

EUROPEAN UNIVERSITY INSTITUTE

Department of History and Civilization

**The Dynamics of the Firm in a Changing Environment. A Case Study on
Ford and the Spanish Motor Industry in Historical Perspective
1900-1990**

Salvador Estapé Triay

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Examining Jury:

Prof. Albert Carreras	Universitat Pompeu Fabra, Barcelona (co-supervisor)
Prof. Terence R. Gourvish	London School of Economics and Political Science
Prof. Richard T. Griffiths	Leiden University (supervisor)
Prof. Jaime Reis	European University Institute, Florence

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Introduction

1. The analysis

The core of this thesis is a case study of Ford Motor Company in Spain. The case discussion will be structured basically as a narrative in order to retain the complexities and interactions over time. It will periodically step back, however, into a more analytical mode, but the narrative structure is essential to the point. In other words: it is an impressionistic thesis, with business history (i.e. the case study) as the thrust or driving line through which different levels of analysis will intersect. It is worth noting that historical studies provide some advantages over contemporary ones. First, their long term perspective limits placing too much weight on recent developments. Second, and from the standpoint of internal organisation, by looking at the formative years of business enterprises, historical studies are able to analyse simpler organisational forms operating in simpler environments. The setting is much purer than today's complex economy and therefore can provide us with clearer explanations. Finally, a third advantage is its dynamism. Indeed, organisations evolve over time and static models that attempt to explain the boundaries of firms or their internal structure overlook the constant change in their shape and scope. More important historical studies provide more information about the causes of their behaviour.

On the other hand, economists, in general, tend to see firms as players in a multi-actor economic game, and their interest is in the game and its outcomes, rather than in the individual firm performance. Moreover, the theoretical and analytical approaches characteristic of economics generally assume the actors' motives and often see a sequence of events as a single event. However, actors (i.e. firms) are embedded in rich networks of mutual relations and relations with other institutional actors, especially governments. Thus, there is a political economy that influences and determines the firm's activity. The narrative mode of this thesis will try to capture the arrangements of events in time and to understand as well the actual motives of firms whenever possible. Therefore, abstract questions and not only

historical ones are essential in order to develop an appropriate theory for business historians. These questions have to stress the importance of the emergence, transformation and death of firms in time and space. Moreover, they should also emphasise the environmental, institutional, and social restrictions that condition the firm's behaviour in real historical time.

The case study will examine the complex interactions over time between the subsidiary and the parent firm, taking into account the influences of the external environment, principally, in a single company's history, and, to a certain extent, the motor vehicle industry.¹ While it is difficult to generalise from the specifics of this case, however, it provides a view of the type of factors and dynamics that may be present in other firms. Despite its narrative weight, the thesis will address analytical questions or, at least, will attempt to take into account the theory of the firm, especially the evolutionary theory.² In other words, the analytical and narrative mode adopted are consistent with the evolutionary view, drawing significantly from the works of Schumpeter,³ Penrose,⁴ Chandler,⁵ Nelson and Winter, and the recent theoretical work of Teece, Rumelt, Dosi *et al.*, Langlois and Robertson.⁶

¹ The environment is interpreted in a broader perspective, standing beyond interpretations that regard it as a "brute environment standing outside our culturally achieved norms, which are the lens through which we see the world. Hence, by necessity, what happens in the marketplace cannot be understood outside of context, which also involves a conscious evaluation process carried out by purposeful human agents." See Magnusson and Marklund (1993: 6)

² In fact, evolutionary language is widely used by economists - and economic historians - to describe changes over time. For a history of evolutionary theorising in economics, see Hodgson (1993).

³ Schumpeter is considered today as the great mentor of evolutionary economics, though his own notion of economic evolution was distanced explicitly from evolution of a biological kind. Hodgson (1993: 139). Likewise, Schumpeter (1976) developed a theory of endogenous technological advance resulting from the investments made by firms to better or stay up with their rivals. For a discussion of Schumpeter's theory of economic evolution, see Kelm (1997) and Hodgson (1997).

⁴ For Penrose, the biological analogies in his theory of the firm are weak because there is no economic equivalent to inherited traits. Penrose (1952: 808).

⁵ Chandler (1962, 1977, 1990). According to Nelson (1995: 65), Chandler's story is a story of coevolution of technology and business organisations. It could be argued, therefore, that Chandler's "fitness criterion" is that the new organisational form solved an organisational problem.

⁶ Schumpeter (1976), Penrose (1959), Chandler (1966, 1977, 1990), Nelson and Winter (1982), Teece (1980) and (1982), Rumelt (1984), Dosi *et al.* (1989), Langlois and Robertson (1994).

Note, however, that in evolutionary theory, “just as routines are analogous to genes, firms are analogous to phenotypes, particular organism, in biological evolutionary theory. There are, however, profound differences.”⁷ First, firms do not have a natural life span, and not all ultimately die. Neither they can be regarded as having a natural size. Second, unlike phenotypes (living organisms) that are stuck with their genes, firms are not stuck with their routines. Indeed they have built in mechanisms for changing them.”⁸ Therefore, it will stress the following features:

- the movement of something over time; that is, explaining what that something is, what it is at a moment in time, in terms of how it got there (‘dynamic analysis’).
- The processes of imperfect learning and discovery. That means, that agents follow rule-guided behaviours which are context specific and, event-independent. But, they are also capable of experimenting and discovering new rules introducing, therefore, novelties into the system.
- Firms are organisations which respond to today’s environment largely in terms of lessons learned from action taken previously. Moreover such action patterns are assembled with three properties (routine properties): recurring, selective and set in organisational context.

Moreover, it will be also argued that social values and institutions evolve and affect the choices presently available. Consequently, the major building blocks of the approach will be as follows:

- Firms are crucial repositories of knowledge, embodied in their routines, and modified through time by their rules of behaviours and strategies.

⁷ For example, Marshall (1920) stated that biology was a fruitful source for further developments in economics. However, though he was attracted to biological metaphors, he never considered applying biological theory to economics.

⁸ Nelson (1995: 69).

- Firms themselves take their place in networks of linkages with other firms and with other institutions. These networks, or lack of them, enhance or limit the opportunities facing each firm in improving its capabilities.
- National systems entail a broader notion of embeddedness of microeconomics behaviours into a set of social relationships, rules and political constraints.

To sum up, our evolutionary/institutionalist framework views the society (or the economy) as a learning process that, normally, entails more or less temporary, and highly sub-optimal, adaptations to what are perceived to be the prevailing environmental constraints and opportunities, and also many systematic errors, trials, and discoveries.

2. The Origins of the Research

When I first gained access to the archives of Nissan Motor Ibérica, the Spanish Nissan subsidiary firm, I decided that my research should combine the methods of business history with the new advances in economic theory on the nature of the firm. There were several reasons for this. First, there was the interest *per se* in the field of business history, particularly in the context of Spain, where this field of research had only recently been introduced.⁹ Second, there were two further sets of interests. The first was the fact that Motor Ibérica was interesting because it had been controlled by different multinational enterprises: American, British, Canadian and Japanese. In addition, it had also been fully controlled and managed by local interests. Secondly, parallel to its changes in control and management, product and process had changed as well: from an assembly workshop to the production of cars, four-wheel drive vehicles, trucks and industrial and commercial vehicles. Thus, issues of strategy, structure and performance had to be highlighted. Both

⁹ In the last years there has been an increasing interest. For a review of the Spanish business history literature see Torres Villanueva (1993). See also, Coll Martín (1991a) and (1991b), Coll and Torrella (1992); Valdaliso (1993).

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reasons provided an empirical case to support, complement and validate the contributions that derive from the economic theory of the firm.¹⁰ Thus, interesting issues that are now more thoroughly studied such as the internal organisation of the company, as well as the strategies and interrelations between groups of companies, could be answered. However, if what we need is a dynamic or entrepreneurial theory that could allow finer distinctions between the proper spheres of firm and market, the transaction cost theory is not suitable because it cannot properly frame the questions of uncertainty that were central to business history.¹¹

The second focus of research would therefore necessarily be the evolution of the economic theory with respect to the firm; from neo-classical theory to the latest developments in the economy of organisation, and evolutionary economics. Furthermore, the analyses of the latest attempts to find a synthesis between both disciplines (business history and economic theory) also had to be considered. Thus, originally there seemed to be two lines of research: first, from the point of view of business history and second focusing on the economic theory of the firm.

It would thus seem that if the firm is taken as a unit or subject of the investigation, we should focus our attention within the firm, on certain topics such as, for instance, the relationship between the subsidiary firm and the head office. However, this must not be done at the expense of ignoring the context of the firm under analysis, because the main purpose of my research was not to concentrate on theory, but rather on the historical aspects of the firm. Consequently, the context

¹⁰ Especially those theories that constitute the bulk of analysis based on the costs of transaction, the structure of property, implicit contracts and asset specificity.

¹¹ According to Parker (1993): "Perhaps a 'new' business history lies over the horizon, using both psychological theories of the 'entrepreneurs' to explain motivation and creativity and models of games and co-operation in markets or in corporate hierarchies to explain social interaction. Business historians, properly educated, are well placed to achieve an intellectual synthesis, which, being translated from sociological generalisations to the particular actions of real men and women, observable in history's literacy and statistical evidence, could form the basis of a truly 'new' business history." For what Parker refers to as 'new' business history see, for example, Shapiro (1991)

was essential, although there were several problems in researching external references to the industry. The main one was that the Spanish motor vehicle industry had not been studied at all from a historical point of view.

Therefore, the focus of my research had expanded: from initially considering historical and theoretical aspects within the firm (a micro-study) to considering problems regarding the industry and the economic, political and social environments that to a certain extent determined and are determined by the business activity. At this stage and after a period of research into the Spanish firm, Ford Motor Ibérica and Ford Motor Company, the study widened to include the overall motor vehicle industry in Spain.

Moreover, it is worth noting that in addition to the aforementioned issues, the present research will also consider the emergence and the development of the Spanish motor vehicle industry in a comparative approach, taking into account the contradictions and performances in a frame established by the interrelation between market forces and state intervention. The relationship of multinational enterprises with their subsidiaries in the host country will be also considered. Such analysis will avail us of a deeper understanding of the influence of Francoist economic policies on subsidiary firms. On the one hand, regarding the relations between multinationals and their subsidiaries from the view point of the host country in the emergence and development of Spanish automobile industry, there are several issues to be singled out such as managerial problems of multinational manufacturing, organisational and operational problems, methods adapted by foreign subsidiaries in host country and the effects of multinational manufacturing in the host country. On the other, with regard to the period of autarchy and the economic nationalism, we will be given some reasons for the lack of big Spanish companies. Moreover, the framework of economic nationalism as against foreign investment will provide an understanding of the role of foreign capital.

In relation to the issue of economic nationalism, some characteristics should be singled out such as, for instance, the increased level of control, barriers to

entrance, absence of competition, and consolidation of sector 'status quo'. Yet, in the Spanish case, two phases have to be considered. The first one goes from 1940 to 1959. The characteristics of this period are regulation and control over commercial and financial operations with the outside, direct control over the internal agents, regulation of prices and salaries, regulation of the creation of companies and regulation of the supply of raw material. The second phase stretches from 1960 to the middle of the 1970s, is characterised by the new financial protectionism, the generation of privileges and the absence of organisations. Finally, another aspect regarding economic nationalism was the ineffective operation of companies. This was due to various factors: the absence of a strong growth "mentality"; difficulties in the administration, management and human relations, which implied strong centralisation of decision-making and the inefficient co-ordination of labour.

3. The narrative

As stated previously, the driving force of the present thesis is the case study of Ford in Spain. Since the 1970s, Spain has emerged as one of the most important manufacturing countries of motor vehicles in the world. However, production is carried out wholly by multinational enterprises. Two other characteristics should also be pointed out. The first is the late date of this emergence; the second, the absence of firms with a major share of Spanish capital. In a historical perspective, neither the first nor the second is absolutely true.

Although the first attempts had been made in the first decade of this century, it was in the inter-war period that the Spanish motor vehicle industry truly underwent sustained development. This was done in two ways. First, there were small firms manufacturing short series of automobiles using handicraft methods; such as the Hispano Suiza, which specialised in luxury vehicles. And, secondly, there were those which assembled imported parts, such as Ford and General Motors. The latter interrupted its activities abruptly and definitively during the Spanish Civil War, but Ford Motor Company remained until 1954.

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Ford pioneered the introduction of the assembly line (and the Fordist system of production) into the Spanish motor vehicle industry in the 1920s. Being a foreign enterprise, Ford had to deal with the Francoist authorities in an autarchic economic context. The experience of Ford in Spain represents an interesting case study of the situation and activities of foreign private enterprise during Autarky. The political system which emerged after the Civil War (1936-39) sought to make Spain industrially self-sufficient, especially in the so-called "strategic sectors" and those related with defence. In a situation of scarce resources, during and after the civil war, state-owned enterprise was promoted to the detriment of private enterprise. In many cases the prejudice of the political leaders against private ownership was difficult to believe. Spanish businesses of the forties and early fifties, maintained and directed by the official authorities, was full of patriotism. This context, characterised by a strong nationalistic feeling consequently prevented foreign companies from adapting themselves to the situation, after a period of disastrous results, Ford Motor Company abandoned its Spanish interests in 1954. It did not return until the 1970s when a new state strategy during the late fifties and sixties more open to foreign capital allowed for the establishment of multinational enterprises and the creation of the modern Spanish automobile industry. Therefore, a bargaining framework that considers both state intervention and multinational enterprises must be introduced in order to understand the development of this industry. Several decades later, at the end of the 1970s, the industry had become dominated by multinational enterprises.

The Nissan Motor Company took over a major participation of the old Ford Motor Iberica as a part of its strategy of entry into the European market. Through the establishment of manufacturing plants, Nissan Motor Company was the first Japanese automobile firm to establish a strategy of penetration in Europe. In England, they built a manufacturing plant from scratch. In Spain, instead, they took over Motor Iberica. Therefore, what Nissan found was an organisation of more than sixty years of history.

4. The Contents of the Research

In order to comprehend the firm and its actions, we have to be equipped with the understanding of the firm as a dynamic 'organism'. Thus, this includes comprehension of both the firm's relations to a dynamic environment and its own inner dynamic. Therefore, the research tries to capture both spheres. In order to do so, it has been structured into four parts and eight chapters, having at its core a twofold perspective: inside the firms and, the firm and the external environment. First, however, the thesis includes a preliminary introductory overview concerning the methodological framework as well as the historical context. Finally, the fourth and last part includes both the latter developments - a an epilogue - and the conclusions.

Part I. An Overview: Methodological Framework and Historical Context

In Chapter 1, I will attempt to establish the methodological framework from which to analyse the case study. Thus, it will be argued on the one hand that within economic theory, institutional and evolutionary economists who attempt to look at an economic system as a continuing process in space and time have gradually overcome limitations regarding the understanding of business organisations. Because they consider the economy as a product of the process of the societal evolution existing in an environment of political and social institutions, the boundaries between an economy and the rest of society are not wholly clear. On the other hand, and within economic history, the work of business historians is of particular relevance to the study of business corporations. Chapter 2 will turn to the historical context. The chapter, first, introduces the research, establishes the main phases of the industry and briefly reviews the first quarter of the century. Second, it analyses the external factor affecting the industry, especial attention is given to the metallurgical and iron and steel industry. Third, it accounts the origins for the Spanish motor industry and finally, and analyses the structure of the industry and the boundaries of the motor firms. It will conclude by arguing that Spanish enterprises did not adopt organisational forms conducive to survival and

growth and secondly, that the role of the government did not foster the infant automobile industry.

Part II. Inside the Firm

Part II turns to the case study at the firm level. It is concerned with the case of Ford Motor Company and its subsidiary in Spain. When Ford established an assembly plant in Spain in 1920, it controlled it as a branch, a mere appendix of the parent company. However, this brought enormous problems of control and monitoring and an increased opposition of the host state. Chapter 3 will proceed as follows: it first introduces Ford Motor Company. Secondly, it introduces Ford in Spain, and establishes the main phases of the history of the company during this century. Section three points out the problem of how to organise a foreign subsidiary in the host country, and how to control and manage the branch.

Chapter 4 analyses the initial period of the company, that is the 1920s, from the standpoint of how to manage and control the branch. It concentrates on rules, routines, procedures and policy application. Routines, as stated in the first chapter, provides a set of premises to help in determining what to do in a particular class of circumstances. Moreover, as members of a community, they will more readily avoid conflict if they follow compatible routines, which collectively may be called a culture. Management literature has focus on two modes of co-ordination, formal and informal structures. The first refers to formal integrating mechanisms such as plans, schedules and formal policies and procedures. These structures generate coherence and predictability in the system, but also create rigidity. The second type of co-ordination relies of relatively informal rules and communication processes. These are more flexible, but, they create impediments to co-ordination for which the formal structure is designed to minimise.

Part III. The Firm and the Environment

The following chapters have a more political economic approach. They refer to the history of the company during the years of war, autarky and extreme economic

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nationalism (1936-1954). The sharp relations that Ford managers both from the head office and the Spanish subsidiary had with the military authorities that spring from the civil war (1936-1954) will be stressed. First, Ford was a clear example of foreign capital, which did not give support to Franco in an industry considered as a strategic interest. Second, the chapter studies the relations amongst the government of General Franco, Ford Motor Company (FMC) and Ford Motor Iberica (FMI) in the frame of the Second World War. The repercussion of the autarkic policy in the performance of the company has a special interest. Chapter 5 will thus analyse, first, the Spanish industrial policy towards partial nationalisation; second, how this policy affected and was affected by Ford; third, in the Civil War, the position adopted by the subsidiary as well as the head office; finally, the damages, physical and human, caused by the civil war (facilities, political persecution and repression, scarcity of petrol, spare parts, tyres, product commercialisation, the exhausting bureaucracy impediments to foreign transactions, price control, etc.)

Chapter 6 turns to the period of the Second World War when the interventionism was originally justified by the necessities of the civil war. However, once the war ended, intervention did not disappear, the Francoist regime sought protection in the need to protect the Spanish economy from the effects of the Second World War in order to maintain its intervention. Finally, Chapter 7 is concerned with the last years of Ford in Spain (1945-1954): far from eliminating the existing control and moving towards a more open regime, once the world war ended, the political and economic authorities of the regime maintained them with more or less intensity for fifteen years. The final section draws some conclusions: the disastrous results of FMI during that years were not an isolated case.

Part IV. Latter Developments and Conclusions

I have divided the last section into three chapters. First, Chapter 8 covers the last period of the company's history, which runs from 1954 to the present day. A twofold perspective is being put forth. First, in more industrial context, it will look at the political economy of the Spanish motor vehicle industry. It will stress the

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emergence of the modern industry based on state intervention and foreign investment. Second, the chapter will turn to the case study at the level of the firm. After the period of strong interventionism (1936-1954), it will stress the strategy and structure of the company in a more open economy. Second, I have included an Epilogue that will refer to the late developments of the firm and it will draw on some historical interpretations offered by contemporary Spanish business history. Moreover, in the aim to combine the narrative with the analysis an attempt to raise some open remarks for a future agenda on management issues and on the microfoundations of Spanish competitiveness will be provided. It will thus stress the importance of a dynamic that links the behaviour of firms (micro level) to technological change, markets, the rise of new organisational forms etc. (macro level). Finally, the Conclusion will draw and summarise the main arguments of the thesis.

Part I. An Overview: Methodological Framework and Historical Context

Chapter One. Business History and Institutional Economic Theory: A Methodological Framework

1. Introduction

In contemporary economic systems, firms have occupied the centre stage. Nevertheless the firm had not been deeply understood, neither from orthodox political scientists, narrowly focused on the state as the primary actor in international relations, nor from neo-classical economics, more concerned with market equilibrium than the nature of the firm. These limitations have been gradually overcome, first, and within economic theory, by institutional ('new' and 'old') and evolutionary economists who have attempted to look at an economic system as a continuing process in space and time. They consider the economy as a product of the process of the societal evolution existing in an environment of political and social institutions. Therefore, the boundaries between an economy and the rest of society are not wholly clear. Second, and within economic history, the work of business historians is of particular relevance to the study of business corporations. Furthermore, the modern corporation is the definitive feature of modern capitalism and hence a major determinant of modern politics. Thus, the corporation should be studied from an interdisciplinary perspective. It will be argued, therefore, that an institutional approach is a more sensitive respondent for this concern.¹²

The most powerful expression of business organisations that dominates world economy is the multinational enterprise (MNE), that is, a firm engaged in activities abroad.¹³

¹² For example, a political scientist such as Stephen Wilks uses an historical approach to the comparative study of the large corporation. His hypotheses are drawn from the 'new institutionalism'. See Wilks (1996).

¹³ The elements of modern theories of the MNEs may be summarised within the structure of an eclectic framework as set out by Dunning (1993). This suggests that firms will engage in international production under three conditions. First, there must be 'location advantages'. Secondly, MNEs must have 'ownership advantages' vis-à-vis other firms wishing to supply a similar market. There are two

These activities involve foreign direct investments in which the firm acquires substantial interest in a foreign firm or sets up a subsidiary in a host country. Multinational enterprises have had a substantial economic impact on the domestic activities as well as on the international relations of the countries abroad. The MNE's affiliates have changed from being simply appendages of the parent firms to becoming part of a systemic network of cross-border value-added activities.¹⁴ The impact of MNEs abroad belongs to various stages, transferring an entire business package including products, processes, experience, reputation, knowledge, marketing know-how, trade marks, technology research and development background, information managerial expertise, and so on.¹⁵ Looking at MNEs as institutions - that is, taking into account the economic and non-economic aspects - we see that their interests might conflict with those of the host state. Thus, the fundamental dilemma of the nation state is how to retain national control over the effective implementation of domestic economic and political policies, while guaranteeing the openness of boundaries so that the MNEs can operate efficiently as well as expand.¹⁶

The growing importance of firms has meant that they are more and more important to states - both in alliance with governments and in conflict with them. Mainstream

categories of this advantage. The first are the unique intangible assets possessed by each firm, which consist of new product and process innovations, as well as managerial and marketing skills (asset or production cost advantages). The second are known as governance of transaction cost advantages, and refer essentially to economies of integration within the firm. Finally, the term 'internalisation advantage' refers to the gains from multinationality as well as the benefits of replacing the markets for the first kind of advantage relative, for example, to the licensing of intangible assets for use within independent foreign firms. In terms of economic theory, we may try to explain the existence of 'location' advantages for a given pattern of international production through the theories of capital movements, trade or location; 'ownership' advantages through the theories of industrial organisation, innovation, and the firm; and 'internalisation' advantages through theories of the firm and markets.

¹⁴ International trade economists have treated the firm generally as a plant or production facility; that is an independent organisation that produces one good in one location. In the new trade theory, trade and gains from trade can arise independently of any pattern of comparative advantage as firms exploit economies of scale and pursue strategies of product differentiation in an imperfectly competitive environment. The literature on geography and trade is a natural extension of this line of research, focusing on how industry agglomeration and regional differentiation can arise endogenously as a consequence of transport costs, market sizes, and the trade policy engine. See Markusen (1995).

¹⁵ Wilkins (1994: 18-50).

¹⁶ See for example: Dunning (1993), Dassbach (1989); Moran, ed. (1985), Robinson (1983), Vernon, ed. (1974), Wilkins (1994).

economists see the state as external to their method of analysis. To them, the determining force is the economic, while cultural, political and other factors are external forces that tend to distort and disrupt the economy.¹⁷ Many works on the multinational firm have deepened our understanding of international capital flows and the global strategies of oligopolistic industries. However, in their emphasis on industrial organisation, they ignore the importance of state policy in determining investment behaviour. On the other hand, state-centric theorists argue that market forces alone will not lead to successful economic outcomes. This literature has opened up the state itself for analysis, much as transaction cost economies and agency theory opened up the black box of the firm. Like the firm in an oligopolistic industry, the state is not portrayed as having unique behavioural rules.¹⁸ Recently, International Political Economy has tried to integrate the economic and political dimension.¹⁹ To a certain extent this has brought us back to the classical tradition of political economy of Adam Smith and Karl Marx.²⁰ Moreover, the role of governments, as custodians of the wealth, creating capabilities for the institutions and citizens within their jurisdiction, is undergoing a fundamental reorientation as a result

¹⁷ The traditional dichotomy of markets versus governments, and the question of which system performs better or is the dominant power, lose their relevance when one views the political and economic as taking place in real time, governed and constrained by history. See Dixit (1996)

¹⁸ See Evans, Reuschemeyer and Skocpol, eds. (1985). Those who have applied a bargaining framework to explain the implementation of domestic automotive industries in Latin America have successfully gone beyond the state-market dichotomy. Bennett and Sharpe (1979), Jenkins (1977). Shapiro (1994) introduces a framework which takes into account the strategic objectives of state policy and expands the bargaining parameters to include not only whether a firm invests, but the form and timing of the investment as well.

¹⁹ IPE's appearance was motivated by discontent with the way political science and economics studied contemporary developments keeping the spheres of the state and the market separated. States play a critical role in constructing markets and market value. The complex relations connecting, determining, but also separating social evolution, international regulation, technological change, political calculations and economic outcomes, were weakly represented from all initial IPE approaches. Thus, efforts were made to integrate all the individual pieces into a larger and integrated theoretical framework of political economy in order to understand the totality of political and economic reality. Orthodox IPE has incorporated a peculiarly "ahistorical" conception of the relationship between politics and economics, derived from the ideological liberalism of past centuries. Thus, by adopting and adapting mainstream neo-classical economics concepts and vocabulary they have neglected history. However, IPE is also concerned with the social, political and economic arrangements affecting the global systems of production, exchange and distribution, and the mix of values reflected within. See Gilpin (1987); Higgott (1994); Tooze and Murphy, eds. (1991); Strange (1988, 1991, 1992).

²⁰ Mirowski (1989) has suggested that the most discontinuous aspect (from the laissez-faire traditions of the physiocrats and Adam Smith, the implicit marginalist analysis of Ricardo and the utilitarianism of

of different features associated with the modern world economy. As pointed out by Dunning, “created” factor endowments and capabilities, such as human capital and knowledge-intensive intermediate products, play an increasingly important role in determining the economic prosperity of most nation states.²¹ Yet, the market for these endowments and capabilities is often imperfect, and their demand and/or supply is directly or indirectly influenced by governments. Governments also affect the resource allocation decisions of MNEs through their impact on the transaction costs of organising economic activity, rather than on the costs and benefits from production of goods and services.²²

The role of the state in the business sphere is clearly exemplified by the case of Japan. The recent emergence of Japanese economic power has to be seen as the result of the success in integrating a vast network of enterprises, each group being dominated by powerful industrial, commercial and financial firms, as well as the role of the state in preserving the home market for Japanese firms.²³ Japanese philosophy is that even if the market is completely free of structural distortions, it would not be capable, by itself, of upgrading resources and responding to the changes demanded of it at a societally optimal rate. For many years, the Japanese government strategy has been one of “improving the long term competitive advantage of the economy by reducing the transaction cost facing its firms in their attempts to upgrade their capabilities and restructure their resources to meet the challenges of global competition.”²⁴

Recently an institutionalist analysis to study the different types of structure within capitalism has been addressed.²⁵ Hodgson, for instance, has stated that: “the expanding literature on ‘national systems of innovation’ is based on the premise that ‘basic

Bentham) of the marginalist revolution was not the postulation of the utilitarian theory of value but rather the successful penetration of mathematical discourse into economic theory.

²¹ Capability might be defined as the capacity to generate action, to guide or direct an unfolding action sequence, that has been stored in some localised or distributed form.

²² Dunning (1992).

²³ Dore (1987).

²⁴ Dunning (1992).

²⁵ Hodgson (1996: 380-433).

differences in historical experience, language, and culture will be reflected in national idiosyncrasies' in the internal organisation of firms, the types of inter-firm relationship, the role of the public sector, the structure of financial institutions, and the nature, organisation and volume of research and development. " ²⁶

Other authors have also stressed the comparative and historical evidence regarding the foundations for economic development in the advanced economies, which supports the proposition that the social organisation of enterprises, regions and nations is integral to the process of economic development. They argue that just as economic development results from technological changes that vary over time and place, we should also observe variation in the characteristic features of social organisation that foster economic development in different eras and different environments. ²⁷

Summing up, markets and firms are like any other institution, guided by formal organisation but also more informal conventions, habits and routines which are sustained over time. Therefore, uncertainty, imperfect knowledge and evolutionary change are the key pillars of economic life. ²⁸ While recognising economics as the most developed of the social scientific disciplines, it has to be assumed that other social sciences have also contributed to an understanding of social and economic life. Therefore it seems necessary to look for interconnections between economics and the other social sciences in the exogenous factors of economic theory. ²⁹ The purpose of such an exercise would be to arrive at a better understanding of social phenomena through co-operation as well as to arrive at a more comprehensive theory of economic phenomena. ³⁰

²⁶ Freeman (1987), Nelson (1993).

²⁷ Lazonick and O'Sullivan (1996).

²⁸ Review of International Political Economy (1994), "editorial".

²⁹ Economic sociology or 'socio-economics', for example, rest on two master concepts. First - and a key concept in political economy - is that the economic activity is "embedded" in the social structure an analytical position which stands in direct opposition to the methodological individualism of conventional economics. The second idea is the "social construction of the economy". It is argued that economic arrangements are established by social bargains and perpetuated through social institutions, that they are neither natural nor inevitable and must therefore be analysed in a contingent social setting. See, especially, Smelser and Richard Swedberg, eds. (1994).

³⁰ Udén (1992).

Since markets are social institutions governed by a set of rules, many of which are not separable, without government there is no market. As Polanyi put it: “economic history reveals that the emergence of national markets was in no way the result of the gradual and spontaneous emancipation of the economic sphere from governmental control. On the contrary, the market has been the outcome of a conscious and often violent intervention on the part of government which imposed the market organisation on society for non-economic ends.”³¹

Accordingly, the present chapter will try to set a methodological framework in order to analyse firms and subsidiary firm in host countries. The approach to a subsidiary can be made considering it either as a branch, a mere appendage of the head office, or as independent entity, i.e., a firm itself. Nevertheless, a third approach, that is a combination of both, provides a wider perspective. To conclude, the present introduction has stressed:

- the growing importance of business corporations.
- The necessity of an interdisciplinary approach in order to better comprehend the different spheres: markets, firms and states, neither of them detached from one another.
- that history deeply matters.

The remainder of the chapter will argue that the institutional - and its further developments, that is, evolutionary theory- is the most useful approach to understand the contemporary economic system, combining theory and history. The chapter reviews, first, the ‘old’ and ‘new’ institutionalist school. It then turns to the evolutionary perspective; how institutionalist economists have invoked evolutionary language to describe how prevailing institutions came into being. The next section turns to the role of business organisations. A twofold approach is provided: ahistorical one and a theoretical one. The chapter concludes by arguing that the better approach to the study of the

³¹ Polanyi (1957: 250).

business organisation is the one provided by capabilities theories of the firm embedded in a wider evolutionary theory, where history deeply matters.

2. Towards an institutionalist and evolutionary approach

The term “institutional economics” was originally applied to the American school of economic thought founded by Veblen, Mitchell, and Commons. This group developed in the United States in the inter-war period but declined after World War II. It has been recognised that Veblen failed to provide a systemic theory because he addressed economic system in too complex and dynamic terms. In addition, and despite Commons’ attempt to build a theoretical system, the outcomes did not reach the internal consistence of those by Marx, Walras, or Marshall. Consequently, the old school of institutionalism established the importance of institutions and proclaimed the need for proceeding in an increasingly descriptive direction, leaving many of the core theoretical questions unanswered.³² To sum up, economics should incorporate more ideas from philosophy and other social sciences, economic phenomena should be analysed as a process, and economics should be a more ‘evolutionary’ science.³³

Nonetheless, since the mid-1970s there has been a remarkable growth in what has been called “new institutional economics”.³⁴ Much of this “new institutionalism” has emerged from work close to mainstream economic theory. For “new” institutionalists, the assumption of the abstract individual is a basic unit of analysis. Therefore, new institutionalism set out to attempt to explain the emergence, existence, and performance of social institutions on the basis of such an individualistic assumption. These explanations address the functioning of various social institutions in terms of given individuals, and once institutions have been formed by individuals, they are seen only as providing external constraints, conventions or openings to individuals who are taken as

³² See the issue entirely dedicated to the controversies between the old and the new in the *Review of Political Economy* (1989), Vol. 1, no. 3, November. Of special interest are the contributions by Hodgson, “Institutional economic theory: the old versus the new” and Richard Langlois, “What was wrong with the old institutional economics (and what is still wrong with the old)?”.

³³ All these themes are congenial to both the old and new institutionalists. See Langlois (1986: 3)

³⁴ For an overview see Williamson (1996) and Langlois (1986).

given.³⁵ Williamson has recognised that the new theories of the firm to which he refers (New Institutional Economic) although initially regarded as rivals to the neo-classical theory, they had, however, increasingly come to be treated as complements.³⁶

This new institutionalism has invoked evolutionary metaphors. In 1950, Alchian argued that market competition created an environment akin to natural selection where the more efficient would win out.³⁷ Selective success depends on behaviour and results, not motivations. Furthermore, because agents operate in a world of uncertainty and may react in different ways to given stimuli, individual behaviour is not predictable. Nevertheless, even if firms never actually attempted to maximise profits, "evolutionary" processes of selection and imitation would ensure the survival of the more profitable enterprises. Alchian reintroduced evolutionary and biological analogy back into economics which had been neglected after Marshall and Veblen in the 1920s. However, a decade later, Winter demonstrated that under plausible conditions the "natural selection" of profit maximisers would not work.³⁸ As Penrose had already pointed out, for natural selection to work there must be inheritable variation in fitness.³⁹ For selection to operate consistently in favour of some characteristics rather than others, behaviour cannot be purely accidental. There has to be some equivalent to the genetic constitution or genotype, such as the structural characteristics, routines or culture of the firm, which fixes, determines, molds or constrains the phenotype in some way.⁴⁰ Winter discovered routine as an answer to Penrose's objection that the inheritable mechanisms were not clearly specified in earlier presentations of the evolutionary analogy in economics. He thus returned to the ideas of Veblen and the 'old' institutionalists concerning the centrality of habit and routine in economic life, and the way in which habits and routines

³⁵ Hodgson (1992).

³⁶ Quoted in Fransman (1994:733).

³⁷ Alchian (1950).

³⁸ Winter (1964).

³⁹ Penrose (1959)

⁴⁰ "The (evolutionary) theory (in biology) is concerned with two actual populations as contrasted with potential one. The first is the population of genotypes, defined as the genetic inheritance of living creatures. The second is the population of phenotypes, defined in terms of a set of variables that happen to be of interest to the analyst. Nelson (1994:118).

encapsulate working knowledge.⁴¹ Nelson and Winter proposed an evolutionary model in which selection operates on the firm's internal routines.⁴² They argued that habits and routines act as relatively durable repositories of knowledge and skills. Routines are the "organisational memory" of the firm.⁴³ Routines may have the capacity to replicate through imitation, personal mobility, and so on. They also transmit information through time in a manner which is loosely analogous to the conservation and replication of information via the gene. In addition, when routines change, their new characteristics can be imitated and directly inherited by imitators or subsidiary firms. The evolutionary approach to economics enhances a concern with irreversible and ongoing processes in time, with long-run development rather than short-run marginal adjustments, with qualitative as well as quantitative change, with variation and diversity, with non-equilibrium as well as equilibrium situations, and with the possibility of persistent and systematic error-making and thereby non-optimising behaviour. Evolutionary theories of the firm pay more attention to processes of learning and development within organisations.⁴⁴ The firm is a changing organism. The idea of knowledge as largely tacit, idiosyncratic, and context dependent, connects to Nelson and Winter's core theoretical concept of routine. The idea of knowledge being embedded in routines stands as the basis of the concept of competence or capability, which is the defining notion in competence-based theories. Subsequent work by both authors has shown direct and useful applications to industrial policy and strategic management.⁴⁵ Innovation and technical change are not simply matters for individual entrepreneurs, but also involve cultural and institutional features at the national level. Competences are established and developed within an appropriate framework of institutions and culture.

⁴¹ Veblen (1919).

⁴² Nelson and Winter (1982).

⁴³ Nelson and Winter (1982: 99).

⁴⁴ For an introduction to the basic ideas and methodologies in evolutionary theory, see Dosi and Nelson (1994: 153-172).

⁴⁵ On application to policy, see Nelson (1996); on strategic management, see Teece (1982); Teece (1988); Barney (1986); Teece and Pisano (1994); Stata (1989); Senge (1990); Rumelt (1974); Lamb (1984).

Veblen's critique was directed to all theories in which the individual was taken as given. This would include much work in the new institutionalist camp. Veblen partially developed an alternative theory of human agency, in which "instincts" such as "workmanship", "emulation", "predatoriness", and "idle curiosity" played a major role. The emphasis on habitual and "instinctive" behaviour was intended to replace the utilitarian pleasure-pain principle, for example by rejecting the idea that work was unambiguous "disutility."⁴⁶ From the last decade of the 1980s, there has been a revival of work in economics that has greater explicit or implicit affinity with the "old" institutionalism.⁴⁷

Institutionalists put stress both on the processes of economic evolution and technological transformation, and on the manner in which action was molded by circumstances. The conception of the agent adopted by Veblen and later institutionalists was strongly influenced by the pragmatist philosophy of Pierce, who rejected the Cartesian notion of the supremely rational, calculating agent, to replace it by a bundle of habits and routinised behaviours. The institutionalism rejects the continuously calculating, marginally adjusting agent of neo-classical theory to emphasise inertia and habit instead. Institutions create and reinforce habits of action and thought: "the situation of today shows the institutions of tomorrow through a selective, coercive process, by acting upon men's habitual view of things, and so altering or fortifying a point of view or a mental attitude handed down from the past."⁴⁸ Accordingly, an institution is "a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of the people."⁴⁹ Institutions are linked to cultural values and norms. The definition of institutions, on the one hand, suggests a place for the concept of power in economic analysis; and, on the other, relates to the concept of culture, culture

⁴⁶ Hodgson (1994: 60-62).

⁴⁷ Hodgson (1994). See also the articles in the *Journal of Economic Issues*, published by the Association for Evolutionary Economics. For the European variant, see the European Association for Evolutionary Political Economy with strong links with other schools including post-Keynesians, Schumpeterians, Marxists and the French regulation school.

⁴⁸ Veblen (1899: 190-91) quoted in Hodgson (1994: 63-64).

⁴⁹ Hamilton (1932: 84) quoted in Hodgson (1994: 64).

being synonymous to the fabric of the ensemble of social institutions.⁵⁰ In this sense, it is worth pointing out that economics and culture have usually been kept apart in academic discussion.⁵¹

To sum up, institutional economics, following the lead of the “old” school of Veblen, Commons and Mitchell, could be defined as an approach that has the following attributes:⁵²

- it eschews atomism and reductionism in economic analysis;
- it sees human behaviour as normally driven by habit and routine;
- it regards self-reinforcing institutions as additional or even alternative analytical units; the conception of economy is of an evolving, open system in historical time;
- it seems individuals as situated in and molded by an evolving social culture;
- technology is regarded as evolving and as a primary motive force in socio-economic development;
- there is a pervasive concern with the role and significance of power;
- and finally, there is a focus on the identification of real human needs.

Institutionalist economists have invoked evolutionary language to describe how prevailing institutions came into being.⁵³ The evolutionary approach emphasises the core concepts as path-dependency, cumulative causation, and lock-in, all of which have a

⁵⁰ Hodgson (1994: 60-64).

⁵¹ Jackson has stressed how this division is damaging to economics, since important cultural questions such as the formation of preferences, the influence of ideology and the relation between the individual and society are systematically neglected. He points out that a cultural materialist perspective is open enough to tolerate individual agency, social structure and human biology as distinct influences on economic or other behaviour. Accordingly, the ‘old’ institutional economics can protect itself from reductionist pressures by adhering more explicitly to a cultural materialist view. Jackson (1996).

⁵² Hodgson (1994: 69).

⁵³ Nelson (1994: 12).

strong institutionalist ring. Accordingly, Dosi states that the evolutionary approach holds the following propositions:⁵⁴

- the world is 'full of opportunities', of which only a very small share is exploited at any time: agents are primarily constrained by the limitations on their own competences rather than by "nature".
- Agents present much less than literally "maximising" behaviour, but rather, the variety of their behavioural norms, decision biases, inertial responses to environmental information. Together with learning, "creativity" and discovery make for a permanent coexistence of history-dependent routines and routine-breaking uncertainty-ridden novelties.
- Interaction amongst economic agents is typically disequilibrium ones and that very fact establishes a sort of "eternality" by which individual participants learn, are selected, grow and die. Hence, "history deeply matters".
- Institutional rules/learning/discovery, on the one hand, and ex-post selection on the other, are driving mechanisms of both co-ordination and change. The process is "evolutionary" in the sense that a variety of behavioural traits, trial-and-error, and lack of *ex-ante* consistency of decisions are the general case.
- Finally, the links with research in other social disciplines are crucial; history and institutions are an integral part of economic "explanations".

Moreover, for Nelson the term "evolutionary" defines a class of "theories, or models, or arguments" with the following characteristics. First, their purpose is to explain the movement of something over time, or to explain why that something is what it is at a moment of time in terms of how it got there; that is, the analysis is expressly dynamic. Second, the explanation involves both random elements that generate or renew some variation in the variables in question and mechanism that systematically winnow on

⁵⁴ Dosi (1991); see also Dosi and Nelson (1994).

extant variables.⁵⁵ Likewise, Hodgson has attempted to revive the 'old' American institutionalist tradition, noting the application to economics of evolutionary ideas from biology.⁵⁶ He recognises that, in a loose sense, processes of natural selection can lead to improvements, because adaptation to the environment does occur, but it is a mistake to go further than this and assume that natural selection is a strong optimising force. On the contrary, natural selection is always an imperfect instrument, and it can sometimes lead to clearly sub-optimal, even disastrous, outcomes.⁵⁷

Evolution will also favour the forms more likely to emerge in a given sector in given circumstances, rather than simply the more efficient. In relation to a particular subsystem, such as a national or regional economy, evolution will also favour the more mobile "immigrant" firms and the subsidiaries thus created. Thus multinational corporations may predominate, not because they are more efficient, but simply because their assets and expertise are able to penetrate national and regional boundaries to become reproducible therein.

⁵⁵ Nelson (1991:115).

⁵⁶ The idea of evolution that he endorses has much more to do with social culture than with selfish genes. Furthermore, the idea that evolution supports a laissez-faire policy is also rebutted. The conception of revolution as progress towards greater and greater perfection, along with the competitive individualism sometimes inferred from the notion of the 'survival of the fittest', are both found to be problematic. Thus, he explores the problems involved in applying ideas derived from biology to economics. The work contains an examination of evolutionary ideas in past economic thinkers, including Mandeville, Malthus, Smith, Marx, Menger, Marshall, Veblen, Schumpeter and Hayek. He argues that the "new evolutionary economics" can learn from the differing conceptions of economic evolution which have been developed in the past. See Hodgson (1993).

⁵⁷ According to Hodgson, the adaptationist fallacy is the assumption that all adaptations are necessarily functional and (near) optimal. It has reappeared in modern economics in two principal and related forms. The first is the attempt to justify the hypothesis of maximising or rational behaviour by appeals to the notion of 'natural selection' by Hayek and Friedman. The second is the proposition that capitalist competition acts like an evolutionary process, favouring the 'fitter' and more efficient institutional forms and modes of industrial organisation. This notion is found in the works of Michael Jensen, William Meckling, Douglass North, Olivier Williamson. They presume that the typical, hierarchical, capitalist firm is more efficient, principally because it is predominant in the modern competitive world. In addition, as regards economic evolution as a promoter of rational maximisation, he addresses authors such as Armen Alchian, Stephen Enke, Milton Friedman, and Hayek; in response to Alchian, see Penrose (1952: 53), who argues that the analogy with natural selection in biology is weak because there is no economic equivalent to inheritable traits. As Winter (1964) insists, such an equivalent and relatively durable element has to be found if the evolutionary analogy is to be employed.

Another important aspect stressed by evolutionary theory is path dependency;⁵⁸ that is, the future development of an economic system is affected by the path it has traced in the past. Evolution often depends on initial “accidents” that somehow dispose it to take a sub-optimal path. In the context of economic history, path dependency suggests that the development of the factory system and the modern capitalist firm is not simply a question of the evolutionary selection of the most efficient organisational configurations. Langlois argues that path dependency may be relevant in the evolution of organisational form in the context of modern industrial structures. The kind of economic history which ignored path dependency and inefficient equilibrium, and assumed that historical change involved a sequence of discrete steps to ever more efficient institutional arrangements, is now widely criticised.⁵⁹

Careful economic history, informed by a perceptive framework of analysis, along with the careful and critical reinstatement of some of the past and present theory which has been brushed aside, should become the norm.⁶⁰ Therefore, in the following sections we will discuss, first, the business history approach, and, secondly, the economic nature of the firm. Finally, we shall conclude with the capabilities perspective as the one that combines the developments from both approaches (historical and theoretical).

3. The historical interpretation of business organisations: business history

In its origins, the field of business history was seen primarily as the study of the administration of business units of the past.⁶¹ It was concentrated on internal administration, and on the individual business unit, rather than on the general development of industries, economic institutions, and organisations.⁶² Moreover, while

⁵⁸ Rosenberg (1976, 1982).

⁵⁹ See Smith and Marx (1994).

⁶⁰ Hodgson (1993).

⁶¹ For a survey of the first decades, see Supple (1958).

⁶² The roots of the discipline of Business History are to be found in the United States in the figure of N.S.B. Gras. The Graduate School of Business Administration at Harvard University was founded in 1908. It initially taught administrative decision-making in business. Its students were led, by means of the discussion of realistic cases within various functional fields, to practice drawing conclusions as to policy from assembled facts. In 1925 the Business Historical Society was founded to promote the study

historians of business had looked frequently at the economic and social role of business, also they had concentrated on the main lines of development in business policy and the chief results of business management in the context of the individual firm.⁶³ Therefore, according to the pioneering studies, the best way to study the heart of business was administration, and administration was through the individual businessman or business enterprise.⁶⁴ By the end of the 1930s, business history had made a secure niche for itself, but was rather isolated from other disciplines in the social sciences.⁶⁵ In 1939, two books appeared which were landmarks of this early period.⁶⁶

During the post-war years some different trends appeared. On the one hand, some turned to sociological investigations of the characteristics and social mobility of leading

of business enterprise from an historical point of view. Two years later, in 1927, a professorship of the subject was endowed at Harvard and Grass came from Minnesota to occupy the chair. He was originally an economic historian, influenced by the German School of Historical Economics. Thus, he represented a connection between business and economic processes. Gras and others were moved as economic historians to investigate the realities of business structures and change which lay beneath economic processes. They were dissatisfied with the superficial generalisations which had been the stock-in-trade of the economic historians dealing with business.

⁶³ The main strength of business biography is that it makes very substantial additions to factual knowledge about business organisations, their economic environment, and historical change. Its main limitation lies in the rather narrow format necessarily adopted in studying a single business and viewing events exclusively in relation to that detail. Therefore, it did not provide enough comparative context.

⁶⁴ The Harvard approach was the most influential until the 1950s. The *Bulletin of the Business Historical Society* has been edited at the Harvard Business School since 1926, the *Business History Review* since 1954. The *Journal of Economic and Business History* (1928-1934) anticipated the *Business History Review* twenty five years earlier. See Gras' articles published in the *Business History Review*, for example N.S.B. Gras: "The value of research to business", *Business History Review*, III (6), 1929; "Capitalism-concepts and history", *BHR*, XVI (2), April 1942: 21-24; "The social implications of Business administration: past and present", *BHR*, XVII (1), February 1943: 1-6; "Are you writing a business history?", *BHR*, XVIII (4), October 1944: 73-110; "What is capitalism in the light of history?", *BHR*, XXI (4), October 1947: 79-120; "Behavior of a business men in a changing world. Rise of business statesmanship", *BHR*, XXIII (1), March 1949: 1-65; "Past, present and future of the business history society", *BHR*, XXIV(1), March 1950: 1-13.

⁶⁵ In the 1930s, the study of the businessman took second place to other interests, such as trade-cycle theory, macroeconomic processes, income distribution, social structures, and standards of living. Thus, the isolation from the mainstream of economic history, which business historians had created by their choice of research topics and techniques, was accentuated by a secular trend which toppled business enterprise from its pedestal of significance in American economic and social life. From the 1940s, the academic attitude to business was changed by economic and social events.

⁶⁶ Gras (1939); Gras and Larson (1939). The latter book was indicative of the close relationships which existed between the teaching of business history and the didactic methods of the Harvard Business School.

businessmen of the 20th century. On the other, others studied the structure of business administration or the nature of modern managers of business administration.⁶⁷ Economists, and economic historians diverted their attentions from fluctuations to growth. This meant that historians were willing to venture into economics, sociology, and statistics to understand their new historical interest. The new movement, called "entrepreneurial history", considered that the approach to business history through company history had the strength of presenting a compact body of material containing most of the written record of a particular set of human activities.⁶⁸ But it also had limitations in that it provided no basis for quantitative generalisation and, thus, little could be said about businessmen as a group in society or about a general framework of entrepreneurship. It appeared inevitable that a considerable part of the interest in the history of business development should be centred on broader problems that transcend the study of a single firm.⁶⁹

According to Cole, the nature of the entrepreneurial function was defined as purposeful activity undertaken to initiate, maintain, or aggrandise a profit oriented business unit for the production or distribution of economic goods and services.⁷⁰ He did not regard

⁶⁷ Druckner (1946) and Galbraith (1952).

⁶⁸ For a historiographical survey see Evans (1991).

⁶⁹ In Harvard the Research Center in Entrepreneurial History was established in 1948 under the stimulus of Arthur H. Cole. The entrepreneurial historians - and the economic historians, economists, sociologists, and anthropologists who wrote on entrepreneurship - viewed business enterprise in an entirely new light. They aimed at dynamic generalisation, at formulating theoretical models, and concentrated to a considerable extent on economic growth and the functions relevant to it, ignoring much of the minutes of administration which permeated company histories. One significant origin of these studies lay in the writings of Schumpeter in "Explorations in Entrepreneurial History". From the periphery of the economics profession, historians of industrial evolution were studying and revealing the development process in the advanced capitalist economies; they were providing the foundations of "historical experience" that Schumpeter had declared to be important. "Nobody can hope to understand the economic phenomena of any, including the present epoch, who has not an adequate command of historical facts and adequate amount of historical sense or what may be described as historical experience." His call for a historically based economic analysis exercised a profound influence on a generation of historians who viewed the entrepreneurial decision as central to the development process. By the "history of entrepreneurship", Schumpeter meant the role of business enterprise in modern economic development. Historians such as David S. Landes and Alfred D. Chandler, both belonged to the Research Center in Entrepreneurial History. Schumpeter was a senior member of the Center from 1948 until his death in early 1950.

⁷⁰ A summary of Cole's thinking on entrepreneurship can be found in his book *Business Enterprise in its social setting*. Cole was responsible for the revival of interest in entrepreneurial history in the United States. He tries to construct a model, or models, of entrepreneurial change, outlining the periods or

innovation as an essential entrepreneurial activity. Moreover, he had insisted that there had to be no dichotomy between entrepreneur and manager. He attributes the process largely, or entirely, to the fact that economists have let their analysis be dominated by impersonal forces in which economic man seeks in his entrepreneurial role to maximise profits.⁷¹

Cole's definition of entrepreneurship may be described as follows: "the integrated sequence of actions, taken by individuals or by groups operating for individual business units, in a world characterised by a large measure of uncertainty, such actions being modified in a greater or less degree by contemporary economic and social forces."⁷² The activities of the entrepreneur have three main objectives: innovation, management and adjustments to external conditions, with the last including the imitation and adaptation of the innovation initiated by other business units and the utilisation by enterprises in one industry of innovation services provided by ancillary concerns. These three activities may be conceived as being directed along six channels or spheres of actions:

- the determination of the business objectives of the enterprise, and the change of the objectives as conditions require or make advantageous;
- the development and maintenance of an organisation, including efficient relations with subordinates and all employees;
- the securing of adequate financial resources;
- the acquisition of efficient technological equipment;

stages by which entrepreneurship evolved from a rather primitive to a rather complicated phenomenon. See Cole (1959).

⁷¹ Cole directs attention to the interplay between entrepreneurship and the evolution of business administration; he suggests that we also think of entrepreneurs at successive periods as being predominately 'community-focused, industry-focused'. The postulate is devoted largely to Cole's desire to elaborate a "model" of the nature of entrepreneurial change. He gives the three elements that he would use in constructing an explanation: the arrangement between the close and the distant forces that affect the entrepreneur; motivation, particularly the need for recognition of achievement; and political and social triumph.

⁷² Cole (1946).

- the development of a market for products;
- the maintenance of good relations with the public authorities and society at large. In all of these phases of entrepreneurial activity there is constant need for decision, and also opportunity for innovation, management, and adjustment to external conditions.

Therefore, for Cole the study of entrepreneurship in its historical setting provides an opportunity to synthesise the work in economics and in business administration, in economic history, business history, and social history, in the history of entrepreneurial thought and the history of social thought.

A connection with the old entrepreneurial school and modern business histories can be found in the figure of Edith Penrose. Indeed, her study of the theory of the growth of the firm illustrates what can be achieved with good business histories. In addition, she also drew attention to the extremely valuable work that was done by the "Harvard Research Center in Entrepreneurial History." For Penrose, the business firm was both an administrative organisation and a collection of productive resources, both human and material.⁷³ For her, "the primary economic function of an industrial firm is to make use of productive resources for the purpose of supplying goods and services to the economy in accordance with plans developed and put into effect within the firm." Moreover, "a firm is by no means an unambiguous clear-cut entity; it is not an observable object physically separable from other objects, and it is difficult to define except with reference to what it does or what is done within it. Hence each analyst is free to choose any characteristics of firms that he is interested in, to define firms in terms of those characteristics, and to proceed thereafter to call the construction so defined a firm." Penrose starts with the mental world of the planners who are situated within the context of their own firm and its specific productive services. The environment of the firm is treated as an image in the entrepreneur's mind of the possibilities and restrictions with which he is confronted." These images emerge from the experience and knowledge that is generated within the firm. Corporate capabilities and the question of strategy: it is the absence of an applicable

⁷³ Penrose (1959:31).

approach to corporate strategy in the economics literature on the firm, more than any other issue, which distinguishes the work of economists in this field from that of "business analysts."

Penrose has also played a major role in the development of the competence-based approach. She gave stress to the tacit and elusive nature of skills.⁷⁴ Much knowledge, she argued, cannot be formally taught, or communicated by language. It is the "result of learning, but learning in the form of personal experience. Experience itself can never be transmitted; it produces a change in individuals and cannot be separated from them" This learning through experience "shows itself in two ways - changes in knowledge acquired and changes in the ability to use knowledge. Competences do not reside merely in individuals: they are dependent on the organisational context, within the firm. In sum, Penrose saw the firm as a complex and structured combination of competences and resources. Placing emphasis on organisation and managerial competences, Penrose saw the firm as undergoing a process of constrained but cumulative development. A similar idea lay behind Chandler's historical studies. These influential and detailed historical investigations further paved the way for the competence-based approach.

During the 1950s, the Harvard group emphasised the social environment within which the entrepreneur functioned, and was concerned with sociological problems such as why certain societies produced an entrepreneurial class and whether entrepreneurs reflected the prevailing ethic of a society or were deviant from it. Both Landes and Cochran stressed the importance of social esteem and approval for successful entrepreneurship.⁷⁵ Landes' explanation of modern industrialisation, published almost two decades later, was based firmly on entrepreneurship and the social environment.⁷⁶

⁷⁴ Penrose (1959:53).

⁷⁵ Cochran (1945), Landes (1969).

⁷⁶ Landes had made pioneering attempts to answer questions like: why have some national economies been more successful than others in setting the process of economic development in motion? And what accounts for the passing of industrial leadership from one nation to another? Like Schumpeter, Landes began the analysis of economic development with entrepreneurial activity, where and when this activity cannot be understood in abstraction from the social context that created opportunities from private investments, and accumulation.

In the 1960s the experience of the 'Center' was considered irrelevant, as the mainstream had turned to modelling the Industrial Revolution and economic growth, leaving business history in a secondary position.⁷⁷ This situation started to change thanks to Alfred D. Chandler. In *Strategy and Structure*, Chandler presents four case studies: Standard Oil, General Motors, Sears and Du Pont, where he connects the growth strategy with the internal organisation structure.⁷⁸ The organisational innovations can be just as productive, or even more so, than technological innovations. Chandler was mainly interested in the emergence and development of big firms, and gave little attention to small and medium size firms because he considered that these firms did not provide innovative elements in their organisation. In *the Visible Hand*, Chandler investigated the beginnings and subsequent development of the modern multi-unit enterprise, a firm consisting of more than a single plant, shop, or office. In *Scale and Scope*, he focused on the history of the modern industrial firm, the most complex and the most transforming of modern business enterprise, from the 1880s, when such firms first appeared, through to World War II. He did this in each of the three major industrial economies -the United States, Britain and Germany- which until the Great Depression produced two-thirds of the world's output of industrial goods. In his most recent book, he studied the new type of industrial enterprise that appeared in the last two decades of the nineteenth century. Throughout the twentieth century, these firms continued to be created, to grow, and to cluster in industries with the same characteristics.⁷⁹

⁷⁷ Debates about entrepreneurship have remained at the centre of attention of both business and economic history since the 1940s. Many historians have traced a direct casual chain from entrepreneurial performance to industrial success or failure and thence to national prosperity. But the problems of definition and measurement have never been successfully resolved. The weaknesses in definition and measurement have been compounded by the failure to identify the linkages of cause and effect from entrepreneur to aggregate economy save in the most elementary terms. For much of the period since the 1930s, the two major streams of historical investigation of business biographies and entrepreneurial history have remained empiricist in approach and content. The most ambitious attempts were made by Cole, who tried to integrate business biography with entrepreneurial history within a theoretical framework, as aggregate business history.

⁷⁸ Chandler (1962).

⁷⁹ Accordingly, in the capital-intensive industries through-put needed to maintain minimum efficient scale required careful co-ordination, not only of the flow through the processes of production but also the flows of inputs from suppliers and the flow of output through intermediaries to final users. This co-ordination did not happen automatically. It demanded the constant attention of a managerial team or hierarchy. The economies of scale and scope, as measurable by through-put, are organisational. These

To sum up, Chandler's research has been concerned with understanding how complex structures that characterise modern multi-product firms came into existence. His approach is of great relevance because he tells a story of co-evolution of technology and business organisations. As Nelson has pointed out, Chandler argues that a variety of technological developments occurred during the middle and late nineteenth century that opened up the possibility for business firms to be highly productive and profitable if they could organise to operate at large scales of output, and with a relatively wide range of products.⁸⁰ For him, firms and their managers are engaged in the pursuit of the dynamic logic of growth and competition. From Chandler's perspective, the modern business firm may be seen as a collection of dynamic organisational capabilities, which are the source of the firm's competitiveness. These are accumulated in the course of carrying out the firm's activities, and depend on knowledge, skill, experience, and teamwork.

Although Chandler is a historian interested in examining the operations and practices of business firms without giving much thought to precise definitions of the firm, he has related his explanations of the similarities in the historical beginnings and continuing evolution of enterprises to four major economic theories of the firm: neo-classical, principal-agent, transaction costs and evolutionary. In doing this, he has tried to indicate the value of the transaction cost and the evolutionary theories to historians and

economies depended on knowledge, skill, experience, and teamwork - the organised human capabilities essential to exploit the potential of technological processes. The entrepreneurs organising these enterprises created national and then international marketing and distributing organisations. They recruited teams of lower and middle managers to co-ordinate the flow of products through the processes of production and distribution, and teams of top managers to monitor operations and plan and allocate resources. The first firms to make the three pronged investments in manufacturing, marketing, and management essential to exploit fully the economies of scale and scope quickly dominated their industries. Moreover, in the new and transformed capital-intensive, oligopolistic industries, the first movers and challengers competed vigorously for market share in national and international markets through functional and strategic efficiency. In other words, they improved processes of production and distribution through systematic research and development (R & D); they located more suitable sources of supply; they improved marketing services; they introduced product differentiation. The accumulative learning of the oligopolies created organisational capabilities that became powerful barriers to new entrants. Such capabilities and the returning retained earnings became the basis for their continued growth. Growth that was directed in two ways: backwards to control material and forwards to control outlets. Chandler (1990, 1992).

⁸⁰ Nelson (1994:120).

economists who are attempting to explain the beginnings and growth of modern industrial enterprises.⁸¹

The historical pattern of the development of the modern industrial firm has already been mentioned. From Chandler onwards both the historical and theoretical approaches have begun to converge. But how do theories involving the firm relate to this? In the following section, it will be stressed how neo-classical theory views the firm as a legal entity with a production set where managers act rationally with full information. Principal-agent theory is concerned instead with "owners'" and "manager's" problems of coping with asymmetric information.⁸² Furthermore, transaction cost theory also focuses on information asymmetry and the resulting information cost, stressing that micro-economic activity is organised to economise the cost of production and transaction. They will also emphasise strongly the significance of asset specificity.⁸³

4. The economic nature of the firm

The firm is one of the basic agents of the economy. It is engaged in production, that is, the activity of combining several factors within a technological process, its outcome being goods and services. This representation of the firm, that has often been called "black box", emphasises only one aspect of its activity: its profit maximisation (or cost minimisation). Nevertheless, this classical view of business organisation has survived better in economic theory than in real life. The increase of the degree of integration made the efficiency of the unitary form of organisation difficult because, as the decision-making process was becoming more complex and the number of staff was increasing, the organisational form was also becoming more complex.

⁸¹ Chandler (1992: 79-100).

⁸² Fama (1980).

⁸³ Specific assets are those whose value use is much greater in a particular use or relationship than in the next best alternative. That is, the specialised physical facilities and human skills that, because they can only be used in the production and distribution of specific products and services, lose value if deployed in other activities.

Moreover, the classical vision was focused on the market operation and not on the allocation process within the firm. The theory of the firm was little developed before the inter-war period. For example, the classics such as Adam Smith dealt with individual entrepreneurs rather than corporations, whose activities, he maintained, were co-ordinated through markets. Most economists, writing from the second half of the nineteenth century until the 1930s, adopted an analytical framework which assumed that entrepreneurial and productive activity depended upon the conditions of market co-ordination. Therefore, they chose to ignore the growing importance of the fact that firms were directly co-ordinating economic activities without the intervention of markets.⁸⁴ As Lazonick put it, "constrained by the impersonal dictates of input and output markets as well as by available technology, the business enterprise enters the theory of the market economy, not as a *social* organisation that takes an active role in managing its productive investments, but only as a production function that puts *technical* limits on how productive resources can be transformed into the products that consumers demand."⁸⁵

The neglect of the firm was due to concern with market behaviour of the firm rather than its internal organisation.⁸⁶ An alternative (but not incompatible) vision to the neo-classical theory (i.e. profit maximisation) has been the consideration of the economic activity as a set of transactions that can be organised, either through the market or through the firm. Therefore, a firm will be engaged in production, that is to say, to make a transaction internally or externally through the market, depending on which of the two is less costly. The firm that is engaged in a market transaction is involved in contracts.⁸⁷

⁸⁴ Already in the 1920s, Frank H. Knight broke new ground by considering that this organisation implied the concentration of responsibility through a centralised decision-making. The human functions in the production implied a decision-making ability; the manager planned the organisation, distributed the functions, selected the people and their value for the entire organisation. The surplus of the manager function was the profit. This came from the uncertainty. Knight (1921, 1971).

⁸⁵ Lazonick (1991).

⁸⁶ Nutzinger (1976).

⁸⁷ For a review of the recent developments and state of knowledge on the theory of the firm, see particularly Holmstrom and Tirole (1989). See also Milgrom and Roberts (1992). For a contractual theory of the firm see Alchian and Demsetz (1972). As Holmstrom and Tirole (1989: 66-7) have pointed out: "Alchian and Demsetz's theory of the firm (...) fails to draw clear organisational boundaries (...). The problem can be remedied with the framework of incomplete contracting, which also suggests a reinterpretation of the Alchian-Demsetz theory." Arrow (1974), March and Simon (1958), and more recently Hart (1995).

According to Alchian and Demsetz, there is no authoritarian control or subordination involved within the firm. For them the distinguishing feature is “the centralised contractual agent in a team productive power.”⁸⁸

For Alchian and Demsetz, the firm is a specific form of organising co-operative productive activity which they refer to as a team of production; it involves co-operation between the team members who together produce a joint output. However, there is an asymmetrical distribution of information among the members of the team, which prevents them all from knowing the precise contribution that has been made by each of them. Furthermore, it is the information asymmetry and the resulting inability to align contributions and rewards that produces a need to monitor and control the activities or output of the team members. They finally conclude by arguing that the team members have an incentive to consent to appoint a monitor and a controller to perform the monitoring and control function. This incentive arises from the productivity benefits. The firm is the particular policing device utilised when joint team production is present. In approaching the firm, Jensen and Meckling’s main purpose is to explore the significance of contracting relationships and of agency costs within these relationships.⁸⁹ For Williamson, it is opportunism rather than asymmetric information *per se* that presents problems. However, asymmetric information is a necessary condition for opportunism: if information were symmetrically distributed, opportunism could not arise. A further information related problem is that of bounded rationality, brought up by Herbert Simon: humans often cannot deal with the entire set of relevant information, they have no alternative but to deal with only a subset.

To recapitulate, there are two approaches to the firm with the assumption that there is asymmetric information. First, the theory of the firm as joint team production and the theory of the firm as a nexus of contracts between principals and agents.⁹⁰

⁸⁸ Alchian and Demsetz (1972).

⁸⁹ Jensen and Meckling (1976).

⁹⁰ Alchian and Demsetz (1972) and, Jensen and Meckling (1976) respectively.

From the contractual approach, the firm is a legal fiction that enters bilateral contracts between itself and its suppliers, workers, investors, managers, and customers.⁹¹ The contracting approach to organisation theory emphasises the voluntary nature of people's involvement in most organisations. This approach sees markets and hierarchies - sometimes regarded as the principal way of organising economic activity- as two extremes forms of organisational contracting, with voluntary bargaining characterising markets and strict lines of authority characterising hierarchy.⁹²

This vision sees the firm as a nexus of contracts between principal and agent.⁹³ Agency cost arise from the fact that "if both parties to the relationship are utility maximisers the agent will not always act in the best interests of the principal."⁹⁴ The firm is "the nexus of a set of contracting relationships among individuals."⁹⁵ Therefore, the firm is viewed as a form of market. If specialisation is efficient, why does integration, a move away from specialisation, frequently take place? Moreover, "in view of the fact that while economists treat the price mechanism as a co-ordinating instrument, they also admit the co-ordinating function of the entrepreneur, it is surely important to inquire why co-ordination is the work of the price mechanism in one case and of the entrepreneur in another". Consequently, a firm is a form of co-ordination of economic activity by direction rather than by contract. For Coase, a sharp boundary can be drawn between the firm and the market. "The main reason why it is profitable to establish a firm would seem to be that there is a cost of using the price mechanism." The key idea is the "comparison of the costs of co-ordinating the activities of factors of production within the firm with the cost of bringing about the same result by market transactions or by means of operations undertaken within some other firm." Coase identified three costs of using the price mechanism. First, discovering what the relevant prices are. Second, the cost of

⁹¹ Alchian and Demsetz (1972: 794).

⁹² Organisation theorists such as Cyert and March (1963) and Nelson and Winter (1982) have emphasised the multilateral nature of contracting in real world hierarchies, suggesting that the firm is a nexus of contracts. See also Jensen and Meckling (1976).

⁹³ A good overview can be found in Fransman (1994).

⁹⁴ Fransman (1994: 212).

⁹⁵ Fransman (1994: 215).

negotiating and concluding a separate contract for each exchange transaction which takes place on a market. And, third "asset specificity".⁹⁶ It may be concluded, therefore, that the availability and cost of information is a major determinant, from Coase's point of view, of the existence of the firm.⁹⁷

The problem of asset specificity raises a further difficulty: the possibility of opportunistic behaviour. Williamson's development of the implications of opportunism adds a new dimension to the problem of information and contracting. For him, asymmetrical information is only a problem in the presence of opportunism. Williamson defines opportunism as self-seeking with guile and with "bounded rationality"; these are the two key "behavioural assumptions" characterising "human nature."⁹⁸ He regards the firm as a governance structure⁹⁹ and derives the "organisational imperative that emerges in such circumstances: "Organise transactions so as to economise on bounded rationality while simultaneously safeguarding them against the hazards of opportunism."¹⁰⁰

A second approach to the firm sees it as a repository of knowledge. According to Nelson and Winter, the routinisation of activities in the firm is largely a response to the quantity and complexity of information.¹⁰¹ Accordingly, firms are "highly inertial action repertoires responding to today's environment largely in terms of lessons learned from actions in days gone by".¹⁰² There is an important similarity between Nelson and

⁹⁶ See also Pagano (1991).

⁹⁷ Coase (1937, 1988).

⁹⁸ Williamson (1987:44).

⁹⁹ Williamson (1987:13).

¹⁰⁰ Williamson (1987:32). In answer to the question of what is bounded rationality we have to turn back to Herbert Simon. On bounded rationality Simon suggests: "the capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behaviour in the real world." "Human behaviour is 'intendedly rational, but only 'limitedly' so" Simon's answer to the two questions 'What is a firm?' and 'What do firms do?' is that firms provide a way for people, through co-operation, to pool the "very small" capacities of their individual minds, their bounded rationalities, and in this way to achieve collectively what they cannot achieve individually. Simon notes, however, that collective achievements are dependent on the ability of the group to agree on goals, to communicate and to co-operate. For Simon, the essential assumption is that people are information-processing organisms. But what is the "information" that they process or how do they acquire it, and how do they proceed with it? See Simon (1956, 1961).

¹⁰¹ Nelson and Winter (1982), Cohen *et al.* (1995).

¹⁰² Cohen *et al.* (1995: 657).

Winter's approach and that of Chandler, and Teece. Responding to this gap in orthodox theory, Nelson and Winter argue that such inherited fitness must be explained by relatively durable routines within the firm.¹⁰³ This also prompts an examination of the processes of internal cultural transmission within the firm. There are good reasons to assume that such routinised behaviour within institutions will not generally be on an optimal track. Selection does not simply depend on considerations of fitness of given units but also on the capacity of the type of unit to procreate.

In Nelson and Winter, the theory of the firm did not emerge from an attempt to understand the firm *per se*, but rather emerged in response to the need for a conceptual tool that would enable them to analyse the relationship between technical change and economic growth.¹⁰⁴ Given their view of technical advance, and of economic growth driven by changes in technology, they had to develop a theory of the firm in which 'firm differences matter'. The starting point was how do individuals, and the organisations within which they work, deal with an information-excessive world.¹⁰⁵ Nelson and Winter draw directly on the ideas of March and Simon, in which the importance of routinised behaviour is analysed.¹⁰⁶ Routines refer to the "regular and predictable" aspects of firm behaviour¹⁰⁷ "Man's rationality is 'bounded': real-life decision problems are too complex to comprehend and therefore firms cannot maximise over the set of all conceivable alternatives. Relatively simple decision rules and procedures, i.e. routines, are used to guide actions; because of the bounded rationality problem, these rules and procedures cannot be too complicated."¹⁰⁸ Nelson and Winter's routinised behaviour is both an individual and organisational response to complexity and uncertainty under conditions of bounded rationality. The firm, therefore, becomes for them a 'repository' of knowledge. It is as a repository of knowledge, contingent on the firm's past history, that one firm differs from another. Therefore, fundamentally, "business firms are organisations that

¹⁰³ Nelson and Winter (1974, 1977, 1982).

¹⁰⁴ Nelson and Winter (1982).

¹⁰⁵ Excessive relative to the ability of individuals to process that information, see Simon (1961).

¹⁰⁶ March and Simon (1958).

¹⁰⁷ Nelson and Winter (1982:14).

¹⁰⁸ Nelson and Winter (1982:35).

know how to do things. Firms are repositories of productive knowledge. In fact, a particular firm at a particular time is a repository for a quite specific range of productive knowledge, a range that often involves idiosyncratic features that distinguish it even from superficially similar firms in the same line(s) of business." However, "productive knowledge is preserved in an organisation while individual members come and go." It is in its routines that an organisation stores its knowledge: "where and what is the memory of an organisation? The routinisation of activity in an organisation constitutes the most important form of storage of the organisation's specific operational knowledge."¹⁰⁹ The routines allow the firm to cope with complexity and uncertainty under the constraint of bounded rationality. Moreover, routinised behaviour allows Nelson and Winter to develop a theory of the firm in which firms differ, and in which the differences matter. Finally, routines provided a way of storing an organisation's accumulated knowledge.

5- Capabilities or competence- based perspectives

The previous pages have reviewed different theories of the firm, as well as the historical approach. It has been concluded that the best approach is the capabilities or competence based perspective embedded in a more wider evolutionary approach.¹¹⁰ Therefore, this section will be concerned with the latter.

Organisational capabilities provided the dynamic for the industries dominated by such enterprises, and for the national economies in which they operated. They were created during the knowledge-acquiring processes. Knowledge and skills were developed by

¹⁰⁹ Nelson and Winter (1982:99).

¹¹⁰ This theory is based on the concept of the firm's activities and growth developed by Alfred Marshall, Joseph Schumpeter and Edith Penrose. The path established by Richard Nelson and Sidney Winter is pursued in the recent writings of David Teece, Giovanni Dosi, William Lazonick and Alfred Chandler himself. With these latter contributions, Nelson has presented an emerging theory of dynamic firm capabilities. He focuses on three different strongly related features of a firm that must be re-organised if one is to describe it adequately: its strategy, its structure, and its core capabilities. Such core organisational capabilities are based on a hierarchy of practised organisational routine, which define lower order organisational skills and how these are co-ordinated, and higher order decision procedures for choosing what is to be done at lower levels. The notion of a hierarchy of organisational routines is the key building block according to the concept of core organisational capabilities. See Nelson and Winter (1982); Dosi, Gannetti, and Tonnelli (1992); Dosi, Freeman and Fabiani (1994); Lazonick (1990, 1991) and Nelson (1991).

learning through trial and error, feedback and evaluation; thus, the skills of individuals depended on the organisational setting in which they were developed and used. Such skills and knowledge were company-specific and industry-specific. They were difficult to transfer from one industry or firm to another, because they had been learned within a specific organisational context.¹¹¹

For the history of industrial enterprise, learned routines are those involved in functional activities. The most important ones are those acquired to co-ordinate these functional activities (production, distribution, marketing, etc.). Also very important are those routines learned in the strategic activities of responding to moves by competitors, of carrying on the long, costly, and risky process of moving into new markets, and of adjusting to the constantly changing economic, social and political environment. The resulting organisational capabilities permit the enterprise to be more than the sum of its parts.¹¹²

The question of strategy is central in Teece *et al.*¹¹³ They propose a dynamic capabilities approach. This approach is best seen as an extension of the ideas developed by Penrose. As in Penrose, the firm is seen as a collection of capabilities which embody its knowledge. Following Penrose, causation turns from capabilities to strategy. They are inherited from and constrained by the past. For Teece *et al.* "a core competence is a set of differential skills, complementary assets and routines, that provide the basis for a firm's competitive capacities and sustainable advantage in a particular business."¹¹⁴

¹¹¹ The continuing enhanced process of constant learning about products, processes, customers, suppliers, and other relationships between workers and managers within the firm allow enterprises to remain competitive and profitable. If not, they normally lose market share in domestic and internationally markets. Spain failed to build the organisational capabilities that develop competitive firms. The reasons for this failure are to be found in the unrestricted working of markets and the interventionist state. For a Chandlerian interpretation of the Spanish failure to develop big firms, see Carreras and Tafunell (1994); for a recent capabilities perspective analysis of Spanish Business History see Valdaliso (1996) and Valdaliso and Lopez (1997).

¹¹² Chandler (1992).

¹¹³ Teece *et al.* (1990).

¹¹⁴ Teece *et al.* (1990: 28).

The dynamic capabilities' paradigm is an eclectic paradigm, drawn from multiple disciplines. The competitive advantage of firms stems from the dynamic capabilities rooted in high performance routines operating inside the firm, embedded in the firm's processes, and conditioned by its history. Firms should be seen as organisations in which information-processing capabilities and decision rules co-evolve in a process of learning and adaptation.¹¹⁵

Evolutionary theories can be regarded as a subset of a wider class of theories, variously described as "capabilities", "resource-based" or "competence-based" theories of the firm.¹¹⁶ Whilst, on the one hand, the contractarian theories of the firm misleadingly assume given individuals, thus neglecting processes of individual learning and transformation and underestimating the importance of technology and the persistence of variety in firm structure and performance. On the other hand, evolutionary and competence-based approaches provide better theoretical tools to understand technological and organisational change within the firm.¹¹⁷

The competence-based perspective sees the existence, structure and boundaries of the firm as explained in some way by the associated existence of individual or team competences -such as skills and tacit knowledge- which are in some way fostered and maintained by that organisation.¹¹⁸ Contractual (and transaction cost) theories see the informational and other difficulties in formulating, monitoring and policing contracts as the crucial explanatory elements.¹¹⁹ Likewise, there also exists an intermediate position "Transaction-Capabilities."¹²⁰ Langlois suggests that any explanation of internal organisation in a regime of rapid change ought to take into account two factors, namely, disequilibrium and path dependency.¹²¹

¹¹⁵ Teece and Pisano (1994: 553).

¹¹⁶ Hodgson (1994).

¹¹⁷ Nelson and Winter (1982).

¹¹⁸ Adam Smith, Karl Marx, Knight (1927); Penrose (1959); Richardson (1972); and Nelson and Winter (1982).

¹¹⁹ Coase (1937), Williamson (1975, 1985); Alchian and Demsetz (1972); Fama (1980).

¹²⁰ Langlois (1992); Langlois and Robertson (1995); Teece and Pisano (1994).

¹²¹ Langlois (1988).

Individuals act as utility-maximising automata on the basis of given preferences, so that non-contractual relations such as trust and loyalty are neglected. The conception of the given individual cannot readily incorporate notions such as learning and personal development. Instead of the mere input of 'facts', according to Hodgson, learning is a developmental and reconstructive process. Thus, learning is not simply the progressive acquisition of unambiguous or codifiable knowledge. Much knowledge is tacit and has to be communicated by example and shared experience rather than by the written or spoken word.¹²²

Furthermore, learning is a process of problem-formulation and problem-solving, rather than the acquisition and accumulative of given 'bits' of information 'out there'. Moreover, organisational learning involves a process of inquiry, reflection and evaluation in which the model is revised and becomes embedded in organisational memory and the regular practices of the organisation. The knowledge within a corporation relates essentially to the organisation and the group, rather than to the individuals composing them, as underlined by Winter.¹²³

The co-ordination display in the performance of organisational routines is the fruit of practice. What requires emphasis is that the learning experience is a shared experience of organisation members. Thus, even if the contents of the organisational memory are stored only in the form of memory traces in the memories of individual members, it is still an organisational knowledge in the sense that the fragment stored by each individual member is not fully meaningful or effective except in the context provided by the fragments stored by other members.¹²⁴ Accordingly it is in firms, not the people that work for firms, that know how to make gasoline, automobiles and computers.¹²⁵ Since "learning and communication of employees take place only within the organisational

¹²² Polanyi (1967).

¹²³ "it is undeniable that large corporations are as 'organisations' among society's most significant repositories of the productive knowledge that they exercise, and not merely an economic contrivance of the individuals currently associated with them". Winter (1988:170).

¹²⁴ Winter (1988:76).

¹²⁵ Aoki writes of the collective nature of employee knowledge in the firm. Aoki (1990)

framework, their knowledge, as well as their capacities to communicate with each other are not individually portable.”¹²⁶

Contrary to the view of information and knowledge as portable and readily transmissible, knowledge is embedded in social structures and it is not immediately transparent. This is partly because opportunities of learning within the firm are transaction and production-specific.¹²⁷ Also learning is an instituted process of interpretation, appraisal, trial, feedback, and evaluation, involving socially-transmitted cognitive frames and routinised group practices which are often taken for granted. Organisational knowledge interacts with individual knowledge but is more than the sum of the individual parts. It is context dependent, culture-bounded and institutionalised. In short, the phenomenon of learning is antagonistic to the concepts of rational optimisation and equilibrium. So, whilst competences are genuinely scarce, they are not simply given - they have to be developed. We are thus dealing with a problem of creation and production, rather than simply the allocation of given resources.

As, regards production, the analysis of the firm is reduced to contracts between individuals neglecting technology and production. The emphasis is not on production, accumulation and growth, but on the choice of governance structures and the efficient allocation of given resources. And finally, there is a clear difference between dynamic evolution and comparative statics. Williamson has repeatedly admitted that his approach is one of comparative statics. Therefore, analytically, the adoption of an equilibrium approach ignores the difference between ‘ex ante’ and ‘ex post’ forms of co-ordination. Firms and markets have different co-ordinate capabilities in dynamic, disequilibrium situations. Firms, through foresight and planning can have advantages ‘ex ante’; markets typically co-ordinate ‘ex post.’ It is now widely accepted that learning and technical

¹²⁶ Winter (1990:45) Similar points are stressed by Dosi and Marengo: “organisational knowledge is neither presupposed nor driven from the available information but rather emerges as a property of the learning system and is shaped by the interaction among the various learning processes that constitute the organisation”. Dosi and Marengo (1994: 162). Lazonick states: “innovation is a social process that requires that conscious involvement of many people with a variety of specialised skills and functions. Innovation requires collective organisation because it is complex, cumulative and continuous.” (Lazonick 1994: 247).

¹²⁷ Teece (1988).

change cannot be adequately accommodated in a static framework. Future knowledge is by its nature unknowable, and the results of research and development uncertain, in the most radical sense.¹²⁸ In these circumstances, embedded routines involving in the managing of substantial reserves of skills and material resources are required as buffers to deal with contingencies. Here the firm comes in. It has the scale, and the material and complex human resources to cope with uncertainty.¹²⁹

To sum up, key features of the modern competence-based approach are as follows:

- recognition of learning-by-doing as a source of endogenous growth,
- recognition of the role of radical uncertainty,
- recognition of tacit knowledge,
- and, finally, the aforementioned leads to the conclusion that not all activities within the firm are contractable.

The competence-based perspective puts emphasis on building up resources and organisational routines within the firm itself. Organisation and production are emphasised, as well as the market. Despite the long history stretching back to the birth of modern economics at the end of the eighteenth century, the competence-based approach to the theory of the firm and corporate strategy is still in its infancy. It offers, however, a crucial reorientation away from a market-based analysis and towards organisation,

¹²⁸ Knight (1921), Keynes (1936).

¹²⁹ Such arguments are traceable to Knight. Knight was primarily responsible for emphasising the role of knowledge and uncertainty in the analysis of organisations, marking a major advance on the work of earlier economists. However, in subsequent years, Knight's path breaking analysis of the firm had more influence on macroeconomics through its general emphasis on uncertainty than on the theory of the firm. Knight argued that the existence of the firm is the direct result of the fact of uncertainty. Knight's views have been elaborated more recently by Loasby, Kay, Langlois and others. Like Knight, these authors regard the firm's capacity to cope with radical uncertainty as a central factor in the explanation of its existence. Uncertainty is not only about the future events themselves but also about the opportunities available. In the context of uncertain world, the analysis of human behaviour has to be centred on the development of capabilities to deal with complexity and change. The emphasis on dynamics and learning in an out-of-equilibrium context enables a more satisfactory accommodation of the real world fact of firm heterogeneity. Losby (1976), Kay (1984) and Langlois (1984).

knowledge and learning. According to Winter: "The co-ordination displayed in the performance of organisational routines is, like that displayed in the exercise of individual skills, the fruit of practice. What requires emphasis is that the learning experience is a share experience of organisation members. Thus, even if the contents of the organisational memory traces in the memories of the individuals members, it is still an organisational knowledge in the sense that the fragment stored by each individual member is not fully meaningful or effective except in the context provided by the fragments stored by other members."¹³⁰

6. Conclusion

To sum up, though my intention has not been to attack orthodoxy nor to define and explain in detail any schools of thought, I have stressed that neo-classical economics viewed economic society as the sum of utility-maximising isolated individuals without social interaction within an institutional and historical framework.¹³¹ Moreover, new institutionalist, as the Coase-Williamson explanation of the existence and rationale of firms and organisations was based on the idea that transaction costs were reduced relative to the alternative market mode of co-ordination. Therefore, the focus was on the reduction of costs related to transactions between given individuals. Though being a major step forward in the understanding of the firm, however, the transaction costs explanation has ignored some fundamental features of organisations in the real world.¹³² Thus, I have turned to the old institutionalism: for instance, the kind and rate of human 'learning' that takes place within organisations - which implies that individuals cannot be taken as fixed while comparing market and organisational modes of co-ordination or

¹³⁰ Winter (1982).

¹³¹ For a useful guide to methodology, see for example Maki, Gustafsson and Knudsen (1993).

¹³² Accordingly Pagano stresses that, in general the 'new' institutional economics of Williamson and others has downplayed matters of disequilibrium. Analytically, the adoption of an equilibrium approach ignores the difference between *ex ante* and *ex post* forms of co-ordination. Firms and markets have different coordinative capabilities in dynamic, disequilibrium situations. Firms, through foresight and planning can have advantages *ex ante*; markets typically co-ordinate *ex post*. This possible and additional reason for the existence of firms is ignored in equilibrium and comparative static analysis. Pagano (1992).

governance, is relates to the "cultural transmission" that takes place within organisations.¹³³

The different theories of the nature of the firm are shown in Table 1.1, it has to be stressed that there is a continuum amongst all these theories, and that many authors would feel uncomfortable to be classified in only one group. The "traditional theories" have the largest critical mass of results, so that they can be useful for analysing specific, "bounded" problems. The most recent theories such as "evolutionary" or "competence-based" lack still such a critical mass or well-established results, and that may be a reason why they are still less used by most economists. It is also worth noting that the methodology of game-theoretic modeling has been used by almost all of them; and second, that the agency theory could be included in the transaction costs theory because the agency costs (asymmetric information) are part of the transaction cost.

Therefore, the main, but not the exclusive factor explaining the existence, boundaries, nature and development of the capitalist firm is the capacity of such organisation to protect and develop the competences of the groups and individuals contained within it. Accordingly, a primary feature of a firm is its capacity to mould the individual perceptions, preferences, abilities and actions of its personnel. This may be first illustrated by the capacity of the firm to generate a degree of trust. Likewise, the concept of corporate culture involves more than shared information: through shared practices and habits of thought it provides the method, context, value and language of learning and the evolution of both group and individual competences.¹³⁴

¹³³ Hodgson (1993) argues that cultural transmission provides an alternative explanation of the existence and relative efficiencies of organisations and should provide a major -if not the major- theme in the analysis of the firm in economic theory. Hodgson also argues relates how, using Williamson's (1975) discussion of site specificity, Joskow (1988, 1991) hypothesised that vertical integration would be more common in cases where the mine and the power-generating station are adjacent. Indeed, Joskow found that vertical integration was much more likely in this case. However, the observed phenomena could be explained other than by Williamson's theory. The higher incidence of vertical integration could result from the fact that mergers and take-overs are more likely to occur when firms are in close geographical proximity. The existence of local business networks and the extensive use of local connections is a common phenomenon in all capitalist countries. See Joskow (1988, 1991); Amin and Thrift (1992).

¹³⁴ Hodgson (1994: 13).

Finally, I conclude by pointing out what Dosi has suggested as a framework of analysis of institutions which is in its essence non-reductionist and based on four fundamental hypothesis:¹³⁵

- forms of behaviour (and their outcomes) cannot adequately be represented by the simple and universal rationality of the 'Homo oeconomicus' postulated by the prevailing economic theory;
- markets and economic processes occurring within them are themselves institutional set-ups specific to historical periods, cultures, countries;
- there are particular combinations between '*lato sensu*' institutions and market processes which efficiently 'match' in terms of some performance yardsticks;
- non-markets variables are a permanent feature of the 'constitution' of the economic system and an essential part of the ways the economic machine is 'tuned' and evolves.

¹³⁵ Dosi (1988).

Table 1-1. From production function to capabilities centre

	Neoclassical theory	Advanced Neoclassical Theory	Transaction Cost Theory	Behaviouralist theory	Evolutionary Theory
Unit of analysis	given individuals	given individuals	given individuals, transaction	human behaviour	institutions
Vision of the firm	firm as a production function	firm as a nexus of contracts	firm as a governance structure	firm as an organisation	firms as a repository of knowledge
Analytical concepts	utility, scarcity, choice, equilibrium	asymmetric information, agency costs	opportunism, asymmetric information, asset specificity, bounded rationality	bounded rationality, satisfying behaviour	routines, habit, emulation, cumulative causation
Motive forces	utility and profit maximisation	utility and profit maximisation	utility and profit maximisation	purposeful individuals	technological change, institutional inertia
Analytical outcomes	general equilibrium, partial and Nash equilibrium	bayesian equilibrium	firm as an alternative mode of market co-ordination		dynamic capabilities, disequilibrium

Chapter Two. Vertical Integration vs. Horizontal Combination in the early Spanish motor vehicle firms (1900-1935)

1. Introduction

The Spanish motor vehicle industry has been very little studied from a historical point of view.¹³⁶ Despite its importance after World War II, Spanish scholars have given little attention to the industry from its origins. However, historically, it is true that the relevance of the Spanish motor industry can not be compared by any means with that of other countries. The motor vehicle industry has been extensively studied in those countries where it had greater relevance: the United States, in both the early period¹³⁷ and contemporaneously.¹³⁸ Europe as well has been given great attention: in France,¹³⁹ Britain,¹⁴⁰ and Italy¹⁴¹ there are extensive studies. Even other European¹⁴² and Latin American countries (from a more political economy approach) are represented.¹⁴³

¹³⁶ There exist two classical works on the history of the automobile in Spain: Ciuró (1970) and de Castro (1967). Recently, in commemoration of the 90th years of the Real Automovil Club de España, another history has appeared written by Gimeno (1993). For the history of the first period see Costa (1922). For more through academic research see, for example, Nadal and Tafunell (1992); see also Cabana (1992); Gómez Mendoza (1989); Carreras (1988); Calvo (1985).

¹³⁷ Arnold and Faurote (1919); Davis (1962); Donnelly (1962); Donner (1967); Donald (1989); Epstein (1926); Maxcy (1958) and Maxcy (1981); Rhys (1972); White (1971); Woollard (1954).

¹³⁸ Bresnahan, Timothy, and Raff (1991); Chandler (1964); Donner (1967); Rae (1984, 1987); Meyer (1981); Raff (1988, 1991); Seltzer (1928).

¹³⁹ Bardou, Chanaron, Fridenson and Laux (1982); Fridenson (1972, 1987); Fridenson (1987); Laux (1977); LeSSmann (1994); Schweitzer (1982).

¹⁴⁰ Barker, ed. (1987); Bowden and Turner (1993); Church (1986); Church (1994); Church and Miller (1977); Donnelly (1962); Foreman-Peck (1981, 1982); Bowden, Foreman-Peck and McKinsey (1995); Lewchuk (1985, 1986, 1987, 1993); Lichesteib and Meyer (1989); Bowden (1995); Tolliday and Zeitlin (1992); Whisler (1993); Wood (1989).

¹⁴¹ Bigazzi (1987); FIAT (1991); FIAT (1987); Volpano (1993).

¹⁴² Blaich (1987); Purs (1987).

¹⁴³ Garcia Gutierrez (1993); Jenkins (1977); Oliveira and Travolo Popoutchi (1979); Shapiro (1991, 1994).

The obvious question asks why such a lacuna exists, considering that Spain has become one of the foremost world-wide producers. Several reasons can be suggested. First, it could be due to the late date of its development as well as the fact that it has arrived mainly through multinational enterprise.¹⁴⁴ Since the 1970s, Spain has emerged as one of the most important manufacturing countries of motor vehicles world-wide. However, production is carried out wholly by multinational enterprises. Thus, two characteristics should be pointed out. The first is the late date of this emergence; the second, the absence of firms with a majority of Spanish capital. From a historical perspective, neither the first nor the second is completely accurate. Although the first faltering attempts to establish the industry had been made in the initial decade of this century, it was in the inter-war period that the Spanish motor vehicle industry truly began its slow development. This was done in two ways. First, there were small firms manufacturing short series of automobiles using artisan methods; e.g. the Hispano Suiza, which specialised in luxury vehicles. And, secondly, there were those which assembled imported parts, namely Ford and General Motors. The latter interrupted its activities abruptly and definitively during the Spanish Civil War, but Ford Motor Company remained until 1954.

A second explanation for the absence of studies on automobile firms and the motor industry could be that the field of business history in Spain has only recently been introduced.¹⁴⁵ The small size of Spanish firms could possibly explain this absence,¹⁴⁶ though since the late 1980s there has been an emerging trend in business history that could provide better explanations.¹⁴⁷

¹⁴⁴ Castaña and Cortés (1980); Díaz Mauriño (1972); Farre (1986); Hawkesworth (1981); Legendij (1993); Sánchez-Cortés y Dávila (1970); Vellas (1979).

¹⁴⁵ In recent years there has been an increasing interest. For a review of the Spanish business history literature, see Torres (1993) See also Coll Martín (1991); Coll and Tortella (1992); Valdaliso (1993).

¹⁴⁶ Carreras (1990), Carreras and Tafunell (1993, 1994), Carreras et al (1996).

¹⁴⁷ Nuñez and Segreto, eds. (1994), Lloren Minambre, comp. (1995), García Ruiz and Hernandez Andreu, eds. (1994), Comín and Aceña, eds. (1996). For a review essay see Valdaliso (1996)

Finally, and as a third reason, it could be argued that the inter-war years, and the civil war and post-war periods have received less attention than the nineteenth century up to 1914. Only in recent years has the inter-war period captured some attention from scholars.¹⁴⁸ As a consequence, perceptions of economic performance in modern Spain have derived from the nineteenth century experience despite the fact that growth and structural change mostly took place in the twentieth century.¹⁴⁹

However, Carreras and Tafunell have argued that although at first glance Spain seems not to have been part of the emerging business trends that occurred in the last decades of the nineteenth and the first of the twentieth centuries, market forces did in fact build relatively important firms in the first decades of this century.¹⁵⁰ By the early 1920s, Spain had demonstrated sufficient technical ability to produce aircraft and automobiles. In the automobile sector almost all the first attempts failed to create a local automobile industry. However, both domestic firms and multinational subsidiaries promoted ancillary industry and sales network. Subsidiary firms of Pirelli, Firestone, Continental and Michelin were already established in Spain.¹⁵¹ These concerns established the basis for the future emergence of the modern industry during the second half of the century. For example, the accumulated know-how of "Hispano Suiza" served as the foundation on which ENASA, the most important Spanish manufacturer of industrial vehicles, would later be established.¹⁵² Moreover, these first decades of the century, until the

¹⁴⁸ Palafox (1991), Comín (1987).

¹⁴⁹ For Spanish economic growth in the long run, as well as its industrial performance see, for example: Tortella (1973); Nadal (1975); Alcaide (1976); Prados de la Escosura (1988); Molinas and Prados de la Escosura (1989); Morella (1992); Carreras (1990); Fraile (1991); Naredo (1991); Tortella (1992).

¹⁵⁰ Carreras and Tafunell (1994).

¹⁵¹ In 1902, Pirelli set up a factory in Vilanova i Geltrú of electric conductors, enlarging it with tire manufacturing in 1917. The factory had an area of 55.000 square meters, employing 1,500 workers. In 1933, "Firestone Hispania, S.A." a subsidiary of the American Firestone was established in Basauri, Vizcaya. Continental set up a factory in 1936 in Torrelavega (Santander); and Michelin, in Usurbi (Guipuzcoa). See Barbone (1993) and also Borrell (1944).

¹⁵² Accordingly, "Empresa Nacional de Autocamiones, S.A." (ENASA) was created in 1946 by the state from the remaining assets and human and technological capital of the Hispano Suiza.

outbreak of the civil war, contemporaneous to the failure of domestic enterprise, saw a slow consolidation of foreign subsidiaries, clearly represented by Ford Motor Company.¹⁵³

The remainder of the chapter is organised as follows. Section two analyses the external factors affecting the motor industry: market size, costs of raw materials and semi-manufactured products, the levels of education, and the role of the State; and, especial attention will be given to the metallurgical industry, due to its strong relation with the former.¹⁵⁴ Section three turns to the structure and organisation of the firms: their small size, atomisation and “amateurism” were the main characteristics of local motor vehicle firms. Three cases will be considered: Hispano Suiza, Elizalde and Iberia. The first represents the relative success of luxury automobile production; the latter was an attempt to manufacture small ‘popular’ vehicles. Finally, Chapter One concludes by pointing out that the Spanish motor industry did not adopt organisational forms conducive to long lasting enterprises.¹⁵⁵ The heavy requirements of capital, owing to technological change, and the incapacity to create specialised firms and therefore promote horizontal combination signified the failure of the industry. Instead, local manufacturers followed a vertical integration strategy that prevented firms from organising in larger business units. As a consequence they had to leave the industry.

¹⁵³ “Motor Iberica SA”, the most important domestic producer of light and commercial vehicles, was the continuation of the Ford Spanish subsidiary: Ford Motor Iberica.

¹⁵⁴ In France, for example, according to Roger Nathan (1928) *Revue d'Economie Politique*, turnover figures for automobile business were as follows: 6,700 million francs in 1927 and 7,500 in 1928. The industry employed more than 200,000 workers and, including ancillary industries closer to 400,000. Moreover, in 1928 the motor industry required 220,000 tonnes of steel, 9,000 tonnes of aluminium, 275,000 square meters of crystal and glass, and 5,000 tonnes of varnishes and paints. Comparing the development of the main French industries, it is worth noting that whereas the general production index was as follows: 107 in 1925 (base 100 in 1913), 109 in 1927, 127 in 1928 and 140 in 1929; the motor industry's production index went as following: 461 in 1925, 522 in 1927, 610 in 1928 and 708 in 1929. Therefore, whereas the general index had increased 31 percent from 1925 to 1929, that of the motor industry increased 54 percent. Other industries had minor increased, for example, mechanical construction 36 percent, iron and steel 30 percent. See *Las Finanzas- El automovil en España*, 358(1929):1016.

¹⁵⁵ There was a lack of “path dependency”, that is, small changes that can produce long-lasting effects, and, more generally that history matters. The concept of “path dependency” was first introduced by David (1985).

2. External factors affecting the industry

2.1 Market size

Two main questions are worth noting in the present chapter: why did all the early attempts fail to create a national motor industry? Why did Spain not have any large firm in this industry? The first and probably most obvious reason is the market size. As Carreras and Tafunell have put it: the size of the market has been one of the most permanent factors influencing the poor performance of large Spanish firms. Spain had some 17 million inhabitants by 1880 - less than half that of the UK, France or Austria-Hungary, and a third of the United States- with quite limited purchasing power -about the Italian per capita level of that time.¹⁵⁶ Not only had the internal market been small, but increasingly protected. A set of tariffs - 1891, 1906 and 1922 - increased the protection of Spanish goods.¹⁵⁷ Spain became a high tariff country. After the Civil War, the autarchic policy of the new regime was even more protective: it closed the country down. This long-term protectionist tradition very much reduced the growth potential of Spanish firms, mainly in export-oriented sectors.¹⁵⁸ However, this protection did not help the emergence and development of a local automobile industry (see table 2-1).

Table 2-1. Protectionist levels* in Europe, 1913-31

Country	General	Iron and Steel	General	Iron and Steel
	1913	1913	1931	1931
Spain	35.7	36.4	55.0	56.5
France	12.9	7.0	23.6	18.6
Italy	12.6	11.6	33.8	21.8
Belgium	8.7	11.0	9.2	11.0
Germany	8.5	6.7	15.0	12.5

Source: Fraile (1991:71) * Most favourable tariff as a percentage of international prices from the main manufacturing exports countries.

¹⁵⁶ Carreras and Tafunell (1993, 1994)

¹⁵⁷ Liepmann (1938), Pelacha (1987), Tirado (1996), Viñas *et al.* (1979).

¹⁵⁸ Carreras and Tafunell (1993, 1994).

2.2. Metalwork and iron-and-steel industry

One of the most important technological foundations for the process innovations was the enormous progress made in the ability to produce cheap steel and of a good quality, that together with the use of steam power made possible the transportation revolution. Highly related with this process were the main organisational innovations of the period, changeable parts, the assembly line, and the hierarchization of management as well as the verticalisation of firms.¹⁵⁹ Catalonia was one of the major industrial areas in Spain and Barcelona, its capital, the city where most of the first automobile manufacturers had appeared, thus, I will be primarily concern with this region.¹⁶⁰ Catalonia practically did not produce iron, since the transportative difficulties had paralysed the extraction of the mineral from the subsoil. Therefore, the region had to select the types of industry that required the fewest material inputs from the metallurgical industry. However, Catalonia could have developed a powerful machinery industry because it had a rich market of old iron and a considerable demand, as well as being the first consumer market in Spain. Sales from the "Central Siderúrgica" (Iron and Steel Central Plant) in 1909, for example, represented 5,5 kilograms per habitant in all Spain, and in Catalonia 7,5 (this figure does not include one big concern which did not belong to the 'Central Siderúrgica'). The strong economic performance of Barcelona's harbour and its hinterland had made necessary the development in Spain of large manufacturing industries. The general coastal traffic of iron in the harbour of Barcelona (excluding minerals) was 20% for entrances, and only 3% for

¹⁵⁹ Magnusson and Marklund (1993: 313).

¹⁶⁰ Already in the nineteenth century, Catalonia enjoyed a fairly equal income distribution. The expansion of internal and external trade generated a demand for transportation and other services associated with commercial development. This created more opportunities for wage labour both in the service sector and in the production of ships, overland transport vehicles, and in the need for work animals. Consequently income levels rose for large numbers of people and contributed to an expansion in the demand for mass consumer goods. The rise of the most important industries was linked to this expansion of the home market. See Maluquer de Motes (1987: 173-4)

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departures. However, Catalan industries of final goods had had enormous difficulties owing to the high prices of raw materials. In a place like Catalonia that did not have optimum conditions for the production of raw materials, it had provoked a lack of manufacturing products, thus constraining consumption, and favouring foreign competition.¹⁶¹

To a certain extent this absence of an iron and steel industry had prevented the development of the automobile industry. Moreover, the shortage of combustible materials forced Catalonia to import energy on a large scale, therefore increasing costs.¹⁶² Catalonia's inability to compete in European markets could be explained not only by this lack of energy, but also by the deficient structure and atomisation of its industry and its subsequent failure to reach the technological, organisational, commercial, and financial levels needed for both economies of scale and improved productivity.¹⁶³ Another factor that helps to explain this failure was the economic policies of the government that temporarily allowed railroad materials to be imported duty-free, depriving the nation's iron and steel industry, and especially its engineering industry, of developmental opportunities. Its tariff policies also hindered the engineering industry by charging low tariffs on imported machinery, whereas high tariffs were imposed on the industry's material inputs, that is, iron and steel products.¹⁶⁴

¹⁶¹ Another obstacle was the shortage of communication means. The freight for iron, from Antwerp to Barcelona was around 8 francs, and 18.75 pesetas from Bilbao to Barcelona. As regards land transportation, most part of Catalonia did not have good roads and transport was largely by mule. *Estudios Mineros* (1910).

¹⁶² On energy production and consumption see, Nadal (1986), Sudrià (1989, 1990). Moreover, the high coal prices prevented the establishment of the iron and steel industry in Catalonia.

¹⁶³ When the metal-transforming and engineering industries arose and began to supply equipment to all other industries, material factors became less of a constraint, since labour now represented the highest proportion of the total production costs. Under these circumstances, Catalan industry could have made deep inroads into the world market in the same way that even less developed economies such as that of Sweden and Italy did, by exporting Husqvarna sewing machines, Olivetti typewriters, and Fiat automobiles. This never materialised in Catalonia. See Maluquer de Motes (1987: 182).

¹⁶⁴ Consequently, Spain did not foster the production of iron and steel through railway manufacture. Railway firms, own by foreign capital, acquired most of their materials from abroad. Spain exported annually 8 to 10 million tons of iron mineral at prices of 14.2 pesetas per ton. The mineral once transformed came back to Spain at a cost of 716.14 pesetas per ton.

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Spain's deposits were of enormous wealth. The country produced lead, copper, iron, zinc, and mercury. However, the deficiencies came in price, quality, supply shortage and difficulties in communication - both overland and by maritime means. For example, the average charge was 50 to 70 per cent of the value of the same raw materials in other European markets. An ingot of iron cost 64 shillings in Middlesborough and 130 pesetas at the free port of Barcelona. Commercial iron cost 170 francs per tone FOB Antwerp and 290 pesetas at Barcelona. These differences were explained by the freight cost, insurance and custom duties, port fares, load, and unload, etc. Therefore, it was impossible for Catalonia to have developed an iron and steel industry that overburdened its raw materials to such a high degrees (see Table 2-2).¹⁶⁵

Table 2-2. British and Spanish iron prices

Year	UK	Spain (1)
1905	175.7	202.0
1910	162.6	260.0
1915	211.3	216.0
1920	572.7	629.0
1925	271.6	577.0
1930	366.2	430.0

Source: Fraile (1991:173)

(1) Fraile (1989:89) "crecimiento económico y demanda de acero"

in L. Prados and P. Martín Aceña (eds.) *La historia económica en España*, Madrid: Tecnos.

2.3. The role of the state

The role of the Spanish government had not been conducive to the spread of early motoring or the motor industry's development. For instance, as regards fiscal

Agrupacion de Industrias Siderurgicas y Metalurgicas del Fomento del Trabajo Nacional. "Memoria Junta General 4 Julio 1910." *Estudios Mineros* 1, no. 20 (30 June 1910).

¹⁶⁵ "The extraordinary prosperity of maritime transport came from high charges, which in the end were passed on the cost of the goods transported, part of which were destined for the home market. The mass of consumers paid for the enrichment of a small minority of transport owners." Fontana and Nadal (1976: 469).

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policy, taxes for the owners of automobiles were high, and tax regulation were old, launched at a time when there were hardly any automobile vehicle in the country. The major part of the vehicles circulating in Spain during the first decades of the century were imported. Customs tariffs were also high, making the spread of automobiles more difficult. On the other hand, and in spite of the tariff question, the local motor industry had not been developed. The motor vehicle industry had not been very effectively protected by the Spanish government, in practice either from custom duties or from the Law of Protection of National Industries. Often, through rebates, motor vehicles were sacrificed in commercial treaties. The French treaty of 1931 and several regulations to promote the assembly of motor vehicles by foreign manufacturers with local materials and components (see the decree of 3 July 1931) and discouraged local manufacturers.¹⁶⁶ The tariffs established that the payment be made according to the 'gross weight' of the vehicle (see table 2-4).¹⁶⁷

Table 2-3. Potential tariff levels of vehicles.

Country	1913 min.	1913 max.	1927 min.	1927 max.	1931 min.	1931 max.
France	9.6	15.4	34.0	35.8	35.0	52.0
Italy	5.1	6.6	43.0	53.0	93.0	111.0
Belgium	3.3	7.3	10.3	20.3	12.5	24.8
Germany	2.6	6.8	24.3	40.6	9.3	23.7
Spain	7.5	11.5	29.0	43.5	37.0	55.0

Source: Leipmann (1938)

¹⁶⁶ Borrell (1944).

¹⁶⁷ Since the July 1, 1906, the customs duties were as follows: iron or steel framed carriage chassis, weighing up to 1,000 kilos each, intended for ordinary road carriage, with or without motor, 80 ptas per 100 kilos gross weight; iron and steel framed carriage chassis, weighing more than 1,000 kilos, to pay 100 pesetas per 100 kilos gross weight; motor carriages, open, with or without motor, to pay duty corresponding to frame, according to weight, plus 200 ptas. Motor carriages closed, with or without motor, to pay duty on frame according to weight, plus 320 pesetas. Note that to determine the weight of the frame, deduct from the total weight of the carriage 200 kilos in the case of Class 571 and 400 kilos in the case of Class 572. Prior to July 1, 1906, there was no special class for motors in the tariff and the customs statistics do not, therefore, show any figures resting to imports. See Diplomatic and Consular Report (1906).

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For many years preceding World War I, the Spanish market had been furnished almost exclusively by European factories and, in those conditions, in order to prevent the imposition of 700 and 800 pesetas more of duties (one gold peseta for each kilogram of container and packing), special railway wagons were built for the transportation of automobiles, so that from right across Europe automobiles were sent without any packing at all. The result, therefore, was that all the European factories were sending cars to Spain overland. Consequently, the Spanish Treasury did not make any profit here. Moreover, as a result of this state of affairs, the firms that did not have overland connections with Spain, as was the case with the American firms, were harmed. Thus, both Ford Motor Company and General Motors decided to set up assembly plants in the country during the 1920s. On the other hand, gasoline taxes were also higher than those of the rest of European countries because, having a few oil producers and therefore being producers of the raw material and its derivatives, they taxed the importation of these substances in order to prevent competition from other producer countries (see table 2-4).¹⁶⁸

Table 2-4. Petrol Prices in the USA, Italy and Spain

	USA		Italian		Barcelona	
	(1)		(2)		(3)	
1890	0.77	100	17	100	22.9	100
1895	1.09	142	18	106	29.5	129
1900	1.19	154	22	129	28.9	126
1905	0.62	80	18	106	31.3	137
1910	0.61	79	15	88	30.6	134
1914	0.81	105	13	76	33.3	145

Source: Sudrià (1990:186) (1) price \$/bar; (2) import price Lire/qm; (3) Ptas/100 l.

According to statistics, motor vehicles registered in Spain during 1925 were 22,000, of which less than five per cent were motorcycles and the rest were

¹⁶⁸ "Informe de la Cámara Oficial "Real Automóvil Club de España" a la Junta de Aranceles y Valoraciones." *España Automóvil* (1916): 32-34. Also see Sudrià (1990).

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automobiles, almost all of them foreign vehicles; the only two factories producing vehicles (Elizalde and Hispano Suiza) had manufactured only 750, whereas there were 20,000 extant vehicles from foreign countries. At an average of 10,000 pesetas per unit, we arrive at 200 million pesetas, though not the entire sum was going to foreign countries. Deducting custom duties (10 per cent) and dealer's commission (20 per cent), what we have is a total of 140 million pesetas flowing abroad, which was enough to have won the attentions of the Spanish Treasury. However there were no movements towards the development of this industry.¹⁶⁹

According to contemporary observers, they observed that the tariffs of the European countries that had a relevant industry, we see that in each case it was very much protected. Spain could have followed the same pattern of protection to foster the industry. Even if, as a consequence of such protection, custom duties from motor vehicle import had been decreased, in the long run the motor industry and its ancillary industries would have developed earlier.¹⁷⁰

It has to be pointed out that Spain's automobile producers never enjoyed true support from the State. On the one hand, the Cambó Tariff of 1922 was thought to have been a good and unique contribution occasion for the development, but never produced propitious results.¹⁷¹ For instance, according to Elizalde, there were several reasons for the absence of large automobile firms. First, Spain did not produce special steels, was forced to acquire them from abroad, and thus pay high prices, customs duties and transportation costs. In effect, one of the most important elements for the manufacture of motor vehicles is the steel, which constitutes a considerable input into the finished product. Almost all parts are manufactured with different proportions of special steels. Steel production was neglected in Spain, and it was of capital importance in order to build an efficient motor vehicle industry. Though something had already been done by the

¹⁶⁹ Nicolau (1926). Pablo Nicolau was a professor of the Engineering School, ex-general manager of Hispano Suiza and General Secretary of the Real Automóvil Club de Cataluña.

¹⁷⁰ Nicolau (1926).

¹⁷¹ On industrial protectionism during the inter-war period see, for example, Pelechá (1987).

metallurgical firms in order to solve the problem, at that moment of time the steels with enough guarantees to be utilised with success were few. Secondly, there were no Spanish manufacturers of special components such as electric equipment, radiators, carburettors, lights, etc. They had to be imported. However, by the beginning of the thirties they started to be manufactured in small quantities and it was hoped that in a short time they could be incorporated into the assembly of automobiles.¹⁷² Thirdly, in order to set up a large scale industry, however, the country did not have the suitable machinery, which had to be imported. There were no factories that produced such machinery nor any factory capable of supplying precision and special design machinery. The same occurred with tools, which had to be imported in large amounts, because there were no firms manufacturing the necessary types of precision made machine-tools. Furthermore, it was necessary not only to have specialised machines-tools but practical experience in using them.¹⁷³ There were few firms whose organisation embraced the necessary activities to carry on automobile production.¹⁷⁴

On the other hand, currency rate fluctuations were facilitating the entrance of foreign cars into Spain. American cars with their much lower price were entering the country in large numbers. Finally, Spanish buyers had been attracted through intensive publicity and more aggressive commercial and marketing methods towards the cheap imported cars, a class of vehicle that Spanish producers were unable to supply.¹⁷⁵

With the aim of organising a local automobile industry,¹⁷⁶ local manufacturers had recommended that, first of all, the government should have the goodwill to protect the industry through the provision of better economic conditions (as in other

¹⁷² Guiloche (1930).

¹⁷³ Rosenberg (1976, 1982) has stressed the importance of learning by doing and by using.

¹⁷⁴ Guiloche (1930).

¹⁷⁵ Elizalde (1926).

¹⁷⁶ The country's needs in terms of motor vehicles can be evaluated at over 8,000 cars annually just for substitution of old units. Foreign countries were the main suppliers of the Spanish market, Elizalde (1926).

countries) for locally made vehicles. The government's protection could be summarised as follows: first, revise customs tariffs in order to prevent the progressive invasion of foreign cars;¹⁷⁷ second, the Government should pass its demands to Spanish suppliers in long term contracts of several years, with the objective of assuring the maintenance of employment for workers and engineers in the factories; third, a revision of tariffs on intermediate goods that were, at that moment too high; finally, to stimulate the local spare parts industry.

Summing up the external problems affecting Spanish industrial life during the first decades of the twentieth, already indicated by contemporary observers were: a limited market size, an absence of export industry, the role of the government as regards tariffs and industrial regulations, commercial and transportation shortages, and the limited establishment of ancillary and complementary industries.¹⁷⁸

3. Internal factors affecting the early motor industry

The remaining part of the chapter is concerned with those first attempts to create a national motor industry tackling, at the same time, some facts regarding firm organisation, strategy and structure. As has already been mentioned, the early period of the Spanish automobile industry has been little studied. Furthermore, it has been impossible to look into the archives of those pioneers, either because they do not exist or because they have been lost. However, the early period can be followed through secondary sources, mainly contemporary journals and magazines.¹⁷⁹ During the first half of the century, motor vehicle industries had developed in several countries, mainly in the USA, Canada, UK, France, Germany,

¹⁷⁷ For instance, France had imposed a 45% 'ad valorem' on Spanish automobiles, plus 19% of luxury tax, multiplied by a coefficient of 1,80. The outcome was that a Spanish car of 25 thousand pesetas paid more than 18,000 francs of customs duties, resulting in a final price of more than 75,000 pesetas, when a similar French car was being sold at 35,000 to 40,000 pesetas.

¹⁷⁸ Barret (1913).

¹⁷⁹ For the early period of the Spanish automobile industry see, for example, Errando (1933); Guiloche (1930); Elizalde (1926); Ruiz Ferry (1928, 1929); Rentería (1926); Ortíz (1920); *España Automóvil* (1916); De Cardenás (1920); Nicolau (1926); Borrell (1944); Costa (1922).

Russia, Italy and Czechoslovakia followed, with less than 10.000 cars and trucks (figures of 1934), by Sweden, Japan, Austria, Belgium, Spain, Poland, Switzerland, Denmark and Hungary. For example, in 1935 USA and Canada manufactured 4.2 million units; that is, 80% of world production. In 1929, it was 85% and in 1937, 76%. Spain, in 1935, had produced only 800 automobiles and trucks, while 22.125 were imported.¹⁸⁰ However, there were 180.000 automobiles circulating, sufficient, according to Andre Citroën (see University of Columbia Congress, New York, 1931) to establish a factory allowing an annual production of $180.000 \times 0,20 = 36.000$ units.¹⁸¹

In 1900, the first local electrical automobile factory, "E. la Cuadra & Co." was established in Barcelona, though its activities ceased soon after. However, several of its creditors, with the remaining assets - machinery and the trained personnel - established "F. Castro & Co.", a manufacturer of internal combustion engine vehicles. This second concern also failed. Finally, in 1904, with an initial capital of 250.000 pesetas, "La Hispano Suiza" was established having inherited the machinery, facilities, technology, and employees from the former firm.¹⁸² Though "La Hispano Suiza" was the most remarkable case of automobile manufacturers in this early period because of its high technical standards, there were also several car manufacturers established in Barcelona worth noting, such as Hereter, David, SA, and Grilló, F. Batlló & Co., Fabrica Nacional de Automóviles, S.A and Badia, Elizalde & Co.(later transformed into Elizalde S.A.). By the mid 1930s, all these

¹⁸⁰ According to the USA's Trade Department, automobile's exports from the USA to Spain were as follows: in 1925, 6,3 million dollars; in 1926, the figure decreased to 5,0 million, however, in 1927 it grew to 7,0 million, and in 1928, 8,7. Trucks exports were 0,6 million dollars in 1925; 1,2 millions in 1926; 1,7 in 1927 and 2,8 in 1928. In 1925, units export from the USA to Spain were 6,484 cars; in 1926, 5,056; 7,515 in 1927, and 9,597 in 1928. The number of trucks and buses exported to Spain were as follows: 1,475 in 1925; 2,227 in 1926; 3,203 in 1927; and, 4,406 in 1928. See *Las Finanzas*, 364 (1929),1159.

¹⁸¹ Citroën (1931) Congress Report, University of Columbia, New York .

¹⁸² It soon enlarged its production facilities and in 1911 set up a large automobile and air engine factory in La Segrera (Barcelona). It had also established a branch in Paris, with workshops at Levallois Perret (Seine), transferred later to Bois Colombes (Seine), and acquired in Ripoll a large factory with hydraulic power in order to set up the printing, inlay and forge sections. It also organised in Barcelona a body section workshop.

concerns had ceased as motor vehicle manufacturers, though some of them kept the workshops and started producing other goods (e.g., Elizalde produced air engines from 1925). Although Barcelona was the main industrial area and where most of the firms were established, other Spanish enterprises had taken the same pattern, such as Lazy, Rivas & Co., Izaro, Grandiere, Calvo & Co.¹⁸³

Local manufacturers were not the only ones established. There were also foreign assembly factories using national components: Ford and General Motors, both in Barcelona, "Fiat-Hispania" in Guadalajara and the "Naval Sornua" of Reinos. In 1934, the two American subsidiaries imported 11.278 cars knock-downed and 2.300 assembled, producing 12.142 units; 9.753 for the domestic market and 2.389 for export markets (mainly France, Italy, African, and Portugal). The Fiat of Italy took over the *Fabrica Nacional de Automobiles, S.A.* of Barcelona (Guinardó), as well as "La Hispano" of Guadalajara. This firm was a truck manufacturer, a subsidiary of "Hispano Suiza" of Barcelona. Then, in 1931, it started the production of the "Hispano", a vehicle akin to the Fiat 514.¹⁸⁴

To sum up, by 1936 there were only five automobile firms in Spain: Hispano Suiza (share capital of 15 million pesetas), Ford Motor Ibérica (9 million pesetas), and General Motors Peninsular, all three based in Barcelona; Fiat-Hispania (0.9 million pesetas) in Guadalajara; and Constructora Naval in Reinos. Of these five concerns

¹⁸³ Borrell (1944).

¹⁸⁴ Fiat represents an interesting case of the establishment of a foreign concern in a host country (Spain) during the first quarter of the century. In August 1919, it established a commercial subsidiary, "Fiat Hispania". During the 1920s, and despite the high customs tariff, Fiat reached one of the top positions (together with Ford, Chevrolet and Citroën) of vehicles exported to Spain. However, in July 1930, a new higher custom tariff impelled Fiat to set up a joint-venture with local manufacturers (Hispano-Suiza, Pescara and Ricart) in order to establish a manufacturing concern in Barcelona. This initiative was favoured by the government, which had passed a decree in July of the following year granting tax deductions of up to 50% for unassembled vehicles destined to be assembled in Spain with local manufacture. However, Fiat had decided to establish itself in Guadalajara instead of Barcelona. According to Bigazzi, the reason had been the labour agitation that followed the proclamation of the Republic in the Catalan capital. Fiat reorganised the Spanish factory - which at that time was producing trucks - to be able to manufacture cars (the Fiat '514'). Production initially was no more than two or three hundred vehicles per annum. Then with the outbreak of the civil war, the factory was dismantled and transferred to Valencia. Bigazzi (1986: 247- 249), see also Volpano (1993).

only the first was a real manufacturer, the remainder being assembly plants. To illustrate, in the years before the outbreak of the civil war, local motor vehicle production (excluding assembly plants) was as follows: 435 units in 1932 (2.0 million world wide); 375 in 1933 (2.7 million world wide); 830 in 1934 (3.7 million world wide); and 800 in 1935 (5.2 million world wide). These figures reflect the importance of importation and local assembly (see figure 2.5.).¹⁸⁵

Technologically, Spanish motor vehicles manufacturing was characterised by small series of *de luxe* vehicles production. However, there had been several attempts to manufacture a 'popular' car, none of them succeeded, and pioneers soon ceased their activities. On the other hand, foreign subsidiaries assembled relatively large series of vehicles. An average of 230,000 could be accepted as a reasonable estimate of cars circulating in Spain in the 1930, a figure that represented 10 vehicles per 1,000 habitants, notably inferior to the USA (223,55), Canada (142,09) Britain (57,96) France (54,02) Germany (28,70) and Argentina (24,36).¹⁸⁶ Such a figure hinted at enormous possibilities for a domestic motor industry. A report published in October 1939 by the Automobile Branch of the Ministry of Industry established the basis for all automobile manufacture in Spain.¹⁸⁷ It entrusted the manufacture of engines and the assembly of vehicles to local manufacturers, in collaboration with foreign firms. It also entrusted the manufacture of the body parts to local ancillary industries already established or about to be established. The government also decreed (10 Feb., 1940) the immediate annual needs of the domestic market at 31,000 vehicle, constituted as follows: Light cars of reduced consumption and price, 5.000; touring cars, 9.000

¹⁸⁵ Borrell (1944).

¹⁸⁶ Ibid.

¹⁸⁷ Robert (1943) probably undertook the most extensive study of the situation of the Spanish motor industry. This report tried to establish the basis for the nationalisation of the industry. Antonio Robert was Chief of the Automobile Section of the Ministry of Industry. For further developments on this subject, see chapters 6,7 and 8 of the present thesis.

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units; light trucks 2,5 to 3 tons, 15.000 units; Heavy trucks 7 tons ,1,000 units, and Tractors 1,000.¹⁸⁸

Table 2-5. Spanish car imports by countries, 1925-1950

Years	Total	Germany	Canada	USA	France	UK	Italy	Others
1925	14148	174		6437	6200	204	1081	52
1926	16688	24	158	7349	6661	239	2255	2
1927	14191	83	5	7391	5413	175	1096	28
1928	17571	134		9750	6049	292	1254	92
1929	15309	246		8391	4864	351	1052	405
1930	9387	159	18	5005	2314	104	1409	378
1931	1706	240		841	398	83	132	12
1932	4912	727	778	497	1190	1449	270	1
1933	9407	1119	2153	168	2831	2153	976	7
1934	13641	2308	2297	472	3813	2525	1312	914
1935	14283	3005	2527	278	1279	1570	1320	4304
1936	4947	1314	712	29	904	1778	30	180

Source: Instituto Nacional de Estadística, Madrid

3.1. Education and organising factors in metallurgy and iron and steel industry

As regards the product quality deficiencies, two issues need to be raised: first, as to quality itself and, second, as to the manufacturing quality process. Modern organisations had to know beforehand all the operations to be carried out in order to manufacture the product, the number of times to be repeated, the time invested, and the number of pieces to be manufactured in one go. Ultimately, it was impossible to carry out this systematic organisation without specialised production. If one observed the major part of Spanish metallurgical concerns, what would have come to mind would had been the great variety of manufacturers with different and undetermined quality standards and operations without mass production precision

¹⁸⁸ Borrell (1944).

machine tools. In these circumstances, it was almost impossible to have adequate facilities. Ultimately, firms could have been modern, but definitely inefficient.¹⁸⁹

Another factor worth mentioning was that the domestic metallurgical industries were not investing in managerial structures. Spanish firms did not possess the organisational capabilities conducive to economies of scale and scope. Moreover, they lacked adequate systems of on-the-job training. Metallurgical firms, as those of motor vehicles later, were weak in exerting control over external market forces and even over their own internal organisation. The internal organisation was represented by four categories or levels in the employee's hierarchy: apprenticeships, workers, master craftsmen and engineers.

- First, modern metallurgical industries required workers with high skills. However, Spain, contrary to other European large industries that required hundreds or thousands of workers, had not organised “workshop schools”.¹⁹⁰
- Secondly, the failure of many metallurgical specialisations and the difficulties of many regions in Spain was due to their carelessness in training and forming workers, implying a shortage of trained workers suitable for new industries' requirements. The handling of iron, the conservation and use of modern machine tools etc., required highly skilled workers. According to research carried out for the First National Congress of Iron and Steel Industries held in April 1913, it was pointed out that through a new organisation of production and the establishment of workshop schools in less than ten years, positive outcomes could have been obtained.¹⁹¹
- A third worker's category was the section master craftsman and the work's head: the former came from the shop floor workers' selection process; the latter,

¹⁸⁹ Barret (1913).

¹⁹⁰ There, the apprentice, after a selection process, had a trial period of three to six months. Then, he could sign the apprenticeship contract that according to the specialisation, had a period of four, six or eight month courses. The apprentice started earning immediately, with further salary increases according to the courses.

¹⁹¹ Barret (1913).

however, required more complicated skills and training than the former. He had to be trained as a semi-engineer with a more practical than theoretical knowledge, along the lines of the German *Tecnikum*.

• The final level in the employee's hierarchy was the engineer.¹⁹² At this point, it is necessary to pay attention to the role of institutions such as universities and research organisations. This was a matter of extreme importance because the level of efficiency of technical education was a contributing factor, to a certain extent, to the industry's development and progress.¹⁹³ However, Spain had initially placed an excessive emphasis on pure scientific knowledge over the applied.¹⁹⁴ The country was still far behind American, German or Swiss technical schools.¹⁹⁵ And a second shortcoming of Spanish high technical education was its lack of specialisation.¹⁹⁶

The enterprises' organisation, probably the most important factor determining the firms' permanence in the industry, had not been well developed.¹⁹⁷ Therefore, it was impossible to draw any positive outcome, whatever the manufacturing firm, if

¹⁹² It has to be remarked that the first managers came from an engineering background. Spain had a long tradition of military engineering during the nineteenth century: both mining engineers and "civil" engineers at Madrid. In the 1850s, the Barcelona industrial school was created. See Garrabou (1982).

¹⁹³ For the importance of industrial engineering see, for example, Daniel Nelson (1995).

¹⁹⁴ It is worth noting that metallurgical technology (and other modern fields such as computer science, chemical engineering) are basically about knowledge stemming from operating and design experience with products and machines and their components, and a general analysing reflecting on this, rather than resting on the fundamentals of science (what philosophers of science may call 'science'). See Nelson (1990), where he stresses the rise of the applied sciences and engineering disciplines, the codification of generic technological knowledge, and the professionalisation of R & D and related activities as important forces for the socialisation of knowledge and, to some extent, R & D.

¹⁹⁵ Universities are a recognised repository of public scientific and technological knowledge. In modern capitalist economies, university science and engineering grew up together with science-based industries. Universities provided the industry with technical people as well as ideas about product and process innovation in newly technical fields, such as chemical and electricity. See Nelson (1990).

¹⁹⁶ One of the few Spanish institutions of applied science was the Institut Químic de Sarrià (IQS) in Barcelona. The IQS, founded in 1916, is a private institution devoted to chemical engineering education and applied science. See Puig Raposo and Lopez García (1994).

¹⁹⁷ Organising factors are stressed in Kogut (1992). He emphasises the principles by which the most important managerial inventions came to be, as expressions of an organising logic of standardisation, rationalisation, and measurement developed and adopted by firms of all sizes.

it did not possess a modern internal organisation. In the USA and Germany, for instance, there were consultants¹⁹⁸ who had organised the accounting, sales department, stocks, transport, manufacturing, administration, technical offices of whatever manufacturing firm's size.¹⁹⁹ On the contrary, in Spain this was still an "unexplored field."²⁰⁰ Re-organisation of labour and the technique of scientific management arrived late in Spain. The industrial firms began to modernise through the adoption of Taylorism.²⁰¹ Taylor's scientific organisation of labour began to be

¹⁹⁸ The role of the consultant is developed in Nelson (1995).

¹⁹⁹ Most firms contain many people and generally have a management group distinct from the individuals who carry out production. There is, therefore, the need for a mechanism to co-ordinate action. Thus, there exists a problem of organisation even if all individuals shared the goals of top management. But, on the whole, a firm's employees do not automatically share the same objectives as managers. So there is a requirement of motivation and monitoring. See Nelson (1981) for a review, though not exhaustive, of the firm as organisation. March and Simon (1958) have distinguished two lines of organisational theory. One, stemming from the work of Taylor (1911) was concerned with physical activities involved in production, what might be called 'scientific management'. And a second, deriving from Glueck and Urwik (1937) and Weber (1947), focus on problems of organisational structure. The view of the organisation as a 'social system' was put forward by Barnard (1937) and Simon (1957). Further path-breaking development in organisational behaviour was Perrow (1979). See also Cyert and March (1973), Williamson (1970) and Liebenstein (1966).

²⁰⁰ Barret (1913).

²⁰¹ Frederick Taylor's mission was to ensure high rates of utilisation of existing plant and equipment by the extracting of high levels of effort from the machine-shop workers. Taylor's critical insight was that, to control the pace of work, workers had to believe that they would share in the value gains resulting from their co-operative efforts.²⁰¹ Taylorism, as well as the scientific management movement that spawned, made important contributions to the rationalisation of plant layout, the co-ordination of work flows between vertically related activities, and cost accounting. Although, in the period 1901-1917, Taylor's followers redesigned work on the shop floor in some fifty firms, they made little headway in using piece-rate incentives to win the workers over to 'scientific' standards. Where the knowledge of how to perform work continued to remain with workers on the shop floor, des-killing technological change in one vertically related production activity only served to enhance the strategic position of the skilled workers in obstructing the flow of work. The managerial method to gain the co-operation of these key workers was literally to take skills off the shop floor by integrating skilled workers into the managerial structure as supervisors or staff engineers, and by restructuring the technical division of labour on the shop floor accordingly. The advent of management control of mass production required that the enterprise employ supervisors, engineers scientists, accountants, lawyers, among other personnel deemed to be worthy of salary status. As the firm expanded multi-plant and multi-regional operations, as it integrated production and distribution, as it diversified into new products lines, and as it committed resources to in-house research and development facilities, the managerial ranks grew. As a consequence of increasing hierarchies and co-ordination of authority within the managerial structure, work on the shop floor was losing much of its intrinsic appeal. For the workers, work was becoming simply a means of making a living. Lazonick (1990: 233). See also Nelson, (1980); Nelson, ed. (1992).

known in Spain in 1914 but it was not until the 1920s that the method was first adopted in iron and steel works and engineering firms.²⁰²

However, despite the shortcomings, the Catalan economy was already basically industrial before the Great Depression. In 1930, twice as many people were employed in industry than in agriculture and the use of electrical energy both in industry and at home had become quite generalised before 1930. Maluquer de Motes has used electricity consumption to measure the disparity between Catalonia and the rest of Spain, and concludes that, in per capita terms Catalonia and the Basque Provinces consumed more than twice the Spanish average. In absolute terms, the Catalan market absorbed approximately one-third of Spain's total electricity output, though the region had only a little over one-sixth of the country's population. In terms of per capita electricity usage, Catalonia, the Basque Country, and Northern Italy shared similar consumption levels. In addition these areas exhibited levels above those of France and not far below those of highly industrialised countries such as Great Britain, Germany, and Belgium. Electricity was generated, however, in the absence of deposit of iron and coal.²⁰³ The lack of local iron and coal caused serious limitations to Catalan industrialisation.

Despite these shortcomings, the domestic metallurgical industry made a considerable effort to displace foreign enterprises that supplied the domestic market. For instance, from 1914 to 1918 workshops had been enlarged, and facilities modernised. Moreover, new goods started to be manufactured. Consequently, in 1918, the picture of the metallurgical sector in Catalonia (and in Spain) had changed from the one in 1913. Increases in facilities and production were notable during this period. However, the metallurgical industry had to face a much more difficult scenario after the World War I with the increasing foreign

²⁰² see 'Revista Técnica', several issues of the first half of the 1920s, for the introduction of Scientific Management in Spain. For other countries such as France, see Fridenson (1987) and Moutet (1975).

²⁰³ Maluquer de Motes (1987: 172-3).

competition.²⁰⁴ During this period, the cost of metallurgical firms had doubled compared to that of 1914, in spite of the fact that the tariff custom had remain the same until May 1921. Therefore, the protective margin was two times less. Moreover, foreign costs decreased quicker than in Spain. This drop had come about through the reduction of the prices of raw material and favourable foreign changes rates.²⁰⁵ It could be concluded then, that the governmental tariff "miscalculation" had consequences for the metal-mechanical manufacturing enterprises provoking a considerable crisis during the first half of the 1920s that affected, in 1923, approximately 40 percent of production.²⁰⁶

3.2. Entrepreneurial factors

Another main reason for the poor performance of the Spanish manufacturing firms was their lack of entrepreneur strategy forming large business groups.²⁰⁷ As a consequence, the unfavourable conditions placed the iron transformation industry with higher cost of raw materials as well as the absence of equal protection for manufacturing goods. A way to decrease the high costs could have been, first, a more efficient customs tariff and, second, the formation of large enterprise groups that through specialisation would have reduced costs.²⁰⁸

²⁰⁴ When the First World War broke out, Spain had no other choice but to remain neutral. With a disastrous financial situation, without a navy and with more than half of the 140,000 men who made up the army immobilised in Morocco in a permanent colonial conflict, Spain was in no position to embark on WW I. It was through foreign trade that the war affected the economy. Imports dropped both in volume and in value, whilst exports rose in value though not in volume. In fact, the five years period from 1914-18 is one of those rare moments in which the country's trade balance shows a surplus, facilitating possible the nationalisation of the foreign debt and the home ownership of a good quantity of railway bonds. See Fontana and Nadal (1976: 460-1).

²⁰⁵ Aguilera (1923).

²⁰⁶ As Dixit has put it: "The economists' standard explanation of the prevalence of inefficient policies rests on a particular model of the operation of special-interest politics. The benefits of the inefficient policies accrue as large per capita amounts to a small and concentrated special-interest group, while their costs fall in small per capita amounts on a large diffuse population. The former has a substantial incentive to become informed about their benefits and solve the free rider problem involved in taking political action, whereas the latter have a much smaller incentive and therefore remain uninformed and unorganised." Dixit (1996).

²⁰⁷ See Valdaliso (1996).

²⁰⁸ Aguilera (1923).

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In many places where the iron and steel was the main industry, mechanical construction and machine manufacturing was a derivative, whereas in Barcelona and Catalonia they were a necessity that grew in parallel. Despite the difficulties of machine tools manufacturing, this industry had undergone considerable development in Barcelona. Thus, it could be considered as one of the major factors of the region's industrial life.²⁰⁹ Manufacturing concerns were incapable of specialising, preferentially due to the small market size and the absence of an export industry. Many Catalans employers missed a great opportunity to modernise and develop their business during the First World War.²¹⁰ By reaching economies of scale, firms could have acquired better facilities and machine tools and therefore return the capital requirements. However, in those conditions aforementioned, firms just could not reach economies of scale. The absence of specialisation in local manufacturers brought a high variety of manufacturing procedures and quality standards. Therefore, Spanish firms spent their financial reserves in projects and models, whereas its European neighbours had increased specialisation and reached economies of scale. However, there were some concerns competing with foreign ones in steam and gas engines, hydraulic engines, railways, etc.²¹¹

²⁰⁹ Playá (1913).

²¹⁰ Opinions differs on the use of the benefits brought about by the Great War. According to Vicens Vives, they served to enlarged and renew plant and facilities. Conversely, Fontana and Nadal have stated that industrialists did not reinvest their benefits in plant, machinery and products. See also Calvo (1988:22). According to Calvo, the war fostered the dynamism of the local automobile industry. Firstly, the establishment of new firms, from the transformation of small mechanical workshops (Diaz & Grillo) or from the reconversion of textile industries (Matas & S.C.R., Talleres Hereter S.A.). In 1917, Automobiles Batllo and American Autos set up. See Calvo (1988:30). According to Seidman, since imports of capital goods and sophisticated machinery from the belligerents decreased substantially, Spain created new firms that relied on the use of inexpensive labour. Despite the windfall profits, the major defects of Catalan's industry - its small size, atomisation, technical backwardness, and lack of organisation - persisted. For example, in the mid-thirties most of the Barcelona metallurgical industries' thirty five thousand workers were dispersed into tiny companies and workshops that averaged fewer than fifty workers per firm and often depended on foreign technicians and technology. Even exceptionally large enterprises were industrially backward. Seidman (1991: 33). See also Vandellós (1933: 43-46).

²¹¹ Playá (1913).

Two final notes regarding importation by means of conclusion. The need to import certain parts of forged iron, and sheet steel, that for their size and special conditions were not produced in Spain because their small demand was a great problem for local manufacturers. A second problem was the importation of raw materials. Because both had to be obtained after a high custom tariff, same kind of manufacturing was impossible. Workshops were established and adapted to their own needs (see table 2-6). Many manufacturing concerns were small and set in old buildings.²¹²

To conclude, in spite of the fact that the size of the market was small and the role of the government not conducive to the expansion of firms, it seems necessary to turn to the structure of the Spanish motor industry and the boundaries of its enterprises in order to find further explanatory factors.²¹³

²¹² Ibid.

²¹³ According to Langlois and Robertson (1993: 37), 'one of the principal factors that business institutions must deal with is structural uncertainty. Thus, one of the principal determinants of the appropriate form of business institution will be the nature of the uncertainty (or innovation) involved. The second critical factor is the existing structure of relevant capabilities, including both the substantive content of those capabilities and the organisational structure under which they are deployed in the economy (...) To be successful, a systematic innovation requires simultaneous change in several stages of production. This would (...) render obsolete some existing assets in the production of the product. If...the existing capabilities are under separate ownership (...) then we arrive at one important rationale for the institution of the business firm. Under this scenario, the business firm arises because it can more cheaply redact, co-ordinate, and where necessary create the capabilities necessary to make the innovation work (...) This picture of the rationale for the firm is what we might (...) call a strategic, entrepreneurial, or Schumpeterian theory of vertical integration.'

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Table 2-6. Mechanical manufacturing Workshops

Mechanical workshops	Barcelona	Province excluded capital
num. of workshops (factories)	126	30
Electric power consumed	2064 HP	99 HP
num. of useful machines	2760	313
Production value, annually	20,1 million PTAs	1,76 m. PTAs.
Salaries	6,25 million PTAs	0,53 m. PTAs
HISPANO SUIZA	Barcelona	
Electric Power	150 HP	
Num. of machines	165	
Employees	400	
Production	1,45 m. PTAs.	
Wages	0,43 m. PTAs.	

Source: Playá (1913)

3.3 A glance at the early motor vehicle firms: Hispano Suiza, Elizalde and Iberia

The beginning of the century saw a slow development of the motor business in Spain. As a contemporary observer stated "the bad roads, dear petrol, and loss of wealth in the Cuban War all had contributed to this slow development."²¹⁴ Motor vehicle was still essentially an 'article *de luxe*' and, vehicles for commercial purposes were practically unknown. This *de luxe* connotation lasted several decades. It is worth noting that, whereas during the first decades of the century governments in European countries where motoring had developed were playing an active role, in Spain no regulation had been dictated in order to spread the development of motor vehicles. In the rest of Europe governments were giving

²¹⁴ "Trade and Commerce of Spain." Diplomatic and Consular Report (1906). I am referring to the motor business in a broader sense, which includes not only motor industry but everything related to automobiles which could have meant an increased level of activity.

facilities for tax payments, they had passed laws and regulations different from those existing for animal vehicles, in order to establish a more accurate proportion between horse power and the price of motor vehicles. This had incentivised and diffused the use of the automobile among the people. In Spain, where the object was still considered an article *de luxe*, taxes were amongst the highest in Europe. For instance, in 1919, automobile tax was still ruled by the Royal Decree of 28 September 1898, complemented by the laws of 30 June 1895 and 38 June 1898. These regulations had been dictated for *de luxe* animal carriage where the basis of imposition was established according to the number of inhabitants of the area plus an amount for the carriage and another for each seat place. In 1920, there were only 12,000 cars operating in the country. Any American or British city with half the population of Madrid or Barcelona had more cars registered.²¹⁵

The automobile industry in the inter-war period was represented by, first, small firms manufacturing very short series of automobiles using artisanal methods, and, second, firms dedicated to the assemblage of imported parts. Family firms, mostly from Catalonia, were among the first to enter the automobile business in Spain. The size of the industry was small compared to the overall industrial sector and its weight contributed modestly to the industrial output because of its low development. Nevertheless, its mere existence was a reflection of the relative technical potential that already existed. These firms were founded and controlled by engineer-entrepreneurs with artisanal or craft-based methods of manufacture. It is worth mentioning that other European countries also saw family firms as the first to enter into car manufacture; they were focused on the manufacturing of luxury motor cars for an upper class clientele and sport cars.²¹⁶

²¹⁵ Ortíz (1920).

²¹⁶ Church (1994). As Church points out, despite the early advantage through the initial design and construction of cars in Europe, the existence of a less favourable middle income market potential combined with a much slower advance of production methods and commercial development provided a more congenial financial environment for engineer entrepreneurs. The willingness of some existing family firms to venture risk capital in markets unreceptive to mass-produced vehicles also favoured dominance in the industry by owner-manager. Both in France and Britain, the early years of the industry saw company promotions of the kind which

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In Britain, for example, the motor industry came into existence in 1896. In the early years, it was not difficult to enter the industry. A knowledge of general engineering techniques and a modest amount of capital were all that were required. Both general engineering firms and firms engaged in cycle manufacture, such as Rover and Humber, were well fitted for making motor cars. The first firms that entered the industry were less fortunate than their counterparts in the US, where the engineering industry had developed a system of standardised interchangeable parts and of extensive sub-contracting that had no equivalent in Britain. The first British manufacturers were forced to make a high proportion of their own parts and components. Their capital requirements were appreciably greater than they would have been if they could have relied more on component suppliers with equipment of their own. They produced cars in small numbers and at high prices. Many of them failed to keep up with the rapid technical advances that were being made in these years, or failed to survive the intensive competition from other manufacturers. Most of the most important present day producers entered the industry in the period before 1914.²¹⁷

In an early stage, at the beginning of nineteenth Century, Italian automobile manufacturers mastered new technical developments and could therefore compete not only in the domestic market but also abroad with countries more developed and industrialised. During the period 1905-1907, almost two thirds of Fiat's production went abroad. In the beginning of the 1920s, exports were 60 to 65 per cent of total sales and more than 20 per cent in 1933; years later exports reached levels of 35 to 40 per cent.²¹⁸

Motor vehicle firms were family business. These firms were characterised by a high propensity to self-sufficiency and self-financing, and the mechanical ability of an individual, usually the entrepreneur (or engineer). The technology acquired was

characterised the American experience, and in all these three countries the newly created firms which succeeded in the industry begun with a modest investment. Church (1986: 169)

²¹⁷ Church (1994).

²¹⁸ Bigazzi (1986:210).

related to the technical background of the entrepreneur, and, the initial phase of production was characterised by the adoption of a discontinuous mode of production. At the beginning, production was characterised by low economies of scale - as a consequence of the limitations of the market and the difficulties in exploiting export possibilities.²¹⁹ Spanish pioneers did not create a real motor vehicle industry. The low levels of investment and productivity, and the incapacity to change into mass production were some of the reasons for their failure. Only the case of the Hispano Suiza and Elizalde are worth mentioning. Elizalde manufactured automobiles' spare parts in special steels; fine steel screws, nickel, copper, brass and other metals; specialised on ball-bearings, technical studies for their applications; and produced oils and greases for automobiles. The firm also entirely manufactured a touring car chassis -it was not just a mere assembly but it also manufactured all required steels in its workshops. An important stamping section allowed Elizalde to also elaborate parts necessary for the chassis manufacture, and also supplied railway manufacturers and other industries which needed stamping materials. The organisation of the screw-making division was of special importance for Elizalde, as it had numerous machine-tools to manufacture screws for the Spanish Air Force. It always held special steels in stock in order to be able to supply according to clients demands without being affected by the World War. The concern was entirely Spanish, a firm owned by the Elizalde family, run by Arturo Elizalde, as a general manager, and his two sons, each one in charge of one of the workshop sections.²²⁰

The second case was the Hispano Suiza. This company, founded in 1904, can be considered the most remarkable case of the early automobile industry in Spain. Hispano Suiza reached a high stage of development for those times, but its

²¹⁹ Cimoli and Dosi (1995). In their reference to South American family firms (but also applicable to the present case), they establish three stages of an ideal learning trajectory. First, the effort is concentrated on product design activities and quality improvements and product differentiation. Second, attention is focus on process engineering. Finally, it may happen that the organisation is developed beyond the original family hierarchy and "managerialised".

²²⁰ Letter from A.Elizalde to the President of The Official Chamber of Industry of Barcelona. *Arxiu de la Camera de Comerç, Industria y Navegació de Barcelona* (1916). ref. 1/106/11.

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production was focused mainly on the luxury segment of the market. As a consequence, there were practically no cheap vehicles in the country, during the first decades of this century. Hispano Suiza, which employed five hundred workers, was known for the exceptional mechanical quality of the vehicles it produced.²²¹ For this reason the Hispano Suiza did not succumb to external competition, despite its low production rates (less than 600 vehicles annually); naturally, this allowed it to specialise in luxury items. The great expertise of its technical staff made diversified production possible. Furthermore, during World War I, it introduced extremely successful aircraft motors. Even earlier, in 1910, the company had opened an affiliated company near Paris.

The origins of the Hispano Suiza can be found in the figure of the young Swiss engineer Marc Birkigt. In 1903, he became chief engineer for J. Castro, who ran a small automobile manufacturing establishment in Barcelona. This firm was reorganised as the Sociedad Hispano Suiza in 1904, with Damián Mateu as President and Birkigt continuing in charge of the technical side, and a capital of 250,000 pesetas. Hispano Suiza targeted the luxury sports-car market with several models of four-cylinder cars of medium size. The following year the share capital increased to 500,000 pesetas. The firm was established at La Segrera, an industrial area of Barcelona. Finding more and more business in France, the company set up a branch factory in Levallois-Perret in 1911. Continued success led the firm in 1914 to move its French branch into a new plant at Bois-Colombes. By that time, capital had increased to 2,250,000 pesetas. However, at this point the company was still far from large. It had a share capital of 1,5 million pesetas (1,5 million francs) and paid an 8% dividend in 1914. During the first year of existence, the firm made 13 vehicles. By 1912, it had built around 750 units, in 1913 1,000 units and in 1914 it reached 1,500 manufactured units. The company operated 250 pieces of machinery and employed 350 workers. After the war and until the 1930s, Hispano Suiza continued to make luxury cars in both Bois-Colombes and

²²¹ Costa (1922), Ciuro (1970), Laux (1976), Calvo (1985), Bardou et al. (1982), Cabana (1992), Nadal and Tafunell (1992), Gimeno (1993).

Barcelona. However, in 1938 it shifted its French factory to armament production and sold the Barcelona works to the Spanish Pegaso trucks firm.²²²

The strategy of the company during its first years consisted basically in direct contracts with the final customer, the opening of sales agencies and garages in Madrid and Paris (1906-1907), the promotion of passenger's transport companies in order to increase demand and, the securing of its supply, and, finally, sales promotion through sport races. The company also diversified its products (30 different types of chassis), invested in increasing its capacity and, therefore, match the high demand of motor vehicles that was being supplied almost entirely by foreign companies, especially French. Finally, the company also opened a subsidiary firm in France in order to obtain cheaper supply of raw materials as well as a better access to the supply industry.²²³

By World War I, the company was in a good position to face the competition and the changes that the new period had brought. However, the outcome was not so good. When the First World War ended, trends in innovation, output, growth, product development and price competition in Europe were similar to those which had occurred in the United States before the War. American-style assembly line plants were introduced and the competition from American-owned subsidiaries brought about increasing industrial concentration in the 1920s and 1930s. Industrial concentration resulting from the introduction of volume car production and price competition forced firms to invest heavily in plant and machinery in order to survive. The small Spanish firms were unable to deal with this new scenario and, although a significant number of small motor vehicle companies had been created since the beginning of the century, they disappeared with this new competitive trend. World War I brought new dynamics to the automobile industry. A wave of newly created firms entered the industry. These new firms had two kinds of background: first, from mechanical workshops and second from other industries

²²² Laux (1976: 155-6).

²²³ Calvo (1985).

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that already had the facilities required to start automobile production. That was the case of Talleres Hereter, dedicated since 1905 to the heating business that by the year 1918 was manufacturing vehicles with four affiliate companies and several hundreds of employees. Although Spain did not enter the war, it was increasing its armament contracts, and this allowed Hispano Suiza to capture the supply of military trucks to the Spanish army, and at the same time start the production of air engines with a great success. However, Hispano Suiza was not the only firm that entered in the air industry, Elizalde did likewise. As in France and Italy, several automobile companies shifted their production to the manufacture of air engines.²²⁴ At the end of the war Hispano Suiza had manufactured 50.000 engines. Faced with the impossibility of obtaining supply of raw materials and other supply industries, the company adopted a vertical integration process. It integrated all the stages of its production process, from foundries and other supply industries.

Table 2-7. Hispano Suiza. Profits & Dividends, 1913-17

Year	Profits (ptas)	Dividends
1913	619.837	7%
1914	236.949	8%
1915	281.279	9%
1916	1.545.674	10%
1917	1.987.582	15%

Source: Nadal and Tafunell (1992)

To recapitulate, the Spanish motor industry before World War I could be characterised as a business 'still to be exploited'. There was only one large concern: Hispano Suiza. Meanwhile, foreign manufacturers attracted by the limited supply of the Spanish market from local manufacturers - especially in the small inexpensive market segment - were increasing their exports into Spain. Therefore,

²²⁴ Hispano Suiza was able to supply air engines to several countries: England (200 engines), Russia (500), Germany (50), France (1875), US (1000). See Laux (1976).

the possibilities in this small segment were opened to newcomers, as we can appreciate in the case of the emergent Spanish firm, Sociedad de Automoviles Iberia. This case exemplifies the narrow strategic view that local manufacturers had of motor business. Iberia had planned just the assemblage of vehicles during the first accounting year. To this end, the company had established commercial agreements with local and foreign manufacturers. These concerns had been entitled to manufacture, with product design and business control of Iberia's technical personnel, all the parts and components of the vehicle, and Iberia would subsequently assemble the parts.

According to Iberia, such a process had two important advantages. First, its financial requirements in machine tools were extremely limited.²²⁵ Secondly, the control and management of the company was entirely under the Board of Directors: its members could handle the entire development of the business during the first year and then decide further developments, without any interference.²²⁶ As a consequence, the firm's organisational structure was very simple: it entailed an engineer acting as a manager and an assembly master - already with six years of experience in an important factory of Paris, in charge of the workshop. During the year of establishment, production was planned to reach just 24 vehicles: the production levels were assured by contracts with ancillary firms. The quality control process was established as follows: first, materials had been conveniently controlled before hand by the engineer of the company and, second, the first fifty series of materials were bought by the engineer in order to control if the elements were ready for assembly. The price of the vehicle and the ensuring profits to the company had been calculated at a minimum production of 75 units during the initial years.

²²⁵ Iberia operated with a capital of 500,000 PTAs, represented by 1,000 shares of 500 pesetas each.

²²⁶ Report on "Iberia." Proyecto relativo a la construcción de la sociedad automóviles "IBERIA". *Estudios Mineros*, Vol. 1, no. 19 (20 May 1914).

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As regards commercial activity, sales were undertaken through dealers' networks across the country. There was at least one dealer in each provincial capital. And, each dealer had to assure a certain level of sales per annum in accordance with the importance of the city. There was one dealer in each of the 49 provincial capitals except Madrid and Barcelona, which had five in each, and Bilbao, Seville and Valencia, with two in each. The sales share of each dealer was stipulated as follows: Madrid 20 cars, Toledo, Guadalajara, Cuenca and Ciudad Real, 2 each; Barcelona 20 and 9 in the rest of Catalonia; the Basque Country, 13; Seville 6 and the rest of Andalusian provinces 2 each; Valencia 6, Palma Majorca 5 and the rest of the Spanish provinces between 2 and 3 each. The total amounted to 161 cars. Finally, the company supported the dealer's sales action through intensive advertising and promotional campaigns - canvassing, leaflets, etc.²²⁷

3.4 Why did Spain fail to create any large automobile manufacturer? Strategy and structure of early local manufacturers

Emergence, development, and decline of industries characterises modern economies. New firms enter an industry, some exit; some grow, others decline. How do industries change over time in terms of their structural features and forms of organisation? It is important to emphasise the pattern of change in economic organisations and structures, in terms of entry and exit of firms, vertical integration, diversification, creation of networks among firms and the role of institutions. Malerba and Orsenigo have distinguished three levels of analysis in the dynamics and evolution of industries: the specific dimensions on industry's dynamics, structural dynamics and structural evolution.²²⁸ The first refers to the specific features of industrial structures. The second refers to entry, exit, the firm's size and concentration, and product and process innovation. Finally, the third refers to a broader view of industrial structure and its evolution over time. A Twofold approach has been taking into account when looking at the causes of the absence

²²⁷ Report on "Iberia" (1914).

²²⁸ Malerba and Orsenigo (1996).

of any relevant automobile enterprise. First, and from outside the sphere of business organisation, the role government is the most important, as it establishes "the rules of the game". Certainly, government policies and public institutions always play a major role.²²⁹ Secondly, the "internal history" of the firm, its strategy and structure; that is, processes of industrial concentration and enhanced competence, processes of specialisation, diversification and vertical integration.²³⁰

As regards the strategy and structure of the firms two different options were available: vertical integration or horizontal combination. It has already been stressed how, during the first three decades of the century, several willing entrepreneurs, mostly from Barcelona, had attempted to develop the motor industry but without great success. This is not surprising taking into account that birth rates, even in industries with high barriers to entry, are high; and, most entrants were new, small firms, far below the minimum scale of efficiency. In general, however, most of the entrants left the industry within a few years of entry and the probability of survival increased with age. But, surviving firms did not have either a higher initial size or higher growth rates.

There was a lack of strategy that might explain to a certain extent the low rate of surviving firms and their failure. On the one hand, some entrepreneurs merely attempted just the final assembly of the vehicle while importing all the material and components. This was the case of concerns such as 'Diez & Grillo', 'Lorcy', 'Landa', 'David', 'Victoria' and 'SA de los M. & A. Ricart'. On the other hand, there were those who saw the entire process through themselves, introducing a vertical integration that ended in failure because the firm's size was too small. 'Automoviles' 'España', 'Elizalde', 'Talleres Hereter', 'SA de los Ricart & Perez' and 'Ricart & España Reunidas', 'Euskalduna', 'SEFA' and so on. A case of special relevance was 'F.N. de A. Pescara', which had a good technical orientation but not enough capital. These enterprises did not take advantage of their own

²²⁹ As pointed out by Hannah (1995).

²³⁰ Chandler (1962, 1977, 1990).

accumulated knowledge. None of them sought any kind of association or synergy with other entrepreneurs. Moreover, they all tried to build automobiles for the sake of the car itself, with little entrepreneurial concern. None of them learned from the mistakes of the others. All lacked technical precision.

Summing up, all the aforementioned firms approached the automobile business from a small scale perspective, seeking the quick and immediate production of vehicles without commercial concern. As a consequence, they worked against the achievement of gains derived from integrating by means of building-up personal and social networks where values such as trust and loyalty among the members would have allowed the establishment of merger or agglomeration, thereby diminishing transaction costs.²³¹ Therefore, the basic model of the evolution of firms and industries according to the "life cycle", can be summarised in this way: in an early stage, firms tend to be small, and entry relatively easy, reflecting the diversity of technologies being employed, and their rapid change. However, as a "dominant design" emerges, barriers to entry begin to rise as an established scale and capital needed for competitive production grows. Then, with some basic technological knowledge, learning becomes cumulative, and incumbent firms are advantaged relative to potential entrants. Finally, industry becomes composed of a collection of large established firms²³² (see table 2.9).

Once the automobile was manufactured, it could hardly compete with imported cars. Vertical integration in such small scale firms threatened their financial

²³¹ However, this transaction cost approach sees the firm in a static dimension, in which firms simply react to changes. Instead, evolutionary approaches would emphasise the relevance of different organisational forms, neither of them intrinsically better than the others. See Malerba and Orsenigo (1996); Geroski and Schwalback, eds. (1991).

²³² Dosi and Nelson (1994:165) The industrial life cycle was proposed by Abernathy and Utterback (1975). Further elaboration are made in Abernathy and Suarez (1993) and Utterback (1994). As Dosi and Nelson (1994) point out, according to Pavitt (1984), significant groups of industrial sectors might not conform this "life cycle" description due to, on the one hand, the specificity and tacitness of the knowledge that individual firms embody and the absence of a strong tendency towards economies of scale. And, on the other hand, the discontinuities in the knowledge base and in the "established ways of doing things". See also Malerba and Orsenigo (1996).

capabilities. Most of them came to exist with a small capital enough to have a technical office and small workshop but not sufficient for mass production techniques.²³³ Moreover, all of them attempted to manage the entire automobile manufacturing process by themselves, without searching for strategies of agreements with other enterprises - neither fusion nor mergers nor integration. Consequently, they did not stimulate ancillary industry. Probably a sort of horizontal integration would have been more successful because the country was incapable of organising large independent industries.²³⁴

While previous paragraphs have mentioned the tariff question, the following ones will be concerned with the attitude of the dictatorship of Primo de Rivera towards entrepreneurship. It is worth noting that a more positive business attitude from the government was clearly apparent. Primo de Rivera's dictatorship proceeded with economic modernisation, through investment in public works, especially roads.²³⁵ It was not until the mid 1920s that the first real attempt to create a national motor industry appeared.²³⁶ In 1926, the Government created the Official Motor Vehicle and Automobile Commission (Comision Oficial del Motor y el Automovil, COMA). Within this Commission all the different aspects of motor vehicle manufacturing were considered.²³⁷ However, despite its good intentions the outcomes were disappointing.²³⁸ The Government's intentions were to encourage organisations to establish manufacturing concerns in order to nationalise

²³³ Errando (1933).

²³⁴ Errando (1933).

²³⁵ On Primo de Rivera dictatorship in Spain, 1923-1930 see, Rial (1986).

²³⁶ In order to grasp the situation two examples are worth mentioning: "Gaceta Automovilista" and "El Sol", both included in "Las Finanzas-El automovil en Espana", reflect the situation and feelings of that period as regards the establishment of a national automobile industry in Spain.

²³⁷ In December 1925 the Marquis of Estella, Ramón de la Sota, Damián Mateu and Arturo Elizalde commented the situation on the motor vehicle industry in Spain before the government.

²³⁸ Notwithstanding the disappointing results of state intervention to create a domestic motor industry, it has to be pointed out that its beginnings created the basis for the future plans of the Francoist government immediately after the Civil War. See the following chapter of this thesis, specially chapter 5.

production.²³⁹ In order to reach this nationalisation the government through the Motor Vehicle Commission, studied the means of promoting the establishment of a national motor industry.²⁴⁰ The resultant program in general terms contained the following points: the Program had to be carried out over a period of six to eight or ten years, but only within three years as regarded the utilisation of domestic raw materials. Regarding the automobile itself, three different categories were envisaged: the high price 'de luxe' automobile, a medium price car, and the inexpensive 'popular' vehicle. Based on the purchasing power capacity of the domestic market (around 30,000 units -17,000 of them in automobiles of the third category- had been sold in 1928) a forecast was made regarding the possibility of setting up one or two factories of first category cars in Spain with a volume production of 600 units per annum, two factories of second category cars (with 4,000 units annually), and two factories of the inexpensive popular car (with 12 to 15,000 units per annum).²⁴¹

The existence of these two factories was thought to be compatible with a considerably high level of import vehicles. Technologically, the type of vehicles to be manufactured locally were going to be foreign types already accepted on the Spanish market; in its first stages, technical support had to be found in foreign firms in order to develop the automobiles. Afterwards, in a second stage, Spanish firms should reach full technical independence. The capital of the firms had to be at least 75 per cent Spanish. The members of the Board of Directors had equally to be Spanish. As regards technicians, executives, administrative personnel and workers, after five years of existence firms should employ no more than 20 per cent foreigners. Maximum protection should be applied to the popular car, because

²³⁹ Note that the term 'nationalisation' here does not necessarily mean taking over by the state, but, the control of foreign concerns by Spaniard. I will come again to the different connotations of the term 'nationalisation' during the Francoist period. In fact, the basis for the future nationalised motor vehicle production in the Francoist period can be found in Primo de Rivera's attempts to create a Spanish motor vehicle industry.

²⁴⁰ This body was also dedicated to the supply and acquisition of the official centres and corporations of ancillary product producers.

²⁴¹ Ruiz Ferry (1929).

it was the preferred object of nationalisation. Moreover, its motor engine had to have useful derivations in other lines of business such as agriculture, public transport, etc. The State would have a supervisory function, and would manage the trade of exclusively national products (raw materials and spare parts) though this should not prevent any technical or commercial initiative.²⁴²

In the second half of the 1920s, despite a lack of positive results overall, some production had been fostered. In effect, under some protectionist legislation, some new concerns were being created, especially regarding ancillary industry. It was thought, moreover, that by promoting the Spanish industry and through the creation of new concerns not only were new jobs created, therefore reducing the unemployment, but military strategy was also served.²⁴³ The World War had demonstrated the importance of the motor vehicle for supply, transport of troops, quick supply munitions and food supplies. Moreover, it had also showed how factories could be transformed in order to build air engines, cartridges and shells.²⁴⁴

In Europe, the automobile industry had developed progressively from small workshops to large factories. Models had been developed throughout the years. Setting up new concerns required, without appropriate 'patents', the creation of new designs, and this meant a considerable investment that firms with a low financial capacity could not afford.²⁴⁵ The beginning of the thirties saw the preparations for a new drive forward in the industry. In effect, several firms set up and with their own or foreign patents expected to be able to manufacture vehicles soon. Certainly, the results were not to come soon, because an industry of such characteristics needs a long period to return its investments. Up to that moment there had been only manufacture of high priced high-speed vehicles and, in small series, trucks. However, the manufacture of motorcycles, medium price vehicles, light commercial vehicles, heavy and semi-heavy trucks was imminent. The only

²⁴² Ruiz Ferry (1929).

²⁴³ Guiloche (1930).

²⁴⁴ see, for example, the case of Citroën concern after World War I.

²⁴⁵ Guiloche (1930).

type of car which was not already projected was the low-priced popular car, that could be used to go to work and as a means of transport. The manufacture of this type of vehicle was running into great difficulties because of its strong financial requirements, and it was thus made necessary to reach high levels of production through economies of scale. Moreover, the organisation of this type of production required more highly co-ordinated organisations than the manufacture of high cost vehicles in small series. It was expected that in the medium term Spain might become a manufacturing country.²⁴⁶

The Government's Commission (COMA) failed and with it failed the last hopes to organise a national automobile industry. The explanations for this failure might be summarised as follows: first, because within the Commission there were two different and opposite views of the way to organise local production in the country. On the one hand, there was Julio de Renteria, who was proposing an horizontal expansion of the industry. On the other hand, there was the vertical integration strategy promoted by Captain Alejandro Sancho. Ultimately, the latter succeeded in imposing its criteria, although, it failed in its application.²⁴⁷

The main purpose of the project launch by the Government Commission was to manufacture the low-priced popular car, but how should it be done?²⁴⁸ According

²⁴⁶ In 1927, for instance, the only Spanish concern manufacturing vehicles in the country had been Hispano Suiza, a concern that was more dedicated to producing trucks for official demands. On the other hand, Elizalde had been involved in that year in reorganising its factory towards the manufacture of large aircraft engines, of the make Lorraine. Moreover, in collaboration with Ricart and España, Elizalde had finished the project towards the construction of the new car APTA. "El automovilismo al comenzar el año 1928." *España Automóvil*, no. 2 (1928).

²⁴⁷ It is worth noting that an increasing state intervention came through an immense number of bodies - committees, boards, and councils - which, in fact, were employers' organisations whose members involved themselves with the government in order to receive economic protection in exchange for their political support.

²⁴⁸ It is worth mentioning the statements made by Marc Birkigt from "La Hispano Suiza" as regards the possibilities of mass production and published in "La posibilidad de la construcción de automóviles nacionales en serie", an interview with Marc Birkigt in *Las Finanzas/El automóvil en España* 356 (1929), October, 962-3. "I do not think possible the start of the mass production of motor vehicles in Spain. Figures for 1928 showed 29 thousand vehicles sold in Spain. If we consider a minimum daily production of a hundred vehicles it seems obvious that there is no Spanish market for such figures. Nor would there be any export market because

to Renteria, the procedure was as follows. In Spain at that period, there existed the following automobile manufacturers: Hispano Suiza, Elizalde, Talleres España, Automóviles Ricart, Euskalduna and Hispano, the first four in Barcelona, Euskalduna provisionally in Madrid while finishing its new factory at Bilbao, and Hispano in Guadalajara. Moreover, there existed in the country an enormous list of small workshops manufacturing motor vehicle bodies, radiators, tires, and so on. The proposal was to merge all these societies in order to create a sort of "Spanish General Motors" in order to manufacture a small popular car on a large scale basis. There were technicians, such as Wilfredo Ricart, and also facilities. However, the main shortage was the size of the market, because the car had to be manufactured through large scale production, and in this respect none of the firms mentioned above were appropriate. Consequently, the only solution would have been a merger or horizontal integration.²⁴⁹ Hispano Suiza at Ripoll, for example, could stamp chassis, Ricart manufacture engines, Talleres España manufacture transmissions, Elizalde manufacture stamping parts and brakes, Euskalduna steering parts, Hispano the assembling, etc. Mass production could have been created through a large holding pooling capital and resources from all the enterprises aforementioned (acting as subsidiaries of the holding), and managed by one or several outstanding and independent executives (or entrepreneurs). Moreover, an organisation of this kind would not prevent each firm from continuing working independently of the parent company. Financially, it was believed that following the above mentioned plan could manufacture 1,500 cars per annum (figure below the 6% of actual consumption per annum), with 10,000 pesetas average per unit, implying 15 million pesetas and granting an average yearly turnover of 1,5 million pesetas to the six concerns aforementioned and 6

Spain pays 30 percent more for raw materials than our European neighbours." However "Counting on the State support and some private initiative, it might be possible to develop an Spanish motor industry that could dominate the domestic market in a period of six years."

²⁴⁹ It is interesting to observe the patterns of integration proposed. Following evolutionary theory, the range of activities which a firm undertakes is determined by its existing capabilities, that is, the skills, experience, and knowledge possessed by a firm. See Langlois and Robertson (1995), Teece et al. (1994).

million to the other complementary industries. The type of car should be a 1500 cc. engine of 8-10 horse power with five seats.²⁵⁰

The second reason for the government program was due to the entrepreneurial psychology which prevented a merger process in all the different concerns that already existed and therefore the integration of the different functions. There were, however, some remarkable cases such as Hispano Suiza SA, which manufactured automobiles and aircraft engines of a high technological level. Elizalde SA was also manufacturing 'Dragon' aircraft engines, completely nationally, and Lorraine engine licenses. There was, moreover, the Compañía General de Autobuses SA, with manufacturing and repair workshops; and lastly there were the assembly plants of Ford Motor Company and General Motors Peninsular, to whom the domestic supply industry was supplying supplementary parts.²⁵¹

To conclude, the motor vehicle industry in Spain did not develop during the first decades of the century due to: first, the fact that for a long time the automobile was considered a luxury item and burdened with excessive taxes; second, the lack of initial state support - only from 1926 did it arrive with the COMA, and then without positive results; third, the shortage of metallurgical supplies and their high prices; fourth, shortcomings in entrepreneurial organisation, particularly in Catalonia, being as follows (a) small sized family firms, whose only finality was the manufacture of the entire vehicle by themselves. (b) Lack of strategic vision. They did not seek agreement among themselves, such as mergers or fusion that through horizontal combination could have reached large size and economies of scale. Instead, they attempted vertical integration, that is to cover all the different stages of automobile manufacturing. (c) Lack of commercial acumen. Commercialisation and distribution were negligible, prices were high, and there were no economies of scale. In fact, it was not until the arrival of Ford's Spanish subsidiary that country saw the new marketing methods.

²⁵⁰ Rentería (1926).

²⁵¹ Errando (1933).

4. Conclusion

To sum up, beyond explanations regarding the size of the market²⁵² and the income distribution, Spanish enterprises did not adopt organisational forms conducive to success and growth and institutions, mainly the government, did not foster the infant automobile industry. The incapacity of changing the organisational structure of the Spanish automobile firms was clearly reflected in the lack of specialisation that consequently influenced the shape of business organisation.²⁵³ While in other countries the expansion of motor activity, the appearance of mass production, the economies of scale, and the capital requirements due to technological change had changed the organisational structure of the firms, in Spain, conversely, the absence of centralisation and specialisation had prevented firms from reaching new patterns of ownership which would have facilitated the raising of the capital necessary to produce vehicles. The organisational structure of the Spanish firms was very simple: all of them had an engineer at the top, and usually the general manager was also among the principal, or largest, shareholders (i.e. Elizalde).²⁵⁴ The lack of knowledge of the markets and the mismanagement reflected in the information and decision-making process all had contributed negatively to the expansion of the existing firms. Whereas other industries became more concentrated via horizontal combination, fundamentally as a result of two factors, market difficulties and firms' financial problems, automobile firms did not follow an organisational pattern conducive to success.²⁵⁵ The internal growth of the firm or the resort to horizontal combination did not allow for the construction of large scale firms. Furthermore, the atomisation of independent small business units did not facilitate economies of

²⁵² Classical explanations for the enlargement of production units consider the role of demand. However, the problem with the market interpretation is that it does not clearly specify all the mechanisms that led entrepreneurs to introduce more centralised production when demand increased. See Magnusson (1993: 308).

²⁵³ The automobile firms reflect a strategy clearly opposite to the one adopted by shipping firms. See Valdaliso (1996).

²⁵⁴ The foreign subsidiaries, especially Ford, brought with them the managerial structures of larger corporations (general attorneys, traffic inspectors, book-keepers, cashiers, etc.).

²⁵⁵ Valdaliso (1996).

scale, which would have provided them with stronger bargaining and market power, and a healthier financial position. The lack of concentration was due, on the one hand, to the absence of any strong company ready to acquire or merge with other existing firms and, on the other hand, to the incapability of existing firms to reach co-operative agreement. The path of corporate development experienced by the Spanish automobile industry can be characterised therefore as follows: first, an absence of specialist firms that could have grown horizontally; and, second, the growth of the market by the introduction of new, more capital-intensive technologies that could have fostered it; foreign subsidiaries (Ford, General Motors and Fiat) controlled the market instead. The absence of a cumulative process of specialisation-concentration-growth, prevented the generation of path-dependency that could have reinforced the existing firms and offered more incentives to the newcomers.

Finally, motor vehicle production was taken over by foreign companies. Foreign subsidiaries had adopted a different pattern of competences that derived, on the one hand, from the parent company and, on the other, from a learning process concern mainly in the adaptation to the local environment, adjustments in product mixes and re-scaling production lines. These competences thus come through the history of the subsidiary or through the development of an autonomous capability.²⁵⁶ Foreign subsidiaries had as major representatives Ford and General Motors. Ford Motor Company was the first and long lasting firm in Spain. The increased profits that were obtained from the overwhelming competitive superiority and the growth potential that it offered to the Spanish market caused its main rival General Motors to follow its example. However, the war and its outcome were traumatic for the motor vehicle industry. Faced with the difficulties of importing raw materials and intermediary goods, the hostility of the state administration towards firms financed with foreign capital and the general climate of economic disaster forced the two American firms to abandon their interests in

²⁵⁶ Cimoli and Dosi (1996: 260).

Vertical Integration vs. Horizontal Combination

Spain. General Motors was the first, definitively abandoning its Spanish interests during the years of the Civil War. Ford remained until 1954 .

Table 2-8. The Spanish automobile industry (1900-1990). Main phases and firms

	1900-19 Small, hand-crafted firms	1920-36 family firms	1955-72 attempts to create a domestic motor industry	1973-90 based-owned/MNEs joint venture	
D	1889 Bonet	Hispano Suiza	1946 state owned Co.	Fasa	
O	1898 La Cuadra	Elizalde	ENASA (former	Barreiros	
M	1902 Castro		Hispano Suiza)	Santa Ana	
E	1904 Hisp Suiza			Motor Ibérica	
S	1901 Fénix				
T	1912 Abadal				
I	1913 Elizalde				
C	1914 David				
		MNEs first investments	MNEs under economic nationalism	MNEs increasing their share in the partnership	MNE's branches controlling 99% of domestic production
M		Ford Motor Co.			
U		1920 Set up Cádiz	1954 Ford Ibérica	1953 Fiat-Seal (36%)	Renault
L		1923 transfer to	fully owned Spanish	1953 Fasa-Renault	Citroen
T		Barcelona	firm Motor Ibérica	(15%, 30%)	Peugeot (former
I		1929 40% Local		1958 Citroen Hispania	Chrysler & Talbot)
N		capital		(45 per cent)	1972 Ford España
A		General Motors		1963 Chrysler Barreiros	1979 General Motors
T		1925 Set up		(40%, 90%)	1980 Nissan (former
I		1932 Assembly Plant		1967 Leyland Authi	Motor Ibérica)
O		Barcelona		(50%, 90%) &	Seat VW
N		1939 Exit		Santa Ana (25%)	Suzuki Santana
A				1967 Massey Ferguson	Iveco Pegaso/ENASA
L		Fiat		Motor Ibérica (36%)	
S		1919 Commercial subsidiary		1967 Mercedes & VW	
		1930 FNA Barcelona		Mevosa (27%, 27%)	
		1931 Hispano Guadalajara			

Source: own elaboration

Part II. Inside the Firm

Chapter Three. Between a Branch and a Local Firm: Controlling Subsidiaries in Host Countries. Ford in Spain (1920-1923)

1. Introduction: The origins of the Ford Motor Company

The introduction of mass production of as complex a good as an automobile by Henry Ford in 1913 represented by far the greatest development in manufacturing.²⁵⁷ By employing an extreme division of labour, using specialised machine tools extensively, and allowing machines to set the worker's pace rather than the other way round, Ford brought about a revolutionary increase in output and decrease in price for the Model T.²⁵⁸ By the time Ford Motor Company opened its doors in 1903, most of the innovations in transportation and technology were already a part of the business environment. Ford, then, created its organisation at a time when such prerequisites to big business as high volume production technology and a national market were already available.

The automobile industry was a small, but growing part of the economy at the start of the twentieth century. In 1900, roughly 300 companies were producing automobiles, but their total output amounted to only slightly over 4,000 cars, most of which were expensive, experimental, and aimed at an upper-class market. At the time that the car moved from an upper class clientele towards the middle classes, manufacturers moved from handicraft to mass production.²⁵⁹ In 1902, only about a dozen firms were producing cars on a commercial scale; by 1910 the number had

²⁵⁷ The Ford Motor Company has been extensively studied see, for example, Arnold and Fay Faurote (1919); Chandler (1964); Dassbach (1989); Dicke (1992); Friedman and Sanders Meredeen (1980); Lewchuk (1993); Meyer (1981); Nevins and Hill (1954, 1957, 1963); Raff (1988); Tolliday (1993); Tolliday and Zeitlin, eds. (1992); Wilkins and Hill (1964); Zunz (1990).

²⁵⁸ Dicke (1992); on the development of mass production at Ford see Hounshell (1984).

²⁵⁹ Dicke (1992), chapter 2. On the early development of the automobile industry see Seltzer (1928).

increased to fifty two. In the intervening eight years, however, over six hundred firms had entered the field. Nearly ninety percent either never reached the production stage or disappeared after making cars for only a few years. After about 1910, when high volume production was widespread, the industry began to stabilise and a small group of firms established themselves as leaders in the national market. Few successful firms were organised thereafter, as a result of the cost of building manufacturing facilities capable of commercial production and the competitive advantage possessed by firms already operating nationally. From about 1910 to the early 1920s, the American market was largely the preserve of domestic manufacturers that increased in size while decreasing in number.²⁶⁰

The basic method of distribution through a few company-owned branches controlled by the head office and responsible for co-ordinating the actions of hundreds of retail dealers was in place at Ford within five years of the company's founding. Ford was able to achieve considerable power over its distributors almost immediately because the company's enormous production enabled it to require its dealers to specialise while improved communications enabled it to monitor actions of thousands of dealers spread across the country.²⁶¹

Like most early automobile makers, Ford began as an assembler rather than as a manufacturer of cars, contracting with various manufacturers who shipped components to the plant for assembly. But Ford soon made a transition from assembler to manufacturer. In 1907, he decided to concentrate on producing and marketing a single car, Model T. Between 1908 and 1923, over one half of the cars produced in the United States were Fords. By the mid-1920s, however, the Model T, despite continued improvements, was obsolete. Ford was slow to make the changes required to remain competitive, and the company experienced a downturn: market research, dealer support, consumer credit, and model changes for

²⁶⁰ Dicke (1992), chapter 2. See also Chandler (1964).

²⁶¹ Dicke (1992), chapter 2.

marketing purposes all became important for success in the industry.²⁶² Under the leadership of Henry Ford, the Ford Motor Company moved very reluctantly to develop these services.²⁶³

From 1903 to 1907, the investment required in specialised equipment was still small, and Ford's total production was not great enough to call for close co-ordination with dealers. At this time, Ford sold his cars through agents, branch offices, and travelling salesmen, as well as directly from the factory through advertisements.²⁶⁴ In distribution, automobile makers generally chose to concentrate on wholesaling through agents. Agents were forced to include a deposit with each order and to pay cash on delivery. Agents thus relieved makers of the burden of carrying a large inventory of finished cars while at the same time supplying them with the funds to continue production.²⁶⁵ Considering that dealers paid cash on delivery, absorbed all the selling costs, and allowed Ford to concentrate on production, the standard discount of 15 to 25 per cent on cars and 25 per cent on parts made this a very advantageous system for Ford. Thus, in the early years there was little need to be concerned with the operation of the dealer network. Although agents were independent businessmen who operate under few restrictions from the company, Ford was still able to market its complex product successfully by relying on dealer self-interest to promote sales and service.²⁶⁶ Contracts, when they existed at all, were simply documents whereby Ford agreed to sell and the agent to buy the company's products. Dealers, for their part, were fairly easy to recruit, even at Ford's slightly lower-than-average discount, because the investment in special tools, facilities, and training was so limited. Although Ford discouraged agents from handling other products or at the very least competitor's cars, it was powerless to halt the practice until around 1911, when the growing reputation of the Model T increased the value of a Ford dealership and

²⁶² Nevins and Hill (1954: 16-18).

²⁶³ Nevins and Hill (1957).

²⁶⁴ Hounshell (1984: 249-51).

²⁶⁵ Seltzer (1928: 19-21).

²⁶⁶ Tedlow, (1990: 130-35).

the volume of production had reached the point where larger agents could reasonably be expected to concentrate exclusively on the sale of Ford products. After 1907, dealers were required to send in regular sales reports, but apparently Ford made no use of this information for forecasting purposes. Until 1916, production was based largely on the number of cars a dealer was bound to sell by its contract.²⁶⁷

In 1907, Ford started the reorganisation of its distribution system. He expanded the branch organisation and provided branch managers with closer guidance from the head office.²⁶⁸ The branches were forming the organisational core of Ford's sales department. They acted as storage points for cars and parts and maintained their own retail sales force. Originally, the company treated branches "practically the same" as agencies by providing them with little guidance from the head office but with the reorganised system of policy making became more centralised on the head office, and the branches were left with the responsibility for implementing the wishes of the sales department. Below the branches were the dealers, who formed the bulk of Ford's marketing organisation. These dealers were supervised by Ford through sales representatives or "roadmen", as they were called, to inspect and evaluate a dealer's establishment to ensure conformity with company standards. Dealers were then required to submit monthly sales report until 1911, when weekly reports were introduced. In 1920, Ford switched to ten-day reports.²⁶⁹

While other automobile makers, notably General Motors, had been developing institutions "based upon the recognition of the community of interest between the corporation and its dealers", Ford continued to act as if dealers were considerably less than junior partners and moved only hesitantly to aid its dealer network. In

²⁶⁷ Nevins and Hill (1954: 249-50, 342).

²⁶⁸ Nevins and Hill (1954: 342-45)

²⁶⁹ Dicke (1992:66) note 44 .

matters of finance, Ford continued to treat its dealers as if they were independent business owners with whom the company should drive the best bargain it could.²⁷⁰

The Ford Motor Company also offers an important example of the social impact of technology on work processes. As Meyer has pointed out, the Ford Highland Park factory represented a full realisation of the American system of production and the maturation of the modern industrial age. Furthermore, the Ford experience suggests that the conscious control of labour and labour processes was an essential feature of the development of Ford industrial technologies. The industrial technology of Ford emerged in an environment of social and economic decisions and choices about the nature of the workers and work processes. The Ford Motor Company emerged in the midst of the genesis of modern management. It stood at the transition from traditional forms of labour management to modern and sophisticated ones. It combined the traditions of scientific management, welfare work, and personnel management.²⁷¹

The emergence of the "deskilled" specialist resulted in the influx of large numbers of new workers to the Ford factory. Not possessing the industrial skills and discipline that came from the traditional craft system, former peasants and former farmers created special problems for Ford factory managers, giving rise to serious social and psychological limitations to the new technology. Low rates of productivity resulted from problems which industrial management labelled the "human element of production." It then inaugurated a series of reforms, which followed the Progressive Era's pattern of welfare capitalism. It also established an employment department and instituted a "skill-wages" job classification system. This system created a "job ladder" based upon productivity and sought to connect industrial discipline with the desire for upward mobility. Nevertheless, these reforms did not solve the problems. Consequently, in 1914, the company

²⁷⁰ Dicke (1992:72).

²⁷¹ Meyer (1981).

announced its Five Dollar Day.²⁷² The 5\$ Day attempted to solve attitudinal and behavioural problems with an effort to change the worker's domestic environment. In the end, the unique and short-lived Ford program did not succeed. However, its significance goes beyond the boundaries of success or failure. It marked an early managerial strategy to match working class culture to the requirements of the modern factory. It sought to transform personal and social attitudes and behaviour through the home and the community, but the root of Ford problems lay in the factory.²⁷³

Through the 1920s, Fordisation and Fordism characterised by the true standardisation and interchangeability of parts, work rationalisation, and line production methods, became the label for modern industrial techniques in Detroit, the US, and the entire world in industry after industry. In order to produce their popular automobile and to overcome their shortage of skilled labour, Ford managers and engineers brought together and implemented a number of interconnected technical and managerial innovations. In the end, they revolutionised automobile production and factory production in the modern world. First Ford managers and engineers standardised the design of their products. Second, they used the most recent advances in machine-tool technology. Third, they analysed, rationalised, and reorganised work tasks and routines (they Taylorised work processes). And finally, they developed and extended the unique concepts of progressive production and progressive assembly. The result was a complete change in tasks and routines, a new occupational structure, and new forms of control in the various shops and departments of the Ford factory.²⁷⁴

A response to the high cost of turnover was the Ford's profit-sharing scheme that promised workers at the Highland Park plant earnings of at least five dollars a day, about double the going wage in Detroit. At the same time, Ford reduced the

²⁷² Raff (1988).

²⁷³ Meyer (1981).

²⁷⁴ Meyer (1981).

workday from nine to eight hours. The company's Sociological Department evaluated the moral character of each worker, in the workplace, in the community, and in the home, to discern whether the man was worthy of a share of the company's profits (female workers were not eligible for the five dollar day). Along with the promises of 5 dollars a day, Ford's personnel managers created internal job ladders that would permit the most productive and co-operative workers to rise to shop floor positions that could bring even higher earnings.²⁷⁵

While unit material costs fell, this fall may have been an accounting phenomenon: the valuation below market price of an increasing volume of input, generated by Ford's move to backward integration. Or the fall may have been a consequence of more careful, and more supervised workers, eager to take home their five dollar day. Ford's five dollars a day established discipline on the shop floor. By increasing through-put and cutting prices to the consumer, Ford was able to build its market share to 56% in 1921. The massive additions to capacity, along with the huge fixed costs occurred at precisely the time when the market for the Model T was both becoming more cyclically volatile and entering into long-run stagnation. Henry Ford's response to his company's loss of market share was to demand even more unremunerated effort from his workers. As a result, during the 1920s Ford's name became "synonymous with many of the most notorious labour malpractices, such as speeding-up work, the dropping of the older, higher paid men, arbitrary discharges, and so on."²⁷⁶

The success of the Model T in the second decade of the twentieth century had depended on the development of a managerial organisation to plan and co-ordinate purchasing, production, and marketing activities. But during the early 1920s, Henry Ford effectively destroyed his managerial organisation for the sake of maintaining personal managerial control over the company. Between 1914 and 1919, Ford used his managerial organisation to take control of work on the shop

²⁷⁵ Meyer (1981).

²⁷⁶ Chandler (1964:194-195).

floor creating in the process a uniquely American system of mass production. Along with the adoption of the five dollar day, Ford pioneered the development of personnel management (albeit with a paternalistic character). But when Ford lost its distinct competitive advantage in the 1920s, it could no longer make good on its high-wage promises. Overcoming the militant unionism and labour turnover that dominated the oligopolised manufacturing sector set in motion a dynamic interaction between managerial organisation and technological change that generated rapid, and perhaps unprecedented rates of growth in the value manufacturing products. Underlying the successful management of the labour relation in mass production enterprises of the 1920s were, first the creation of personnel departments that could plan and co-ordinate the employment and remuneration of the shop floor workers with a view to maintaining the flow of work; and second, the elimination of the influence of workers' collective organisation in the determination of the issue of labour turnover that was considerably lower than those that had beset these companies in the previous decades.²⁷⁷

Meyer considers that from 1908 to 1921, the Ford experience with technology, labour, and social control represented in microcosm the experience of our modern age. The labour problems which Ford first encountered with mass production have continued to plague manufacturers and managers throughout the twentieth century. Furthermore, he points out that paternalism in Ford failed because it did not achieved its principal objective; that is, the control of the workers. Ford officials struggled to meet the unprecedented demand for Model T. This required the control of work processes. The modern system of mass production was developed and in the process they wrested control over production from craftsmen and skilled workers. At the same time, work tasks and work routines were deskilled and degraded. So they devised technical and administrative forms of control for the unskilled workers at machines and assembly lines. The massive influx of immigrant

²⁷⁷ Lazonick (1990:240-243).

workers that then filled the unskilled jobs. These workers did not have the traditional discipline and incentive for industrial work. The conventional means of control, which rested upon craft traditions, independent work groups, and trade union apprenticeship system, no longer functioned after the reorganisation of work processes. Paternalism gave away to more authoritarian patterns after World War I. The rise of the Auto Workers' Union signalled the ultimate failure of paternalistic labour policies. Confronted with an independent working-class culture of resistance, Ford official shifted to tougher political forms of control. This political control was more effective. It worked at least as well as the much more expensive Profit-sharing Plan.²⁷⁸

2. Ford Motor Company in Spain. An overview

The first foreign countries where Ford started sales, where Canada and Britain. The reasons for choosing these two countries were the high standard of living, the quality of Ford leadership and finally, tariffs. Elsewhere, protective duties had made Ford sales more difficult, but Britain was the only country in Europe with no duties on automobiles. For the next nine years Ford cars came freely onto the English market, their lower prices giving them a competitive advantage over local products. In 1907, he had already opened several sale agencies in Europe: two in Germany, and one in Belgium, Spain, Holland, Italy, Denmark, Sweden, Austria, Poland and Russia. The most active overseas markets during the first decade of the century were England (103 cars from October 1906 to September 1907), Germany (41), Belgium (24) and Mexico (23). Of the eight countries to which Ford US exported more than 10 units, four had active local industries: England, Germany, Italy, and Belgium.²⁷⁹ From the start of the industry until about 1907, Ford's agents were independent business people who frequently sold other products as well as automobiles and who as a rule required no close or lasting association with the manufacturer. From about 1907 to 1937, Ford dealers were subordinate to the

²⁷⁸ Meyer (1981).

²⁷⁹ Wilkins and Hill (1964:26).

company, which was successful in establishing tight control without actually assuming ownership of retail outlets.²⁸⁰

It was not until the end of the 1910s that it decided to expand establishing assembly plants into Europe.²⁸¹ Notwithstanding this early expansion it was not until after World War I that it began its more extensive presence on the Continent. Ford managers made two visits to Europe to observe post-war conditions across the Atlantic and to make decisions on the sites and character of Ford activity on a continent recovering from war. One of the areas that they targeted as a potentials for the enlargement of trade was Spain. They chose the location of Cadiz in the south part of Spain. The scope of their plans was to handle European sales through six divisions: the northern with its headquarters at Copenhagen; the central controlled from Paris; the southern, with headquarters in Cadiz; the British, directed from Manchester; the Adriatic operating from Fiume; and the Black Sea, centred in Odessa. While Ford plants in the 1920s would function in four of these six territories, the six then never came into operation.²⁸² In Cadiz, as in the other locations, assembly would start in leased premises. If their business thrived, Ford would buy land from their profits and erect a plant. If they failed, little would be lost, and the investment would be modest. This policy permitted the company to completely relocate from Cádiz to Barcelona in 1923.²⁸³ There seem to have been two main reasons for this decision: first, because of the Cadiz plant's relative novelty they were running into difficulties as regard the efficient control and

²⁸⁰ Dicke (1992).

²⁸¹ Wilkins and Hill (1964).

²⁸² Few references to the early Spanish Ford subsidiary can be found in the extensive literature on the Ford Motor Company. See, for example, Nevins and Hill (1954, 1957, 1963) and, Wilkins and Hill (1964).

²⁸³ Net profits for 1924 were 1.5 million Ptas. This profit, upon first sight, would appear to compare very unfavourable with the profit made in 1923. However, when it has to be considered that Ford helped credit on its books during 1923 for profit on 1,800 automobiles which were still unpaid for on December 31st of the same year, indeed these cars were not actually paid for until 1924 thus reducing its 1924, business to 5,528 cars as compared to 9,186 cars sold in 1923, we find some reason for this reduction in profit. The total monetary volume of sale for 1924 decreased 29 per cent as compared with 1923 volume while expenses showed a slight increase. 20 April 1925. Balance Sheets and Profit & Loss Account 1924. # fld FMC SAE, Cadiz, accession 608/box 2, *Ford Archives*, Dearborn.

governance of the branch;²⁸⁴ second, Cadiz was a small and industrially isolated town, with no other industry, there was difficulty to find efficient personnel. In short, there was no labour market to provide what the company required.

Ford Motor Company SAE was established in 1920 with a capital of a half million pesetas (about 100,000 dollars at that time). They planned to assemble 2,000 cars in the first year of operation, and 5,000 in the second. Unfortunately, the company was the victim of strikes and a prohibitive tariff (raised in reprisal against the French because of their import tax on Spanish wines, but raising all automotive duties, so that the Ford touring car soared to 438 per cent of its cost in Detroit). As a result, the activities at the Cadiz factory were suspended until July 1921.²⁸⁵

In the spring of 1923, Ford Motor Company SAE was transferred from Cádiz to Barcelona and settled down in rented land owned by Rocamora and Co., in Poble Nou.²⁸⁶ The Cádiz's concern had lasted only three years and soon another location was found. Barcelona, that was originally considered but discharged because of its labour conflicts, was finally chosen. Ford had left Cádiz because: first, the workforce was not 'suitable'. That was, according to Ford executives "probably due to the fact that there were no other industries whatsoever in that part of the country and that Cádiz was simply a small town, it was hard to obtain more efficient help."²⁸⁷ Secondly, there were high transaction costs due to the lack of an industrial district equipped with a small supplier of components. Therefore, the industry already established in Cadiz, mainly the shipping industry (Astilleros de Puerto Real and La Carraca - San Fernando) did not seem complementary to the automobile industry. Ford originally was just assembling separate parts (knock-down) arriving from the United States, however, and although it is difficult to establish the degree of complementary or similar activities Ford later on would

²⁸⁴ "Report from the Auditor, A.L. Byrns to the Plant Chief of Barcelona, 1 June, 1923" box 7541, Ford Motor Ibérica Archives, Barcelona (from now on as *FMI Archives*, Barcelona).

²⁸⁵ Ford Spain Minutes, April 1921 President's office files. *FMI Archives*, Barcelona.

²⁸⁶ For an exent monography of Barcelona's industrial district of Sant Martí de Provençals and El Poble Nou, see Nadal and Tafunell (1992).

²⁸⁷ Letter from Manager of FMC S.A.E. to Byrns, FMC England, May 2, 1921.

require, it effectively had a relatively well-developed local supply industry. Thus, Barcelona, as the previous chapter has already showed, was a more suitable location, for both reasons: the specialised workforce and the well-established local supply industry.²⁸⁸

At the end of the 1920s, a new English corporation was created, called the Ford Motor Company Limited. This replaced the Ford Motor Company (England) Ltd., which was the central element in Ford's European activities. Under the plan for expanding operations in Europe, the new Ford of England acquired the shares of the Ford operations on the European continent, which at the time were owned either by the American Ford company or the Ford family. Ford America owned 60 per cent of the English company's stock and thus controlled its policy. The other 40 per cent was offered to the British public in small lots. At the same time, the English company held 60 per cent of the share of each of the European affiliates, and offered the public in each country the remaining 40 per cent. Ford expected that national participation in ownership would mask the fact that it was a foreign corporation. As a result, in 1929 a new company emerged in Spain: Ford Motor Ibérica (for the local main shareholders, see table 3-1 at the end of the chapter).

Ford Motor Ibérica was created, with its headquarters in Barcelona, in June 1929, as a transformation of the old Spanish Ford Company of Cadiz in 1920. The company's capital was fixed at 15 million pesetas, which was subsequently reduced

²⁸⁸ It was Alfred Marshall who first presented the classic economic analysis of industry localisation. Marshall identified three distinct reasons for localisation. First, by concentrating a number of firms in an industry in the same place, an industry centre allows a pooled market for workers with specialised skills, and this pooled market benefits both workers and firms: localised industry gains a great advantage from the fact that it offers a constant market for skill while men seeking employment naturally go to places where there are many employers who need such skill as theirs and therefore it is likely to find a good market. The owner of an isolated factory, even if he has good access to a plentiful supply of general labor, is often put to great shifts for want of some special skilled labor; and a skilled workman, when thrown out of employment in it, has no easy refuge. Second, an industrial center allows provision of non-traded inputs specific to an industry in greater variety and at lower cost. For subsidiary industries devoting themselves each to one small branch of the process of production, and working it for a great many of their neighbors. Finally, because information flows locally more easily than over greater distances, an industrial center generates what we would call technological spillovers. Marshall (1920).

to 9 million pesetas by means of repayment to the shareholders of 40 per cent of the nominal value of the shares. Up to July 18th 1936, the Company's business was very successful.²⁸⁹ Ford Motor Ibérica assembled its vehicles in a leased factory in Barcelona and about 50 per cent of each unit comprised local parts.²⁹⁰ Moreover, once the company started performing well in Barcelona it planned to establish a manufacturing plant. The Ford engineers had already travelled to Barcelona to start works when the Civil War abruptly interrupted their expansion. Thus, because of the Spanish government pressure for home production with home-labour and home-materials, the Ford Motor Company began to plan to expand this assembly into a manufacturing factory.²⁹¹ During the first decade, the number employees of the plant was around five hundred. It reached its highest level during the first half of the 1930s at about 750. Then, after the civil war, it dropped to 350 and did not recover till the 1950s.

Ford remained until 1954 and, from its remaining assets, a new company dedicated to the manufacturer of industrial and commercial vehicles was established: Motor Ibérica. It not only lasted until 1954, but when it sold its financial participation to local interest a new company with commercial and technical ties with Ford was formed: Motor Ibérica, wholly-owned by Spanish capital.

²⁸⁹ The last balance sheet approved for the year ending December 31st, 1935, showed net undistributed profits of approximately 16 million ptas (after payment of all profits taxes), of which more than 15 million ptas was in liquid cash. The company was also owed 14.5 million ptas by domestic debtors. Because of the difficulties of obtaining Foreign Exchange, however, the Company owed foreign creditors the sum of 15.8 million ptas (whose debt had increased on July 18th 1936 to a sum of approximately 17.3 million ptas). Among the creditors were the Ford Companies of United States and Canada, guaranteed by another creditor, the English Ford Company.

²⁹⁰ For example, in 1933 local purchases amounted to 4.3 million ptas, whereas in 1935 local Spanish purchases amounted to 15.6 million ptas. Acc.608/Box 3, *Ford Archives*, Dearborn.

²⁹¹ Wilkins and Hill (1964).

3. The Cadiz Assembling Plant (1920-23). Between a Branch and a Spanish Limited Company

When Ford came to Spain, the country had enjoyed a prosperous year in 1919 up until the latter part of 1920, when a general period of business depression set in and lasted out the whole year. Business was being affected considerably by the war and the country's inability to market her products had caused this depression.²⁹²

Ford was paying duty on an 'ad valorem' basis - the law provided for a duty of 25 per cent on open cars, 35% on closed cars and 20% on the chassis. These percentages were paid on the value of the cars as they were entering Spain and, as duty had to be paid in gold, the government each month announced a percentage to be added to the fixed duty to cover this item. That is, if, for example, Ford paid 25 per cent duty, then they paid during one month for instance 49 per cent of this 25 per cent as a premium for gold - making the duty in effect about 37 per cent on open and about 52% on closed and about 30% on the chassis. If the cars entered the country direct from the US, duty was to be paid on the US invoice value plus the freight from New York to Spain. But Ford's cars did not enter direct from the US. When the plant was established in Spain, they were granted the favour of

²⁹² As the previous chapter has showed, for example, the steel industry had profited both from the increase in foreign demand and from the decrease of competition from foreign firms. However, the iron and steel industry exported ingots of primary fusion, remaining dependent on imports for materials at a more advanced stage of manufacture. Thus, in the steel industry, the war had a double impact on demand, through the increase in exports and through the need to find substitutes for the articles which previously came from abroad. However, the gradual readjustment of the economies of the countries that took part in the war, had the effect of closing the opportunities which had been available to Spanish production. Finally, the major devaluation of certain currencies favoured the import of foreign goods and ruined the market for the home product. The steel industry, for example, found that export orders decreased whilst competition at home increased. According to Fontana and Nadal (1976), "The war had conferred a 'natural' or 'spontaneous' protective margin on Spanish economy. However the end of the war saw a revival of protectionism, with the creation of a high tariff wall. The pretext was the French tariff of 1920 designed to exclude Spanish wines. Using this as an excuse, The Royal Order of 26 November of that year raised the duty of 131 items of the revised tariff list of 1911, which included a wide selection of industrial products, irrespective of origin." Moreover, according to Rial (1986), the absence of demand for high-volume production militated against capital intensification needed for modernization. Small industrial manufacturers endure a precarious existence originating in the high cost of their products. These products were made still more expensive by the high cost of their component parts and materials.

being considered outside Spain, that is, they were in a free trade zone - all of which was perhaps advantageous when duty was paid on a weight basis. But at that time, they were still outside Spain - they were still in the 'free port' and yet from a duty standpoint they were in Spain. Therefore their cars entered not from the US but from Cadiz's Plant in the Free Port. The Free Port for all purposes was the same as any other country as far as duty was concerned.²⁹³

Owing to the manner in which the Company was paying duty, a dealer in Spain could have bought direct from New York to almost as good advantage as from Cadiz and in some instances to better advantage. The dealer in Barcelona could have got the same car from New York at 4,700 pesetas and if Ford was in Spain and not in a Free Port 4,300 pesetas.²⁹⁴

At the beginning, the organisation of the branch was very simple. Ford Motor Co., SAE had no assistant manager at its plant. The one, at that moment, had been filling before the position of chief clerk.²⁹⁵ He had come to Ford's company on February 1921 from the Power Company at Barcelona where he was a private secretary to the Assistant Chief Engineer. His work at Ford had been as assistant chief clerk and he was the only man there that could handle the work of the chief clerk. His knowledge of book-keeping and accounting was sufficient, according to Detroit. However, neither the auditor from London, nor the chief clerk were suitable for managerial positions, their experience and background being those of accountants. Thus, under the circumstances there, it did not seem to Detroit the best judgement to leave the Spanish branch during the absences of the American executive in charge of a chief clerk who had been with the Company only seven months and therefore who had had only seven months to learn Ford's policies.²⁹⁶

²⁹³ Letter to Klingensmith in FMC, Cadiz. Letters and reports concerning Cadiz Aug 4, 1919, acc.608/Box 2, *Ford Archives*, Dearborn.

²⁹⁴ *Ibid.*

²⁹⁵ The salary of the Ford's manager was between 1,305 pesetas (about \$170.00) and 1,785 pesetas. The director's salary was 2,800 pesetas. See letters and reports concerning Cadiz, 4 August 1919; acc.608/Box 2, *Ford Archives*, Dearborn.

²⁹⁶ letters and reports concerning Cadiz, 4 August 1919 acc.608/Box 2, *Ford Archives*, Dearborn.

In spite of the fact that business at Cadiz's plant was small and perhaps did not warrant an assistant manager there, investment was large and the problems of running the branch there (even although the branch was small) were as many as everywhere,²⁹⁷ especially so, because with the legal problems involved there and the fact that beyond the branch's manager, all the other employees had been secured locally except the superintendent, who was a foreman at the Bordeaux Branch. Therefore, it was believed necessary to send him (the branch's manager) a man of Detroit's absolute confidence, who could assume the duties of an assistant manager.²⁹⁸

As we have said Ford had chosen Cadiz over and above Barcelona because of its labour conflicts: "Barcelona was so full of trouble all the time that we do not think it worthwhile considering establishing the plant there."²⁹⁹ The strike against Ebro Power and Irrigation, a Canadian-British enterprise known as La Canadiense, had been determinant for the rejection. Although there was an authentic labour dispute in progress, the decision to call a strike in a company so vital to the region's industry had two main objectives. First, the winning from Catalanian employers of full recognition for the Worker's Confederation (CNT), along with the acknowledgement of labour's right to conduct its affairs in a free atmosphere. And, the second objective was essentially political, and it would enable the CNT's rapid growth to continue and assure the organisation's position as one of the most powerful forces in Catalonia. In the event, Cenetist resoluteness combined with the stubbornness of management to produce a 44-day strike so intense and complete that the city of Barcelona was virtually paralysed, a strike never since equalled in magnitude in Spain. The action was the first major test of the new organisational weapon, the Sindicato Unico -specially the Sindicato Unico of Water, Gas and Electrical Workers, whose successful organisation would make it possible to

²⁹⁷ Investments in setting up the concern, finding, selecting and contrating employees, training them, establishing the sales network, etc.

²⁹⁸ 6 October 1921. Cadiz. FMC, Cadiz. acc.608/Box 2. *Ford Archives*, Dearborn.

²⁹⁹ letters and reports concerning Cadiz 4/8/1919 acc.608/Box 2, *Ford Archives*, Dearborn.

extend the strike not only to the "La Canadiense" workers but to those from the other power companies in the area as well. By April 14, the general strike was at an end. As a consequence of this strike the industrial situation was polarised, and the moderates of both sides were pushed from the stage. The capitalists began to use the lockout, and also to fire militant workers from their factories in substantial numbers, whilst at the same time circulating extensive blacklists.³⁰⁰

The most important thing for Ford executives in Cadiz was its location - which was almost an exact duplicate of Buenos Aires - Ford's concern was the first building that any ship would see sailing in from the Atlantic. Ford managers realised, however, that the concern must first make money before they could engage in an operation of that kind. Cadiz was not a free port in the English sense of the word. According to Ford managers who had visited Cadiz for three times, previously to take the decision to establish there, "Cadiz is (...) without the shadow of a doubt about the best geographical location, both from receiving and a re-shipping standpoint, in this way that nearly all steamers going anywhere in the Mediterranean from the Atlantic call there, and nearly all Spanish coast-wise steamers call as well. The harbour is one of the most beautiful in the world. It is natural and has unlimited room for anchorage and (...) there was plenty of labour to be had. The highest standard wage was paid at the docks, and amounted to 10 pesetas per day for 8 hours work. The town had been singularly free from labour trouble. The only manufacturing done was some canning of fish in two big shipyards, and enormous slate works."³⁰¹

The port authorities had given a Spanish Company called 'Crédito & Docks' the privilege of storing materials free of duty for a limited period in warehouses located within a zone called 'Deposito Franco' at a railroad station some fifteen minutes ride from the port.³⁰² This company - Crédito & Docks - with which Ford

³⁰⁰ Meaker (1974: 158-169). See also del Rey Reguillo (1992); Soto Carmona (1989); Tuñón de Lara (1977); Martin (1990).

³⁰¹ Letters and reports concerning Cadiz 4/8/1919 acc.608/Box 2, *Ford Archives*, Dearborn.

³⁰² *Ibid.*

managers had had negotiations at different times since 1916, knew full well that no one else could get exemption or free port privileges at Cadiz or Barcelona, which were the only two ports having regular steamship communications with America and the Mediterranean ports. They had, therefore, led Ford on until they were ready to do business. At the beginning conditions were absolutely impossible from Ford's point of view. They had asked 80,000 pesetas annually for the rent for five years. This was more than what they could pay for the space which they had offer, and after long negotiations Ford agreed to pay 35,000 ptas. a year and a bonus on cars shipped beyond a quantity of 4,000 on a sliding scale, and also pay 4 PTAs. per car for the first 3,500 cars, 3 PTAs for the next 2,500, and 1 PTAs. for each car over 10,000. Finally, Ford representatives agreed to pay them 15,000 pesetas in advance, and the other money to be paid every six months from the shipping records. In this way the Company was protected to the extent that when production was small they only pay 7,000 \$ a year, and for 10,000 cars they would pay about 11,000 \$ a year.

This last scheme had involved a good deal of negotiations with the Spanish Government, and could not have been began until Ford was duly established and doing business. Ford Motor Company felt sure that if they were able to show their intentions of using Spanish help, and of investing their profits in the extension of the Spanish company, they should be able to approach the Government at that time, in good conditions. According to Ford managers, it was "hardly possible to do anything with the present Cabinet, as they were wrestling with post-war problems, especially the high cost of living, and workmen's strikes in Catalonia".³⁰³

The buildings for the assembly plant were previously used as a brewery, but they were already in the process of being cleaned out as there were not sufficient markets for the beer. However, the idea was to petition the government for permission to erect a modern building in 'Puerto S.Carlos' later on when the

³⁰³ Ibid.

Spanish company showed the necessary return, and therefore get out of the 'Deposito Franco'.³⁰⁴

Floating a company was very easy in Spain, at that time, because no Spanish stockholders were required, nor were any Spanish directors necessary. The objections to a branch were partly the same as in other countries but in Spain the taxation question was the most difficult because the authorities were claiming that it was impossible to determine the profit tax of 12% on business showing no capital investment.³⁰⁵ The other taxes which Ford had to pay were insignificant. The fees in connection with the legal work, the printing of articles etc. amounted about 6,000 PTAs. There were quite a number of American companies doing business in Spain in this manner, many of them of recent origin.³⁰⁶ The regulations of the company were the same as the Danish, with whatever small modifications that the registrar might have demanded.³⁰⁷

As regards the business in Spain, the Ford company expected no difficulties in producing 2,000 cars the first year, 5,000 the second and the third year, and 7,000 the fourth and fifth years. The contracts which were sealed for six months only,

³⁰⁴ The buildings were of an old-fashioned Moorish construction, with very heavy columns, and a round arch support for the roof. The floors of beaten earth had to be cemented but it did not require any very great expense. However, Ford had to buy electrical equipment, as at that moment the rate for electricity was 35 cents (US \$) per Kilowatt. Thanks to power cables erected to transport electricity generated by water power current from the mountains some hundreds of miles away, electricity was available manufactured at 4 cents the Kilowatt. The infrastructure already was extant, and as soon as they got a permit from the Government they started to set it up immediately. This permit was necessary because free port people had no right to manufacture anything within their boundaries. They could only store materials. See letters and reports concerning Cadiz, 4/8/1919, acc.608/Box 2, *Ford Archives*, Dearborn.

³⁰⁵ Apparently, most firms first choose foreign production locations, and then instruct their tax departments to minimize taxes. See Markusen (1995). Moreover, there is little support for the idea that risk diversification or tax avoidance are important motives for direct foreign investment.

³⁰⁶ The possibilities of Spain for industrial development were attracting foreign capitalists. The 1920s, specially the dictatorship period (1923-1929), saw a considerable influx of American capital. Among the American and European firms setting up in Spain were the Standard Electric, General Electric, General Motors, Nestle and Ford Motor Company. See also Calvo (1988).

³⁰⁷ The Stock Holders were Edsel Ford, Klingensmith and Davis, there being a minimum of three required. The stock was transferred to Ford in Dearborn exactly as in Copenhagen.

and which called for delivery from New York until the assembling plant was completed show a total of 710 cars for approximately seventy five percent of the country. They were signing contracts in Spain strictly on American terms, as was done in other countries like Switzerland and Holland. Thus, they were not giving any more concessionaire agreements to anybody. And, no firm was getting the whole of any one contract. The territory was determined by the size of the country and the man standing as a dealer.³⁰⁸ Denmark, Norway and Sweden were catered in the same way. As long as the dealer paid for his cars in New York and financed his own responsibilities, he was allowed the English terms. And, as soon as the assembling plant delivered cars, he charged the list price stipulated by the plant and received the regular discount of 17.5 percent. There were very good dealers in Spain. The Barcelona dealer, and one in Seville were according to the Ford managers "very progressive people and will surely sell a lot of cars." Ford also kept some old retailers like Brenosa in Madrid, whose only hope was to make a Ford look like a Locomobile or a Packard limousine in order to sell it at a price around 9,000 pesetas. But, Ford made it very clear to them that they had either got to change such a strategy or quit selling Ford.³⁰⁹

During the first year, production would have increased daily without any interruptions and the benefits obtained would have fully corresponded to the auspices under which the business was started, if different adverse circumstances had not occurred.³¹⁰ In the initial period, average production reached 10 units a day, and at the end of May 16 units a day. However, on the 21st of July the Plant suffered its first reverse with a stoppage that last until August 24th caused by defiant resistance of the *stevedores*, who obstructed the remittances of material bought from Ford Detroit. A Cadiz loaders strike came thereafter. Loading and discharging operations had to be performed by Ford men. The slowness of cartage

³⁰⁸ For Ford dealer policy in America, see Dicke (1992).

³⁰⁹ Letters and Reports concerning Cadiz, *Ford Archives*, Dearborn. See also Wilkins and Hill (1964).

³¹⁰ Minute Board of Directors 6/3/1921. Report corresponding to the fiscal year ending 31 December 1920. Acc.608/Box 2, *Ford Archives*, Dearborn.

implied a still greater decrease in the possible rate of daily production. They were forced to buy from Ford Detroit the majority of their spare parts, until Cadiz's installations, definitively finished, allowed them to produce most of the material which went to make up the Ford automobiles. The rate of exchange was acting directly upon the prices of the cars by reason of the large sums of money which had to be remitted to Detroit in dollars, thereby reducing the profit calculated in proportion. Finally, the re-establishment by the Spanish Government of paying the customs duties in gold had to sustain a premium of exchange which of necessity has influenced Ford selling prices.³¹¹

Furthermore, a ministerial disposition apparently adopted as a commercial restriction against France, comprised all classes of automobiles in the surcharge of customs duties, which if of real importance as regards luxury automobiles was still greater and of absolute importance to the cheap cars of common use. Such difficulties, however, had not prevented Ford from obtaining enough profit to hope that in the years to follow their business would reached the results intended "not only with a view to an industrial end, but to be rich in both a moral and social point of view. In general, employees have given complete satisfaction and have collaborated with their efforts towards the development and continuation of Ford enterprise."³¹² Ford had desired from the very first moment that all those who belonged to its organisation should participate in the prosperity of the business towards which they had contributed their work. Workmen were getting from 12 pesetas to 24 pesetas a day and that the minimum salary of the office was 600 PTAs.

The Free Port regime was not offering any reasonable advantage to the Ford Motor Company in Spain, particularly when taking into account that for that moment and for a long time to come, the Spanish territory alone was Ford's best market inasmuch as in Spain, where there existed at that time some factories

³¹¹ Ibid.

³¹² Ibid.

dedicated to the construction of luxury cars, there was not a single one constructing cheap automobiles for all public generally, Ford consequently being the first and as it was believed "for a long time to come yet" the only industrial Spanish, enterprise of this class.³¹³

4. Ford as a Spanish Limited Company

The main concern of the Ford Motor Company of Cadiz in its first years was how to appear as if it were a Spanish Limited Company (S.A.E.) with a capital independent and operating independently of any other foreign organisation.³¹⁴ Despite the fact that there were no national low priced car factories such as the Citroen in France to protect, Ford believed that "the object should be to inspire the feeling of our desire to protect and assist the country in which we are working. An example we have in mind is the idea conveyed to the public by the Manchester Plant of an 'All British' Ford car."³¹⁵

If the Ford Motor Company of Cadiz in spite of having a proper legal representative of its own though being a Limited Company (Sociedad Anónima Española, SAE) was, by its operations suggesting in every way that it was a branch of the Detroit factory (sales organisation through having offices, factories, shops and installations) the Spanish Administration would determine the tax to be imposed, in consideration, not of the capital and profit of the Ford Motor Company of Cadiz but the capital and profit of the Ford Motor Company of Detroit. In no case would this tax have been less than one-tenth of the capital and profit.

Therefore, it was necessary through its mode of operating that the Ford Motor Company of Cadiz should have always conveyed the impression -for fiscal reasons-

³¹³ For *Hispano Suiza* see previous chapter.

³¹⁴ letter from the head office to Lloyd Davis (branch manager), Ford Spain's General Manager, 22 June 1921 in # FMC, Cadiz. Acc.608/Box 2, *Ford Archives*, Dearborn.

³¹⁵ letter from branch office to Craig (head office). 12 March 1921 in # Cadiz, December 1920-December 1925, Acc.608/Box 2, *Ford Archives*, Dearborn.

that it was an independent organisation. Since, if with a nominal capital of 500,000 pesetas there was a declared profit of 122,892 PTAs (24.5 per cent) and from this sum no amount was destined to dividends or to reserves, the Tax Administration would have understood that the FMC of Cadiz was really only a branch.³¹⁶

According to the stipulations of a Royal Decree of 25 April 1911, still in force in 1924, a company was to be considered a foreign one in the establishment of the capital tax: (a) when the directors were not Spaniards, (b) when the managers were foreign or dependent on foreign people, (c) when the company was operating in Spain but under foreign control, and (d) when there was a majority of foreign shareholders to impose their decisions on the general meetings or on the management of the Company. Therefore, Ford Spain could easily be considered as foreign by the authorities, particularly when they could prove that the working capital was not sufficient with relation to the profits earned by the Company or when they were out of proportion. Hence the suggestion by the Spanish lawyers to increase the capitalisation to the maximum amount consistent with the least possible expense. Ford's balance sheet was showing an unusually large credit appearing in the name of the Ford Motor Company of Detroit, from which it might easily have been inferred that the Detroit Company was partner of the Spanish one. They would like, at some future date, to have seen the capitalisation increase in the neighbourhood of twenty million pesetas, which was more in proportion with the earnings.³¹⁷

Ford thought that there was a discrimination against limited Companies having no Spanish members as shareholders on the Board of Directors.³¹⁸ It was obvious to the Chamber of Industry that companies which were formed with a capital of 500,000 pesetas were not complying with the law regarding the majority of the

³¹⁶ letter from head office to Lloyd Davis in # FMC, Cadiz, 22 Jun 1921. Acc.608/Box 2, *Ford Archives*, Dearborn.

³¹⁷ letter Harrington to Craig. 15 April 1924 in #fld FMC SAE, Cadiz, Acc.608/Box 2, *Ford Archives*, Dearborn.

³¹⁸ From Ford Spain's Legal Department, letter from L. Rodriguez, Ford's legal adviser, 21 February 1921 in # FMC Cadiz, acc.608/Box 2, *Ford Archives*, Dearborn.

share holders being of Spanish nationality. Ford was advised in their interest own increase the capital to two million pesetas and to replace one of its foreign shareholders by the company lawyer.

Ford Motor Company had chosen an influent person as its legal adviser. Effectively, Ford's legal adviser in Spain, Leonardo Rodriguez, was an ex-minister of the Cabinet, and at that moment a member of the Spanish Cortes or Congress, a leading politician and an attorney, well-spoken of by the American embassy, banks and business in general. The Minister of Finance, Francesc Cambó, which was one of the most important cabinet portfolios, and who was the spokesman on the Committee on Profits, was a law partner of Rodriguez. Ford Spain's position under the present laws should have been as favourable as it could have ever been, on account of the close connection between Rodriguez and Cambó on whom the entire question of finance and taxation reposed. However, Rodriguez was depending too much on his influence at that time to protect the company, and even with this influence he was insisting that they should appear of a Spanish Company by following his suggestions. Thus, if Ford did not follow his suggestions as he was inferred very insistently, Ford would be in a very precarious position. This can be gleaned from a letter from the lawyer addressed to the Manager of FMC Spain, dated the 28th of January 1921, and which stated: "(...) regarding the news as to the government taking strong measures against all the Limited Companies (SA) who have not the greater number of their shareholders as Spanish members (...) what has been going on (...) is a strong current of opinion favourable to the Directors (Board of Directors) having one or more Trustees of Spanish nationality, this being the case due to the fact (...) that such a Trustee will always take care, owing to his own origin, of adopting and bringing together the interests of Limited Companies with the general economic ones of the nation (...) This opinion (...) will turn out a legal disposition. Of course, everything done with due anticipation and endeavouring to have someone in the Board of Directors who is a Spaniard, seems to me very proper (...) whenever any negotiations have to be effected by the Company with someone who is a Spaniard speaking as member of the Board of

Directors of the Company, as this would take away any foreign colouring the Company may have (...) In this manner, my efforts would have a firmer footing in appearing as a direct interest of a Spaniard citizen against competing interest or firms of the other Spanish citizens who could dispose of similar influence to mine with the public Powers."³¹⁹

Thus, the most important issue was the legal status of the Company in Spain. The main concern for Ford was how to appear Spanish. There were two main reasons for this: first, because as an American company taxes would be so great as to prevent operation in Spain; and second, to secure any advantages granted to national industry as against foreign enterprise.

Referring to the question of what benefits Ford received as a Spanish Company. It has to be said that first, as at that time the Spanish Government had not made any decision as to what the taxes would be, Ford had not been advised how much the taxes were going to be. So that from the standpoint of evading excessive taxes, Ford Cadiz did not know whether it was gaining an advantage by organising itself as a Spanish Limited Company or not. And second, aside from the matter of taxation, from the standpoint of being a national industry, Ford Cadiz received no advantage whatsoever over foreign enterprises. Had they received a lower rate of duty on their raw product as brought into Spain, then as a Spanish company Ford would have had an advantage over foreign competitors such as Overland, Chevrolet, Citroen, etc., but Ford was paying on exactly the same basis as the others. So that the company had no advantage in this respect.³²⁰

So it was evident to Ford directors that they had no facts on which to base any conclusion that they had gained regarding the advantages of being organised as a Spanish company. Taxation was, of course, the big question in their minds. Consequently, the first thought was that given they were organised as a Spanish

³¹⁹ Ibid.

³²⁰ Legal Report on The Spanish Company. 6 October 1921, Acc.608/Box 2, *Ford Archives*, Dearborn.

Limited Company the Spanish Government should consider them as a Foreign Corporation from the standpoint of taxation. On distinct occasions the Spanish Government had gone on record through legislation as countering to foreign enterprises attempting to evade taxation or gaining advantage by organising Spanish companies which were not genuinely Spanish.³²¹

The following paragraphs taken from a confidential report made by the Commercial Attaché at Madrid to the American Ambassador in Spain reflect the viewpoint of American interests in Spain with respect the law of 1920: " (...) the law of 29 April 1920 imposing new and increased taxation upon foreign enterprises based in Spain. Since my arrival here, I have been giving this matter considerable study and when in Barcelona I recently discussed this new law with the Board of Directors of the American Chamber of Commerce (...) A number of American business enterprises have taken refuge in the establishing of a Sociedad Anonima (...) their position is a precarious one and it will rest with the Jurado de Utilidades to decide ultimately whether their position well taken. In the case that not, the arbitrary decision of the Jurado will be liable to cost them very heavily. This Jurado has arbitrary powers independent of the Spanish Court and from which there is no appeal. This is contrary to the law and spirit of international trade agreement and therefore can not be enforced where foreign interests are concerned (...) This Jurado de Utilidades is a tribunal without precedents and constituted not of lawyers but of government officials and persons named by government officials to exercise judicial functions of the highest degree. This means undoubtedly that the Jurado de Utilidades can disregard all principles of law and equity. The Jurado is absolutely independent of the Spanish Courts by the following clause of the law:

³²¹ Three laws have to be mentioned. First, on February 14, 1907 a first law was passed encouraging national industry and establishing the principle that only goods of national production could be purchased by the government except in certain instances. It was also decreed that foreign companies could not be considered as Spanish companies for the representation and sale of products obtained in foreign countries, or because they had established in Spain assembly or secondary manufacturing plants. Secondly, there was the Royal Decree of April 28, 1911 (based on the law of December 29, 1910). And finally, the law of March 2, 1917 and the law of April 29, 1920.

Managing subsidiary firms in foreign countries.

The findings of the Spanish cabinet and Jurado de Utilidades in matters within their jurisdiction cannot be impugned by judicial proceedings.(...) The entire situation has been discussed thoroughly with our attorney (...) he is intimately familiar with the relationship existing between the Ford Motor Company of Detroit and the FMC of Cadiz (...) the desires of the head office and how we should operate here; the head office impressions and criticisms of naming a Spaniard to the Board of Directors; the declaring of dividends; etc. As a matter of fact, he well knows the desire of the FMC of Detroit to control the Cadiz Branch (...)"³²²

Therefore, the main points to consider were as follows:

First from the viewpoint of being a Spanish Limited Company (Sociedad Anónima Española, SAE), by avoiding Ford appearing as a branch of Detroit this Ford Directors were finding themselves well guarded against all kinds of prosecutions, requirements and investigations from the government.

Secondly, and with regards the capital, the fact of having a larger capital stock was believed to be of excellent assistance to them their organisation as a Spanish corporation. In effect, it seemed a little strange to see operations carried out as such a big scale by a company whose capital consisted of only half a million pesetas. The operation to follow would had been easy one. There were in Cadiz nearly eight to ten million pesetas worth of material supplied by the Ford Motor Company of Detroit. Therefore, by making it appear that the half million pesetas was produced by a contribution of the Ford family in cash, and by making a double entry in the books without the necessity of making a cash payment, they could consider that 500,000 PTAs had entered their cash box to increase the capital and that they went out to pay for the material. It was therefore simply an exercise of meddling with the figures which was made in the books.

³²² Legal Report on the Spanish Company. 6 Oct 1921, Acc.608/ Box 2, *Ford Archives*, Dearborn.

Thirdly, regarding the Board of Directors, it had been advised by the Spanish lawyer that it would be of great importance for the 'moral' and legal consequences, that there were the greatest possible number of Trustees of Spanish nationality, "although conditioning their intervention so that the Company and same may at all times operate, without any danger whatsoever, under the absolute orders of Detroit."³²³ Notorious agency problems had been appearing during the decade of the 20s. The Board of Directors of the Spanish Companies was formed by three directors, two of whom were American were permanently domiciled in their country. This reason made it juridically impossible that a real meeting of the Board could take place through the other Director being in Europe, because it was impossible for a single man, even furnished with proxies by his colleagues, to meet with himself. Nevertheless, for a long time, that was what happened in the FMC SAE. In spite of any phraseology used in the Minute book, it was evident that the resolutions were adopted by an individual, before the Secretary, who committed them to writing. They were thus far from the conception of the stock company, in which everything requires diverse personal co-operation and a plurality of votes.³²⁴ Moreover, it is dangerous to place the Company in the hands and under the power of a single man, and that the Company's manager was to be under the control of the Board of Directors, without being himself a Director and the Secretary being an independent personality, outside the company's employees and thus exempt of any coercion.³²⁵

And finally, from the standpoint of the Head Office, the Spanish representative believed that it would be very convenient to have the management and administration in Cadiz or wherever the factory be at any given moment, but he thought it would be very convenient to have the head office in Madrid, which meant that they should have their legal domicile and the official books of account there.

³²³ Ibid.

³²⁴ Especially dangerous after the Buckley's incident. Buckley, the former manager of the Spanish branch, had been sacked because of mismanagement.

³²⁵ Letter of Riera y Soler to Briggs, 23 November 1926, in # f1d FMC SAE, Cadiz, Acc.608/Box 2, *Ford Archives*, Dearborn.

Managing subsidiary firms in foreign countries.

In what respect they were a genuine Spanish Limited Company (SAE) and although it was believed that all aspects of Ford organisation and functions were characteristics of a Spanish Company, it was necessary nevertheless that they should not have endeavoured to make it appear so. For this they required that Detroit leave them to do what was proper with regard to the Spanish organisation. Moreover, Detroit should have been confident that when the branch was doing something that might have surprised them or may oppose their system, they did it precisely to keep all the appearance of a Spanish organisation. In this manner, they could challenge the accusation that they, by their acts and writings, were showing themselves to be a branch of Detroit.

For the Ford Motor Company to operate as genuinely Spanish it had to take care of the following six issues: first, to pretend that a dividend was distributed amongst the shareholders so that if the Spanish Government examined the books for what was due to them, they would not suspect that what they saw there was a 24% profit of the capital and that no dividend had been distributed. Second, not to mention the Detroit Plant at all in any letters or circulars, nor give to understand that all orders and instructions were received from same, inasmuch as it had to figure as an independent organisation. Third, not use letter-headings or any other printed matter with the Home Plant figuring on the same. Fourth, to draw up all correspondence, advertisement, circulars, posters etc., in good Spanish and not as it had been done up to now under the previous management. Fifth, to have the greatest possible number of Spanish Trustees. And finally, to keep the account books in the way which most resembled to the general system employed in Spain, and to avoid entries that were made in a foreign language. So that instead of a branch of Detroit, the Spanish Committee on Profits (Jurados de Utilidades) would only have seen in the Ford Motor Company of Cádiz a perfectly Spanish organisation.

On the other hand, the tendency to nationalise, in a partial way at least, was becoming more and more acute. So it would have been more convenient for them when they were soliciting, as they constantly did, some favour or advantage from

the local administration. The Spanish law of protection of industries demanded that there be at least a certain minimum number of Spaniards on the Board of Directors. Consequently, they believed that a vacancy should be made by taking one of the members off the Board and substituting a person in whom both the lawyer and themselves could place implicit trust. They would thus have two Spaniards figuring on the Board of Directors and in this way the Spanish character of the Ford Motor Company, SAE, would have been more pronounced, notwithstanding the fact that the Ford family would be only proprietary members.

Ford Cádiz recognised the fact that it was not Ford Dearborn's desire to have foreigners actual shareholders (this being the case, it happens that they were naturally not offered the benefits of participating in the profits of the company, being owners in name only, as in the case of legal adviser). Ford Motor Company of Spain, however, felt that this inconvenience could have been overcome by following the procedure which was usual in Limited Companies. That is, that the members of the Board of Directors participated in the net profits obtained each year; in that way, the person who would have been elected to the Board would have been sufficiently remunerated.³²⁶

Ford Spain was convinced that this question was of the utmost importance to them and therefore to continue increasing the prestige and popularity of the company in order that it take on all the characteristics of a Spanish Limited Company. Moreover, it was essentially convenient in order to favourably impress the high political administration and government.

On the other hand, the unfavourable laws which existed against foreign corporations would no doubt have been out into effect before long with commercial concerns. For example, the Branch of the National City Bank of New

³²⁶ For example, suppose that the Company obtained a net profit for the year of 100,000 pesetas after putting aside a certain sum, say 10% for a reserve fund. It should still have 90,000 pesetas, out of which the shareholders could then agree to pay 10% (9,000 pesetas) to the Spanish members of the Board for their services, and the remainder could be distributed amongst shareholders.

York was obliged to change its name to the International Banking Corporation (in Madrid) due to the effect of this law, which imposed taxes not only on the capital assigned to the Branch and the business done by that branch, but also on the home capital.

Finally, a Spanish Royal Decree was issued on 20th April 1924 for the purpose of facilitating the creation of new Spanish industries and the development of those already existing. Its provisions were very similar to those already in existence. It dealt with the same subject as that of the March 2, 1917 which ceased to have effect at the close of 1922.³²⁷ The following is a summary of the chief points in the Decree. Within three years, applications for certain benefits may be made by the following three classes of Spanish industries: new industries, industries whose production was insufficient in quantity or quality to supply normal demand in the country and, industries whose production was greater than the requirements of the country and for which a foreign market was necessary. Agricultural industries, mining, steel and metal works, building and railway material construction firms, hydro-electric and electro-thermal works were among the types of industries which were entitled to apply for the benefits prescribed. In order to ensure their being qualified in regard to the indispensable condition of Spanish nationality, firms had complied with the following four rules: first, the Board of Directors and the management had to be Spanish, but in the case of limited liability companies one-third of the Board of the Directors could be foreigners. No foreigners, however, could be President of the Board and Managing Director. Second, 75% of the capital had to be owned by Spaniards. Third, 80% of the office staff and workmen employed had to be of Spanish nationality. During the first three years, however, the employment of foreigners in the following proportion was permitted: 75%, during the first year, 50 % the second and 30% the third. And fourth, the fuel, material and fittings used had to be of Spanish production, excepting where for technical or other special reasons they had to be obtained from abroad. However,

³²⁷ see the "Journal" of 26th October, 1916: 280-1.

in the case of industries which required foreign markets for their surplus production the State was authorised to accord assistance to enable them to compete abroad.

5. Conclusion

To conclude, when Ford established an assembly plant in Spain in 1920 it controlled it as a branch, a mere appendage of the parent company. However, this brought enormous problems of control and monitoring and a heightened opposition of the host state. Therefore, Chapter 3 has highlighted two broad issues. First, the problem of how to organise a foreign subsidiary in the host country. And, second how to control and manage the branch. According to opinion put forward by the Spanish legal adviser, the solution was to put on the appearance of a Spanish company and do everything possible to prevent the Spanish government from gauging the true nature and structure of the firm. All of these assertions on the part of Rodriguez urging and advising on the appearance of a genuine Spanish Company subject to the issue of taxation as a foreign company. Ford of Spain did agree to take every precaution in conducting its business to give the appearance of a genuine Spanish company, but they did not make any change whatsoever with reference to dividends, increase of capital or appointment of another Spaniard to the Board of Directors, or any change in Ford policies until they had received definite instructions from Detroit.³²⁸

³²⁸ Legal Report on the Spanish company. 6 Oct 1921, Acc.608/ Box 2, *Ford Archives*, Dearborn.

Table 3-1. Main Shareholders. Ford Motor Iberica, 1929-54

	1929	1930	1931	1932	1933	1934	1935	1936	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
								1939															
FMC (1)	18000	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180
Conde Guell	235	217	291		105	50			50		50		50	50									
M. de Hoyos	72				50	50			50		50	50	50	50	50	50							
Riera y Soler	200	200	200	100	150	150	100		25		90	50	50	50	50								
B. Lopez Bru	348																						
Garcia Munté	122	210	185	185	205	205	205		50		50	50	50										
Mas Sarda	50	325	357	400	370	274	424		499	499	458	495	510	677	851	866	687	688	651	636	275	1000	
Geo Jenkins	630	570	810	700	700		500																
Percival Perry					300																		
Banca Arnau							420																
Ruisenada									50		50	50	50	50	50	50							
Bco. Vizcaya																							
Banco Bilbao																							
J. Casanellas											242	317	302										
Isidro Darna														400	450								
Roviralla																							
Alemany																						2010	3175
Solvay																				100	100		

Source: Minutes Board of Directors, FMI Archives, Barcelona

(1) 1929-39 Societe d'Investiments Ford Lux.; 1940-49 Ford Investment Co. Ltd.

Chapter Four. Managing Subsidiary Firms in Foreign Countries

1. Introduction

Chapter four analyses the first period of the company, that is the decade of the 1920s from the standpoint of how to manage and control the branch. It is concentrated on, rules, routines, procedures and policy application.³²⁹ Routines, as it has been stated in the first chapter, provides a set of premises to help in determining what to do in a particular class of circumstances. Moreover, members of a community will more readily avoid conflict if they follow compatible routines, which collectively may be called a culture.³³⁰ Management literature has focused on two modes of co-ordination, formal and informal structures.³³¹ The first refers to formal integrating mechanisms such as plans, schedules and formal policies and procedures. These structures generate coherence and predictability in the system, but also create rigidity. The second type of co-ordination relies on relatively informal rules and communication processes. These are more flexible, though they create impediments to co-ordination which the formal structure is designed to

³²⁹ The fundamental role of routine is coping with imperfect knowledge. In this sense, they are far more important than contracts because bounded rationality and uncertainty prevent people for making complete contracts. See Nelson and Winter (1982); Postrel and Rumelt (1992). According to Langlois and Robertson (1993), routines are the skills of an organisation. In a course of its development, a firm acquires a repertoire of routines that derives from its activities over years. A firm's routines are a subset of its capabilities that influence but do not fully determine what the firm is competent to achieve. Capabilities, therefore, refers to skills, experience and knowledge that a firm possesses. Richardson (1972). In essence, capabilities and routines are forms of knowledge about how to carry out productive tasks. Some of this knowledge may be tacit and not easily articulated or transferred to others, but other capabilities may be generally available to those willing to make the investment necessary to acquire them. Polanyi, M. (1958).

³³⁰ Loasby (1995) For a discussion of the concept of routine, see Cohen *et al.* (1996). Barnard (1938) argued that formal and informal organisations always coexist. Moreover, the informal organisation contributes to the viability of formal organisations because of three different functions: its communication in formal organisation, its function of cohesiveness and, the maintenance of integrity, self-respect, and independent choice.

³³¹ Barnard (1938); Drucker (1986, 1990); Mintzberg (1994); Mintzberg (1979); Milgrom and Roberts (1992).

minimise.³³² These impediments are 'opportunism'³³³ and 'convergent expectations'.³³⁴

Organisations have developed policies, rules, routines and data as a means of co-ordination and information among their members. A set of formal and informal networks has arisen to facilitate such information flows. Consequently, a rising tide of technical and organisational innovations appeared, all designed to improve communication and control in complex organisations. Yates has described the process by which modern managerial systems came to be created.³³⁵ She has focused on the evolution of corporate communication as an integrated whole, examining its functions, technologies, and genres. Accordingly, managers discovered that they could capture the benefits of growth only by replacing informal and primarily oral management methods with more systematic modes, heavily dependent on written communication. In nineteenth century factories where ownership was separate from management, factory owners created information systems that allowed owners to monitor the costs and profits of their operations and assure an efficient internal, managerial co-ordination of multiple functions.³³⁶ During the period from the mid-eighteenth century to 1920, internal communication came to serve as a mechanism for managerial co-ordination and

³³² Camerer and Knez (1996).

³³³ Individuals may take actions that are not consistent with the interests of the organisation, and may impede efficient levels of co-ordination. See Williamson (1975).

³³⁴ Convergence expectations exist when the expectations of all members of the interdependent system are aligned. See Malmgren (1961).

³³⁵ Yates (1989 and 1991). For further implications for economic theory see, for example, Nelson and Winter (1982). As they saw the firm as a repository of knowledge, the routinisation of activities in the firm is accordingly largely a response to the quantity and complexity of information. There is an important similarity between the Nelson and Winter approach and the one by Chandler and Teece. For Nelson and Winter, such inheritable fitness has to be explained by relatively durable routines within the firm. This also prompts the examination of the processes of internal cultural transmission within the firm. For a more extensive account, see Chapter One of the present work. See also Hodgson (1994) and Hodgson (1994/5), where he refers to the reasons why habits and rules are efficacious for human decision and action. Institutions are grounded on the common social transmission and replication of such habits and rules. Accordingly, many rules and many institutions enable rather than merely constrain action. Therefore, according to Hodgson, it is a major error to regard rules or institutions wholly or principally as impediments or constraints.

³³⁶ Yates (1991); and Johnson and Kaplan (1987).

control. In 1920, the major elements of the modern communication system and its role as a tool of managerial control had been established. Yates uses control in a sense which means "the managerial control -over employees (both workers and other managers), processes, and flows of materials- is the mechanism through which the operations of an organisation are co-ordinated to achieve desired results. Managerial control is essentially management as we now view it today."

The tremendous increase in the size of the market and the amount of goods available caused a number of basic shifts in the ways goods were distributed.³³⁷ For mass distribution to work, however, it was necessary to get information from the market to the head office and develop the means to process it into useful form. The use of high-volume production methods, which entailed set, scheduled production cycles, increased enormously the value of gathering information on retail sales in a timely manner. In fact, without such information it was not possible to profitably employ mass production techniques.³³⁸ By the second decade of the twentieth century, the flow of information was swift enough and deep enough that businesses could formulate coherent plans and policies on a national scale and establish methods to monitor their implementation. For example, in 1915, Ford routinely collected daily reports from branches located elsewhere in the country. These branches could in turn communicate with hundreds of dealers with nearly equal speed. The practical result of this change was to reduce head office reliance on the independent judgements of local standardisation and control over their operations.

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As executives increased their experience of big business, they began to develop more efficient managerial tools and organisational structures and to create a host of services designed specifically to meet their needs like, for example, the modern

³³⁷ For an overview of the origins and development of the mass retailer see Chandler (1977), chapter 7. Other works dealing more specifically with the development of mass market see Tedlow (1990).

³³⁸ O'Brien (1997).

³³⁹ Dicke (1992).

accounting procedures, standard volume and flexible budgeting during the 1920s. These gave managers a powerful tool not only for determining costs but also for measuring performance. To help project future demand, managers also began to make extensive use of market forecasting, derived primarily from information made available by improved communications.³⁴⁰

The Ford assembly line and the distribution system to market the Model T were the prototypes of the systems that would be installed by all major manufacturing concerns. In its original form, it was an extraordinarily influential organisation that contributed significantly to our modern notion of the corporation. But, Ford management practice did not extend much beyond issues not directly related to production. Unlike Taylor, Ford laid the technological bases for mass production more in the manner of a mechanically-minded inventor than as a proponent of scientific management.³⁴¹ While Taylor's work -focusing on time and motion techniques- directly addressed the theory of management, Ford was more interested in devising ways to replace men with machines.³⁴²

Ford's individualism also comes through in his attitude toward finances. Ford resisted any resort to the financial markets. He hated speculation. Ford also had no social aspirations. In fact, the Model T was essentially a farmer's car that did not required good roads and for which replacement parts could be found in any rural hardware store. He also fought hard to prevent unionism at all cost while some corporation began to integrate unions as part of a larger vision of managerial strategies. The reality that should be stressed, however, is that in the years of the company's unchallenged success, from 1908 to 1919, when sales increased from 6,000 vehicles to 775,000 and the workforce jumped from 690 people to over 44,000, Ford's managerial style was perfectly in tune with the attitudes of the men

³⁴⁰ Dicke (1992). For an extensive study of internal communication and office technology, see Yates (1989).

³⁴¹ Litterer (1961); Jelinek (1980); and Nelson (1974).

³⁴² Lazonick (1990).

he hired, the technicians and draftsmen who helped build his assembly line and design his Model T.³⁴³

The men surrounding Ford did not come from the college-educated elites and manufacturing establishment. Technical men, they acquired their engineering experience on the job and took no part in the corporate synthesis of science, management, finance, and consumption that characterised other large corporations.³⁴⁴ In the case of these men, innovation was not the product of a new corporate synthesis but instead of raw aptitude, ingenuity, on-the-job experience. This constant non-institutional exchange of ideas led to innovation. But as Ford grew, the company needed people who could drive men as well as design cars. Typically, the executives who ran the shops rose from the ranks of the tinkers. The ability to mold the diverse group of men into first-class production executives is one reason for Ford's extraordinary success. Another is that Ford attracted first-rate men to build the bureaucracy necessary to run the company despite his legendary distrust of nonmechanical executives and record keeping. But in spite of his antipathy to bureaucracy, Ford admitted the necessity of maintaining a total of over 500 clerks to process the ever increasing paperwork the automobile industry generated. It created a large pool of clerically employed subdivided into a variety of departments to process the ever increasing paperwork the booming industry generated. Clerks at Ford were keeping a distance from workers, and also foremen and skilled workers who held supervisory positions in the factory also kept themselves aloof from the semi-skilled workers.

2. Information flows in a subsidiary firm. The first years at Cadiz

Business organisations usually have a management group different from the individuals who actually carry out production. This fact implies the need for mechanisms to co-ordinate action. Therefore, given the division of labour, tasks

³⁴³ Zunz (1990).

³⁴⁴ Meyer (1981), Lazonick (1990), Rosenberg (1982).

must be compatibly designed and appropriately assigned. A network of information flows is needed so that the whole job gets done smoothly. This problem of organisation would exist even if all individuals shared the goals of top management. But, in general, the employees of firms do not automatically share the same objectives as managers. So there is a requirement for motivation and monitoring. Moreover, management cannot effectively choose what is to be done in any detailed way, and only broad control over what is done, and how well. Only a small portion of what people actually do on a job can be monitored in detail. The social system of work set norms, enforces them. The lower levels of representatives of management such as foremen, whose function is to monitor and discipline performance, are at least partially co-opted into the social system. Procedures and norms can be influenced by the sentiments and attitudes of the workers, and by those of the organisation more generally.³⁴⁵

The evolutionary theory of the firm regards, to a certain extent, the firm as an organism. In such an organism managers (replicators) are organised into teams (chromosomes) that seek to unlock the potential gains that can be derived from specialised resources by co-ordinating how they interact through the creation of rules (genes).³⁴⁶ Through co-operation, the different areas of the firms are linked in order to create an organisational structure that becomes the foundation for the firm. Moreover, the rules that specify how resources are to be allocated and used to support the organisational structure are collectively defined as the genotype of the firm. These rules encompass the policies, procedures, and practices that define the role of the manager, what specific actions are to be undertaken by management, and how these actions are to be performed. Policies serve as the general guidelines that oversee management activities. Procedures formally specify

³⁴⁵ Nelson (1996: 20-21).

³⁴⁶ To clarify what the meaning of 'rule' denotes see Khalil (1994). In his essay he distinguishes on the one the promoters of old institutionalism, who argue that the resistance to changing behaviour (in the light of new circumstances which cannot be explained in terms of transaction costs) arises because agents are more or less set in their habits and customs. On the other hand, new institutionalist explain it as a result of the taste for risk aversion. Khalil (1994: 262).

how these activities are to be carried out. Practices consist of those 'rules of thumb' and other informal ways of doing things that are used to accomplish the task assigned individual managers.³⁴⁷

Let us now turn to our case study. As the previous chapter has stressed, during the first years of the Ford expansion in Europe with the establishment of several concerns in countries such as Denmark, Spain, France and England, the company pursued a severe policy with those enterprises. Indeed "although all four were companies, they were operated as branches. To have a company made for the prestige of the unit, protected the head office from certain tax liabilities overseas, and gave it privacy from foreign scrutiny." In 1921, the American territory had been divided up geographically into 34 areas. Each area had a branch office and, eventually, an assembly plant. The branch managers were responsible for recruiting dealers, signing them to contracts, and supervising them. The dealerships were not directly owned by Ford, but were operating as franchised agencies. Though dealers could free ride on Ford's reputation and sales, the company overcame this problem by having dealership continually visited by company 'roadmen' who were dispatched by the branch offices to enforce strict rules regarding the appearance of showrooms and repairs shops.³⁴⁸

Branches had no room for independence of action. Therefore, they were treated as branches, and despite their European locations and problems, they received the same general letters of instruction, the same communications about accounting, sales, production, and purchasing as did the domestic assembly plants. Each company had binders into which these missives went, their rules and policies to be followed implicitly. These came to be known among employees abroad as the "Ford Bible."³⁴⁹ Furthermore, any European prejudice against routines imported from the United States was brushed aside as unimportant. Americanisation

³⁴⁷ Niman (1994: 373).

³⁴⁸ O'Brien (1997).

³⁴⁹ Wilkins and Hill (1964: 99-100).

extended to the management.³⁵⁰ The present chapter is concerned with these policies and rules.

The setting up of a Ford branch in Spain meant the introduction of the Fordist system in the country. The establishment of a new set of organisational routines involved a different social distribution of knowledge and also a different distribution of power and control among the individuals and social groups.³⁵¹ Moreover, the establishment of Ford's subsidiary helped to bring the American principles and styles of management and organisation to Spain. 'Scientific management' was an American movement. However, once in the host country specific knowledge was embodied in people, firms and networks. Skills of individuals arise from the institutional context of the country. Moreover, the firm's changing dynamic rests, overall, upon the common experiences of competing firms in the context of the national environment. This environment includes the skills which workers bring to their jobs, the role of the governments, how other firms compete and the characteristics of national demand.³⁵² The remainder of the chapter is closely related to the first. The following chapters will deal with the national environment.

The importance of the concept of routine has already been stressed. However, once defined, the problem of how can we approach empirical research raises its head. The one we have adopted consists in working on routine elements of action in an organisation over several years of existence. Thus, the research method is the reconstruction from the organisation's history through its written procedures. The result is that it is possible to learn the diffusion of specific design competences.³⁵³

³⁵⁰ Ibid.

³⁵¹ Coriat and Dosi (1994).

³⁵² Kogut (1992).

³⁵³ There are, however, other ways to approach empirical research. For example, we can explain in detail the exact routines that emerge for a particular experimental work group. A second approach, could be via a field study, looking for indicators of routineness. Finally, there is an approach that tries to extract evidence for routines, or other recurring patterns, via statistical analysis. Cyert and March (1963). All these approaches, their advantages and disadvantages, are discussed in Cohen *et al.* (1995).

The empirical basis of the present chapter embraces almost the entire decade of the 1920s and is based on several auditors reports. Auditors from Detroit regularly appeared in Europe to inspect operations; they checked books, management, and plants to see that American policy was followed up. The decade of the 1920s is of special relevance because it covers the formative years of the firm, and meant a significant qualitative change from other organisational forms already established in Spain; that is the introduction of the Fordist system and systematic management. Moreover, the source is particularly suitable because as the aforementioned auditors came to Europe to implement the rules of the parent company, the execution and following up of those rules is reflected in some way. Because, when the actors are men (and not machines), as was the case, the rules do not cover all possible contingencies. Therefore, individuals who do not memorise all the specific and detailed set of rules are able to re-create parts of them in many different ways.³⁵⁴

The profitability of the branch offices was closely monitored by the head office and the salary of each branch manager was dependent upon the profitability of his branch assembly plant.³⁵⁵ It is also worth mentioning that the first years in Cadiz were full of troubles and managers, for example, had stated that "probably due to the fact that there are no others industries whatsoever in this part of the country and that Cadiz is simply a small town, it is hard to obtain more efficient help."³⁵⁶ Years later however once they were already established at Barcelona, Ford management had stated that "we will never permit the office (referring to the new plant at Barcelona) to run along the same lines as it was conducted at Cadiz, we have hired plenty of employees to keep the work up to date so that none will be

³⁵⁴ Cohen *et al.* (1995). With regard to the behaviour of men and machines in the realisation of a repetitive task, Egini has established four differences. First, the rules that individuals adopt are quasi-rules. Second, 'co-ordination rules' are the rules which embody mutual relationship. Third, fully routinised activity is possible when tasks are performed by isolated individuals. And, fourth, purely routinised collective behaviour is rather difficult to realise.

³⁵⁵ This was an attempt to overcome the principal-agent problem between the company and its branch managers, by attempting more closely to align the branch managers' interests with those of the company. See O'Brien (1997).

³⁵⁶ Letter 2 May 1921. Box 7541, *FMI Archives*, Barcelona.

obliged to work overtime and the day of slovenly desks has passed with this Company.”³⁵⁷ “Co-operation is one of the best assets in Plant and we are sorry to say that we do not find as much of it as these should be in your organisation. Friction exists between shop department heads, stock departments and office, and a general meeting should be called of all departments and get them in line.”³⁵⁸ A way of interpreting this slack and the like is that these are sources of managerial utility.³⁵⁹ However, elsewhere, Williamson has argued that these cost excesses contribute negligibly to utility but are principally due to inferior organisation and maladapted operation.³⁶⁰

After the first three years of existence, the branch had showed a decided improvement in its work and record's conditions existed at the time of the previous audit. Some individual features, however, still were reflecting a need for more concentrated attention, particularly the “car and motor records”. Therefore, a more systematic follow up had to be institutionalised, planned in such a way that all of the details of office life would be scrutinised at least every thirty days by the chief clerk personally and assignments for detailed checking given from time to time to the assistant chief clerk. Consequently, the procedure would serve to “keep an eye on the progress of the work” but also to “serve to train people in office practice”.³⁶¹ The program herewith had been too random, resulting in some of the records coming in for close attention, while others were almost totally neglected from the of supervision.

³⁵⁷ Auditor's letter to Chief Clerk Barcelona, 1 June 1923, Box 7541, *FMI Archives*, Barcelona.

³⁵⁸ American auditor to Barcelona's Manager, 3 November 1923, Box 7541, *FMI Archives*, Barcelona.

³⁵⁹ Williamson (1964).

³⁶⁰ Williamson (1991) reprinted in Williamson (1996). Moreover, he states that the profit differential between two firms in the same industry using the same technology, selling to the same consumers is because one firm is working better, has superior organisational form, better internal incentives and controls and better alignment of the contractual interfaces. See Williamson (1996: 310).

³⁶¹ On-the-job training. See Kogut (1992), Nelson (1992).

In a report dated on April 1921, the American auditor had pointed out several features of disagreement in the management of the Spanish branch. For example, the chief of the traffic department was, at the same time, agent of three insurance companies. The head office concluded that the commissions they were getting should indeed have gone to the Company.³⁶²

The auditor had reported unsatisfactory conditions in almost every department of the branch. He had pointed out that an increased supervision from the direction was necessary. The Spanish firm's organisation was very simple at that time. The Company was organised around the following three main departments: the Office (Administration), Factory (Works) and Departments of Traffic and Sales. The firm's strategy was clearly focused on the development of a consistent sales network. It had opened dealership throughout Spain. Moreover, those dealers were instructed by the branch. It had also organised an intensive advertising campaign. It is important to mention that the Ford car had been the first real popular car introduced in Spain. Therefore the advertisement techniques utilised by the company represented a new medium as compared with that carried out by other

³⁶² The American auditor was thus asking the Spanish Company to explain the advantages obtained from such a situation. The Spanish direction responded accordingly: "With reference to our Traffic Department head being agent for three Insurance companies, this information is not entirely correct, as he was agent for only one company, which was the Sea Insurance Company. We found on effecting shipments by boat to dealers we were having delays of two or three days in receiving the insurance policies, and though we made several changes in concerns in Cadiz we were unable to send shipping documents together with policies to our dealers immediately. The whole question in our mind was the service; besides this, we were able to get better rates. There is now a representative of a new concern in Cadiz who is able to still improve on the rates as well as being able to insure the cars against individual damage, whereas up to present we have only been able to obtain insurance for total loss. We have tried this new insurance firm out on two occasions and they have been able to deliver us insurance policies immediately. It has therefore, not been necessary to make use of this Sea Insurance Company. This employee does not handle any outside insurance business and we are able to prove that all commissions were being turned into the Company. Apparently in other cases to which (...) refers, he interpreted the fact that we are able to obtain a discount on the insurance of the material which we had in the two buildings as to the official tariff rates quoted. This was simply due to the fact that our Insurance amounts to PTAs. 3.800.000 which is a sufficient amount to induce the different Insurance Companies to give us a better rate than on smaller Insurance which they had with other local concerns." Letter from Manager of Ford Motor Company S.A.E. to Byrns, Ford Motor Company England, 2 May 1921, Box 7541, *FMI Archives*, Barcelona.

automobile traders. One of the ways to distribute units across the territory was through a parade of fifty vehicles. In addition, it was a way to advertise the cars.

Ford's assembly and sales organisation allowed it to control the inventories. In effect, Ford set up an elaborate inventory control system, the first step of which was a requirement that dealers specify the number of cars they were ordering for each month of the coming year. The order could be modified with one month's notice and formed the basis for the company's monthly production schedules.³⁶³ In Spain, the number of dealers had stabilised around 250. For example, there were 240 dealers in May 1926 compared to 255 of the previous year. Dealer networks was organised as follows: there were 10 to 11 zones worked by the different dealers - 231 dealers and 180 services points- under the control of the Barcelona office, divided into eleven zones, each one under one sales dealer. With regards to the sales organisation, it went as follows: wholesale manager, chief roadman, eleven zone roadmen, head of tractor department, two tractor roadmen, head of truck department, two tractor roadmen, Lincoln department head, two Lincoln roadmen, one service roadman. Procedures consisted in dealers being visited approximately each six weeks. And, as a general rule, meetings with salesmen were held each month.³⁶⁴

Table 4-1. Evolution of the no. of dealers

<i>Year</i>	<i>no. of dealers</i>
1921	213
...	...
1925	255
1926	240
1927	249

Source: *FMI Archives*, Barcelona

³⁶³ O'Brien (1997).

³⁶⁴ Letter from Manager of FMC S.A.E. to Byrns, FMC England, 2 May 1921. Box 7541, *FMI Archives*, Barcelona.

They had realised that there was considerable room for improvement in each one of the departments and with a view to obtaining this they had institutionalised meetings of the office employees every evening for over two months, in order that they could understand the system. Employees were also transferred at different times to different jobs. Therefore, according to the head office, "simply by constant work and education we were able to get some improvement in each department."³⁶⁵

Stigler was one of the first to emphasise that information is costly and that it has consequences for decision-making.³⁶⁶ Economic decision-makers will generally not choose to acquire all the information available, moreover, they may not be able to process all the information to which they have access.³⁶⁷ As a result, business people typically have to make decisions on the basis of incomplete information. Management therefore emerges as an important activity. The functions of management are visible at many different levels of business enterprise.³⁶⁸ There is an isomorphism between the process of making decisions at the level of hiring employees, managing subordinate business units, and deciding upon the extent and financing of the firm as a whole. The recognition of this common ground has sparked interest in the development of management tools and in the creation of a body of economic theory useful for thinking about this development.³⁶⁹

The relationship with employees has developed interesting ramifications when it is costly for the employee's manager to know how well the employee's tasks have been executed and how diligently the employee's responsibilities have been executed. Any owner or manager (principal) faces a problem of motivating their

³⁶⁵ Ibid.

³⁶⁶ Stigler (1968).

³⁶⁷ Herbert Simon (1955).

³⁶⁸ Pollard (1965).

³⁶⁹ Raff and Temin (1991).

employees or agents.³⁷⁰ This problem is most intense when uncertainty is high, monitoring is expensive, and observable outcomes are delayed. It is a function of management to design systems that are appropriate to the particular structure of costs and incentives faced by the various parties engaged in production.³⁷¹

This adds additional dimensions to the decision-making process, and not only to the relationship between owner/managers and employees, but the relationship with groups when firms expand vertically and horizontally.³⁷² The common form of organisation appropriate to simpler organisations was strictly functional. There was a division responsible for engineering, manufacturing, sales and finance. So long as the shareholders or top managers grasped all the major details of the business and the operating circumstances, it was possible for them to assess directly how well all the employees were doing their jobs. Once operations expanded, grew and diversified, this ceased to be possible. Not very much information was available to top managers and shareholders. The information they could easily obtain had too little structure to be very useful.³⁷³

3. Routines, procedures and rules

Ford during the 1920s still was managing its foreign subsidiaries as equals to its US branches, although problems derived from the long intervening distance, the culture and the newness of these concerns had emerged out and were continuously present.³⁷⁴ A way to overcome these managerial problems was through the

³⁷⁰ For principal/agent relationship, see chapter 1.

³⁷¹ Raff and Temin (1991).

³⁷² See Chapter Two and the frustrated attempts to integrate and consolidate a group of automobile manufacturing in Spain during the first quarter of the century.

³⁷³ A step forward in the organisation of complex business enterprises came with the reorganisation of GM during the 1920s. It restructured operations and information flows so that the firm became rightly divisionalised. That is, it became a collection of divisions, each with its own products, organised internally long functional lines. See Raff and Temin (1991). See also Chandler (1962).

³⁷⁴ The concept of corporate culture is attractive because it provides some language for speaking about the 'personalities' of organisations. These personalities are fairly stable over time and independent of their actual members. Cremer (1993). Moreover, it could be stated that the weight of the past is clearly determinant David (1985) Culture may be define as a system of

establishment of several procedures and routines by the head office.³⁷⁵ One can identify five representations of the action pattern (routine) set up in an organisation.³⁷⁶ First, in the memories of the individual actors for their respective roles in the overall patterns. Second, by means of locally shared language, with special significance given to terms used to trigger or carry out the actions. Third, via physical artefacts (tools, spatial arrangements, written codes of standard operating procedures, etc.). Fourth, via organisational practices (archives, rotations of personnel, maintenance of working examples,...). And finally, by means of globally shared language forms (oral codes, pledges, etc.). However, the cognitive approach is not enough to categorise the routines, it is necessary to include the contextual aspects of routines; that is, the physical environment and the motivational context. Thus, the effectiveness of a routine is not measured by what is achieved in principal but what is achieved in practice.³⁷⁷

In the practice of running the business, the head office had established procedures regarding every aspect of the business. For example, referring to the General Stores, the FMC had stated: "You will discontinue maintaining General Stores cards at once. General Stores requisitions should be priced at the last cost available, as shown by the records of the Purchasing department, except in the cases where the last price is at so great a variation from the previous cost prices that too great a difference would result; in which case you should arrive at a fair

values, ideas, and beliefs which constitute a mental apparatus for grasping reality. Business culture therefore is that set of limiting and organisation concepts that determine what is real or rational for management, principles that are often tacit or unconscious. See Lipartito (1995). Furthermore, the role of tacit knowledge is relevant because of the learning processes that differ from firm to firm and from period to period.

³⁷⁵ Coriat and Dosi (1995). See also Winter (1995); Hodgson (1994/95); for an extensive discussion on routines, see Cohen *et al.* (1995). They define three properties of 'routines': (i) Recurring, that is actions taken by the same actors at different times or same actions by different actors (i.e. approving a purchase order); (ii) Selectable (subject to forces that would make them more or less likely to occur (i.e. setting the R&D budget at 6% of total expenditure); and (iii) Set in an organisational context. Dosi *et al.* (1995) have added (iv) their context dependence and (v) their invariance *vis-a-vis* detailed informational change, once the context has been given.

³⁷⁶ Cohen *et al.* (1995).

³⁷⁷ Cohen *et al.* (1995: 662).

average between the cost of material still on hand and the last purchase price. If the General Store material is received from the Home Plant and not purchased locally, the Purchasing Department should maintain price cards for such material.”³⁷⁸

To recapitulate, the paragraphs above have been concerned with the formative years of the company. It has been stated how the Spanish company, although an independent legal entity, from the managerial standpoint was a mere appendage of the parent company.³⁷⁹ However, managerial problems of control, monitoring and supervision had emerged from the very beginning. Moreover, the location transfer in 1923 meant a disruption to the process of settlement. However, this decision in the long run emerged as a positive one: it was convenient to be situated in Barcelona’s industrial suburbs.

The impact of multinational enterprises abroad entails a transfer of an entire business package that includes products, processes, experience, reputation, knowledge, marketing know-how, trade marks, technological research and development background, information managerial expertise, and so on.³⁸⁰ As has been stated in the previous chapters, modern management techniques were being introduced slowly in Spain. Moreover, the automobile industry was, at that time, still formed by small family firms. The establishment of the Ford branch meant, for the first time, the introduction of Fordism in Spain. First, this was clearly reflected through the information flow between the head office and the branch. Secondly, the establishment of a dealer network across Spain and the intensive use of advertisement and promotion techniques meant a new dimension of motor business in Spain.³⁸¹

³⁷⁸ June 30 1921, Box 7541, *FMI Archives*, Barcelona.

³⁷⁹ *Ibid.*

³⁸⁰ Wilkins (1994).

³⁸¹ The concept of intangible assets, that is more the firm’s market value rather than plant and equipment, and those specific assets, those whose value is much greater in a particular use or relationship that in the next alternative will be important as one of the driving forces to explain the company’s several changes in its major shareholders as well as in its production.

According to Yates, control through communication operates on at least three different levels. First, communication flows downwards from all levels of management conveyed information, procedures, rules, and instructions to control and co-ordinate processes and individuals at lower levels.³⁸² Second, upward flows of communication drew data and analyses up the hierarchy to serve as the basis for managerial control of finances, facilities, materials, and processes. Information as progressively summarised and analysed as it proceeded up to hierarchy, served at each level as the basis for monitoring and evaluating individuals and operations at lower levels. As a by-product of these vertical flows, lateral flows of communication developed at middle levels to co-ordinate and document interactions. In the early twentieth century a third, less direct form of control through communication emerged. Systematic management was built up on the assumption that individuals were less important than the systems they functioned within. Negative reactions to this depersonalisation led to the development of such communications tools as the in-house magazine, which attempted to humanise the workplace for workers and managers, and manager meetings, which were intended to gain the goodwill and harness the efforts of lower -and middle- level managers.³⁸³

Although the Spanish plant at Cadiz was still in its infant stage, however, monitoring from the headoffice was intensive though ineffective. Instructions had been given as to the proper manner in which the plant had to keep accurate record of both assembly and service stock. And, for the Spanish managers' information and guidance, the head office was repeating these instructions, as well as seeing that they were being followed up afterwards.³⁸⁴

³⁸² The creation of rules helps to reduce transaction costs. Rules are necessary to assist in the monitoring of performance to prevent shirking, see Alchian and Demetz (1972), to help align incentives because of the agency problem, to structure information flows to facilitate decision making, and to provide supervision. See also Niman (1994: 366).

³⁸³ Yates (1989).

³⁸⁴ For example, the branch had received instructions regarding general correspondence because it was not being filed accordingly; it had to be filed alphabetically under surname and under the first letter of the Christian name in a subdivision under the alphabetical letter. Triplicate copies

Instructions were issued to all office employees that it was expected of them to have all their records and all papers not necessary to the conduct of the business to be cleared off their desks at once. They were also instructed to handle the routine of the day's business promptly and not allow the daily work to accumulate and "to put off until tomorrow what should and must be done today. When vacation time is coming up, it will not be possible for any employee to take a vacation unless his work is up to date."³⁸⁵

Moreover, as soon as the paper work was soured out, employees were sent to the workshop, as there was no need for any more employees in the office. The chief clerk of Ford Spain and the auditor were visiting all the desks in order to give each employee an opportunity to get his work done and impress upon each one that it had to be kept that way at all times in the future, that they were not just cleaning up for a holiday. "We will never permit the office to run along the same lines as it was conducted at Cadiz, we have now hired plenty of employees to keep the work up to date so that none will be obliged to work overtime and the day of slovenly kept desks has passed with this company."³⁸⁶

The increasing amount of information flowing up and down firms created two types of problem in dissemination. First, information overload for management because the data had to be recorded, analysed, and passed up the hierarchy. Fewer and fewer people were getting more and more information at the top levels of

had to be made of all letters 'held for answer', and a third copy placed in the '1 to 31' index showing the date of the original letter. The head office correspondence had to be filed according to the department, in a separate drawer from the general correspondence, and with the current month's correspondence always at the front of the drawer. Folders could be used for each of the departments for any number of months until the folder became full, with the name of the month marked on the outside of folder. All correspondence had to be transferred at close of the fiscal year to transfer file cases, except correspondence relating to unsettled claims. It was also suggested that a stand to be built in the office to hold summaries and binders and other records, with the exception of important records such as ledgers, check registers, cash received, etc. so that the employees could clear the tops of their desks at the close of the day's business so as to have the office present a neat appearance. See Auditor's Report, October 1921, Box 7541, *FMI Archives*, Barcelona.

³⁸⁵ Auditor's Report, October 1921, Box 7541, *FMI Archives*, Barcelona.

³⁸⁶ *Ibid.*

hierarchy. Ways of presenting information for easier understanding were needed. Secondly, downward flows of information such as getting notices of policies and procedures were not reaching increasing numbers of people at the bottom levels of the hierarchy. Techniques of presentation and duplicating methods and devices were adopted to address these two problems.³⁸⁷

Considering the management and administration of the Spanish branch during its initial years, the following procedures and policy applications have to be pointed out.

All purchases of small amounts made with company cash were charged directly to the individual's accounts on "Impress Summary". For all disbursements made through the Impress for which there were receipts, it was necessary that these receipts be attached to the Impress Vouchers representing the expenditures and not filed together with the general correspondence. It was also important that all automobiles, parts and repair orders to be accounted for, and it had to be the clerk's duty handling this Register to check all outstanding orders at least twice weekly and report their state to the chief clerk. As regards the head office account, it had to be immediately reconciled to the receipts of the head office statement. In this matter, the auditor was suggesting greater care in the distribution and that small transactions having an individual cost value of less than 100 PTAs or having a probable effective life of one year or less, had to be charged to General Stores and when requisitioned out be charged to the proper expense accounts. Also better judgement had to be used in ordering stationery from the head office, as it was noted that "twenty thousand automobile orders were ordered at one time," and also there had been an over supply of Purchase Orders. Economical distribution had to be made of stationery throughout the office so that desks were not filled with stationery which would become soiled and used for scrap paper, etc.

³⁸⁷ Yates (1991:128).

Furthermore, requisitions had to be numbered in advance when given in to the general store's clerk and all requisitions accounted for. It was also suggested that a requisition be used for each department such as body, paint, etc. and be held in the general storeroom until such time as all lines were filled, then turn the same over to the General Office, etc. At Cadiz there had been much laxness in handling credits without positive information, before credit was passed, referring to crediting dealers for shortages on parts shipments. As a consequence, accordingly, the head office had instructed an accurate check of all parts orders before being shipped to eliminate claims. It would eliminate the shipping of material which had never been ordered, as was noted from the quantities of dealers' returns.

The billing of parts orders while awaiting remittances were discounted at once. Upon receipt of dealers order unaccompanied by cash, the dealer was advised of the approximate necessary to cover the shipment awaiting this remittance before writing the order, unless there were instructions to ship against documents, in which case the order could be put through. Dealers were often changing their minds after placing orders and money would be lost by packing and unpacking consignments repeatedly. It was suggested, then, that parts orders be written up as sent in by dealers and in the event of being unable to ship all the items requested a rubber stamp would be used on the invoices with the following: "items not shipped are temporarily out of stock, reorder with next monthly order". Parts orders should not be forwarded until the pink copy came back from stock department and then only extend such items as had been shipped and parts orders will present a neater appearance. According to the head office, this work was considered very important as it furnished them with the basis on which to handle claims for shortages and it was necessary to have a reliable employee doing this work.

Sales Records were only recorded on one numbered form, form 116. This form carried all the information necessary to make up the Branch Manager's Report and saved much time in the Sales Department. This Report showed the number of cars shipped to each dealer since the beginning of the fiscal year or since the signing of a contract, if within the year.

The Spanish plant did not have gas and oil tanks and was receiving its supply in drums, which were charged to the general stores account. The plant was drawing three or four drums of gas at a time and a barrel of oil from general stores, charging them to the miscellaneous assembly expense account and all gas and oil sold on automobile orders was credited to miscellaneous assembly expense. A record of all gas and oil used for commercial purposes was also kept, such as demonstration vehicles, etc. and at the end of each month a journal voucher was made of miscellaneous commercial expense and credited miscellaneous assembly expense with the amount. Finally, it was suggested that three or four drums of gas and one of oil at a time were adequate, as corresponding to present production. But if production increased, these quantities could be increased also.

The new retail selling price of service stock had to be established as soon as possible as the present high prices were driving dealers and customers to purchase spurious parts. The Spanish plant was using Head Office catalogue prices of August 1, 1920 as the basis for computing selling prices. But to arrive at a proper selling price, they had to determine their laid down costs, to which 100% was added. By taking a number of different goods they were able to determine what coefficient to multiply US catalogue prices by so as to insure their margin of profit, thereby making it unnecessary to figure the profit on each item separately. Computations were made on a basis of 8 pesetas to the dollar. Once the new prices were already established and they had started billing dealers, they could then put into effect the system of computing cost summaries of sales at the end of the month instead of costing each item separately, as was current at that time.

The head office's auditor noted that the complete statistics were not been filled in on the Monthly Statement and called local managers' attention to sections such as "number of dealers", "total pay and salary rolls" and "average cost per car". "Labour expense" had not been shown in the "to date" columns. "Also when Roadmen or any other employees were given equipment or assets for Company use, such as a typewriter, tires, spare parts for cars used to travel professionally, such that such employees be charged under Sundry Dr account in the Particulars

Column by memo parts order for these items, and then a complete record will be maintained as to where the Company assets are to be found, and will also furnish evidence when settling with employees leaving the Company as to the exact level of debt.”³⁸⁸

It is worth mentioning in more general terms that according to the head office a chief inspector was badly needed. He should cover all departments in the plant and report his findings to the manager. The assembly of the car could be greatly improved by having a competent employee looking over the car in the process of assembly and through an examination once it came off the line. The quality of the car should not be sacrificed for speed, doors should be made to close properly, fenders lined up, scratches repaired, seeing that adjustments are made so that the car was running properly before turning it over to the dealer. The car should be in such shape when leaving the branch that the dealer could immediately turn it over to a customer.

Routines in a broader sense³⁸⁹ fall into two categories. First, routines in a narrow sense: complex, highly automatic behaviours that ‘function as a unit and involve high levels of information processing that is largely repetitive. Examples might be that of a retail clerk accepting payment, recording the sale, bagging purchase, etc. Secondly, ‘rules of thumb’ routines: quantitative, relatively simple decision rules that are consciously invoked and require low levels of information processing. Examples might be rules of determining R& D expenditure or advertising expenditure in relation to sales, etc.’³⁹⁰

To conclude, two years after the establishment of Ford at Cadiz, there were still managerial problems as reported from the head office. For example, as regarded Service and Roadmen's cars (not shop trucks), they should be sold at least every 90

³⁸⁸ Auditor's Report, October 1921, Box 7541, *FMI Archives*, Barcelona.

³⁸⁹ Considered as a “quasi genetic trait”, i.e., any trait that remains approximately constant in the organisation over a period long enough for significant selective feedback to accumulate at a level where “outcomes “ are tested by an environment. Cohen *et al.* (1995).

³⁹⁰ Cohen *et al.* (1995: 663).

days, though one car was recorded having been sold at a great loss after nineteen months' service.³⁹¹

Secondly, as regards Salary and Pay Roll Records, the new salary and wage schedule effective from September 1, 1922 had to be put into effect at once. Indeed, these schedules should always be put into effect immediately upon receipt, as it saved much clerical labour in computing back pay, creating a better feeling among the employees. Accordingly the rule that if an employee was compelled to work overtime one day he should work much less on the succeeding day hardly improved the efficiency of the Plant. Therefore, they had to be paid for all overtime worked, if it was necessary, after first being approved by the manager to do the work

Finally, it was concluded that an occasional checking over of the work was considered to be sufficient to insure proper handling and it had not be carried to the extremes of having a record or form ratified by two or more persons. To sum up, the auditors found the office top-heavy at the time of their arrival on account of unnecessary detail which had not been eliminated. It was not allowed to creep in again in the future and suggestion was made that no more work be done than was actually called for by the accounting instructions.

4. Inside the firm. Branch implementation and adaptation of head office policies

Multinational enterprise must arise in host countries due to the fact that it possesses some special advantage such as superior technology or lower costs due

³⁹¹ Item JV58 shows that a car was purchased from a dealer in Northern Spain after travelling that part of the country for about ten days. The dealer's price of 7,491 pesetas and 773 pesetas in delivery charges were paid. The car was then sold to another dealer in the same section for 7,491 peseta at the dealer's price, and no money was taken for delivery charges from Cadiz, but the difference of 773 PTAs was charged to travelling expense. This was quite clearly not a Travelling expense and we believe delivery charges should have been imposed. Delays did not encourage dealer co-operation. See Auditor's Report, November 1922, Box 7541, *FMI Archives*, Barcelona.

to economies of scale that compensate other added costs of establishing itself in a foreign country such as, higher costs of stationary personnel abroad, language barriers, customs, and finding oneself outside local business and government networks. Accordingly, multinational enterprise may bring inherent advantages to the host countries.³⁹²

Before the 1960s, there was no established theory of the multinational enterprise (MNE) or of foreign direct investment (FDI).³⁹³ The 1960s saw two remarkable contributions to the theory of the MNE: the contribution of Stephen Hymer and the product cycle theory of Raymond Vernon. When Hymer first began studying direct foreign investment, three main approaches to the phenomenon dominated the literature. The first approach was that international capital movements in and out of countries occur in response to the different interest rates prevailing in those countries.³⁹⁴ The second explanation argued that there were risk premiums in international equity markets designed to cover uncertainty regarding the exchange risk on shares bought in weak-currency countries.³⁹⁵ The third explanation held that direct foreign investment resulted from both the explanation of a firm's market and its use of internal funds.³⁹⁶ Stephen Hymer expressed his dissatisfaction with the theory of portfolio capital transfer to explain the foreign value-added activities of firms.³⁹⁷ He identified three dissatisfactions. The first was that market imperfections altered the behavioural parameters affecting the conduct and performance of firms and their strategy in servicing foreign markets. Secondly, Hymer asserted that FDI involved the transfer of a package of resources and not just finance capital. Thus, firms were motivated to produce abroad through the expectation of earning an economic rent on the totality of their resources, including

³⁹² Hymer (1976), Kindleberger (1969, 1984), Dunning (1993).

³⁹³ With respect to attempts to explain the foreign activities of firms prior the 1960s, see, for example: Iversen (1935); Southard (1931); Dunning (1958). Reprinted by Arno Press (1976); Penrose (1956, 1959)

³⁹⁴ Ohlin (1933).

³⁹⁵ Aliber (1970).

³⁹⁶ Kindleberger (1973).

³⁹⁷ Stephen Hymer (1960).

the way in which they were organised. The third characteristic of FDI was that it involved no change in the ownership of resources or rights transferred.³⁹⁸

In a classic article published in 1966, Vernon used a micro-economic concept -the product cycle- to help explain a macro-economic phenomenon. He pointed out that the propensity of countries to engage in trade depends on their capability to upgrade their assets (natural endowments and human resources) or to create new ones (technological capacity).³⁹⁹ The approach of Vernon to explain foreign production was an extension of the neo-classical theory of the spatial distribution of factor endowments to embrace intermediate products. Vernon first argued that the competitive or ownership advantages of US firms was determined by the structure and pattern of US factor endowments and markets. He then switched his unit of analysis to the firm and particularly the location of its production. Initially, the value-adding activities based on the firm's property assets were produced for the home market in the home country. At a later stage of the product cycle, the product was exported to other countries most similar in demand patterns and supply capabilities. Gradually, as the product became standardised or mature, the competitive advantages changed from those to do with the uniqueness of product *per se*, to the ability of firms to minimise the costs of value-adding activities. As demand becomes more price elastic, as labour costs increase and foreign markets expand, activities in a foreign location increase. The product cycle model did not explain, nor propose to explain, resource based, efficiency seeking or strategic assets acquiring FDI. Nevertheless this was the first dynamic interpretation of the relationship between , international trade and foreign production.

Finally, by the mid 1970s with the appearance of several attempts to refine and test the theories of Hymer and Vernon, both theories were beginning to converge, although their focus of interests remained very different. There was the industrial organisation approach, which identified the ownership-specific advantages of

³⁹⁸ For Hymer's collected papers, see Cohen *et al.* (1979).

³⁹⁹ Vernon (1966).

MNEs. This approach recognised that the way in which assets were created, acquired and organised was an advantage in its own right.⁴⁰⁰ There was also the trade/location approach that had begun to acknowledge the role of market imperfections in affecting the way in which firms chose to organise their cross-border activities. The elements of modern theories of the MNEs may be summarised within the structure of an eclectic framework as set out by Dunning.⁴⁰¹

4.1. Under the influence of Detroit (1920-1929)

By way of recapitulation, the present and previous chapters have attempted to look 'inside the firm' by focusing on the information flows between the head office and the branch in the host country. The establishment of procedures, rules and routines formulated to cope with problems of information and co-ordination have been stressed. However, those routines and procedures have to be analysed over a long run period. We have covered the whole decade of the 1920s, accordingly. Thus, this final section stressed the implementation and adaptation of head office policies by the branch at the end of the decade.

As soon as the new Barcelona plant had established itself in 1923, the head office suggested several procedures. For example, it had suggested putting a competent clerk to work taking an inventory and bringing all equipment cards up to date and clearing away all the material not located. The installation there would be ran the same as at Cadiz, that is there should not be labour added while in a rented building, but merely the initial cost of equipment. Ford executives from Detroit had clearly "advised the employees that the General Letter binder is open to all to read and for their instruction, as well as the Accounting Instructions, and no excuses will be accepted where they plead ignorance of instructions. Employees will never developed if you continue to hand-feed them, they must have initiative enough to hunt for information." In this sense, the Stationery clerk had to call upon each employee each Monday morning and take a list of stationery they would need for

⁴⁰⁰ Caves (1971) and Caves (1974).

⁴⁰¹ Dunning (1993).

the whole week. "This will prevent dozens of trips during the week and will not permit employees to go to the stationery room and help themselves."

The branch had to report daily to the assembly department at the head office how many automobiles had been assembled that day. Auditor nevertheless came regularly to foreign branches (twice a year) although instructions and suggestions were not always followed. Moreover, one or two visits were not sufficient for the implementation of the head office's policies. Furthermore, managers were English and the language used was always English. It has to be mentioned, however, that from 1926 Spanish personnel came to occupy managers positions.⁴⁰² A second procedure seemed to be more efficient. I am referring to the standard regular reports done by the subsidiary and sent to the head office. These served as information channels and routinised the procedures.

Table 4-2. Summary of standardised reports between branches and head offices

<i>Type of Report</i>	<i>Type of Report</i>
<i>Summary of sales</i>	<i>Long form record of company cars</i>
<i>Substitute auto record car</i>	<i>Departmental distribution of labour</i>
<i>Report of persons employed</i>	<i>Investment ledger card</i>
<i>Inspector's tag</i>	<i>Tool shortage report</i>
<i>Auto release</i>	<i>Daily report of sales orders issue</i>
<i>Termination service</i>	<i>Dealers' tractor discount record</i>
<i>Tool kit charge card</i>	<i>Record of receipts and disbursement</i>
<i>Semi-monthly report on purchase</i>	<i>Weekly check of orders outstanding with more than seven days</i>
<i>Recommendation of change in rate</i>	<i>Motor checking sheet</i>
<i>Equipment inventory</i>	<i>Checking sheet</i>
<i>Organisation chart</i>	

Source: *FMI archives*, Barcelona.

⁴⁰² Auditor's Report, 7 December 1927, Box 7541, *FMI Archives*, Barcelona.

What follows next is a summary of the most relevant actions adopted by the branch as regards head office's policy applications.

The ledger was in good condition. In the past there existed the practice of inscribing transactions to the ledger and then again to customer's statements direct from sales orders, etc. at intervals throughout the month. These amounted to duplicate posting and auditors suggested that statements had to be compiled by transcribing thereon the items already posted to individual accounts.

As regards the 'Journal', 1,600 accrued pesetas monthly by way of investment interest. This was merely an arbitrary figure representing approximately 1/6 of the estimated amount of interest payable for the period ending December 31st. The reserve for taxes was set up at 2,500 PTAs monthly and no schedule was available to support the figure, but analysis showed it to be the monthly equivalent of all the numerous taxes paid. However, many transactions were too small to warrant journal entry, such as taxes on signs, etc. The auditors then suggested that the small item had to be charged directly to expense at the time of payment and the entries confined to transactions of fair importance which could be incorporated into a comprehensive schedule from which figures could also be obtained in support of the monthly entries.

In the auditor's opinion, insurance coverage was adequate and the whole subject received an intelligent handling. As a matter of information, all salary employees of a certain category had, according to law, to be insured against accidental death and disability. Individual policies were carried since the premiums varied according to the salaries. Auditors noted that while a price reduction was officially effective from February 1st, a circular letter was sent to all dealers on January 10 advising them of the impending revision. Consequently, dealers whose orders were shipped during this intervening period had for the most part demanded and received credits for the differences involved. It was not customary to announce proposed price changes to dealers in advance of the actual effective date and then reductions were

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sufficient to warrant protection to the dealer, which was accomplished by deferring the effective date of release to the public for 30 days or so.

The bulk of returned sales issued during the last six months were for the purpose of cancelling pending drafts preparatory to redrawing on other dealers. Price reductions were effective on January 7, March 25 and March 31 of 1925. These changes occasioned numerous returned sales to effect the customary reductions in draft actually pending on the dates the changes became effective. In addition to regular rebates allowed on pending items, the auditors observed a considerable number of returned sales covering rebates on cars, trucks and tractors for which the dealers had already paid on the dates the price reductions became effective. In other words, the idea was to facilitate the movement of the touring chassis and when a dealer ordered a service motor he was induced to take a chassis into consideration whilst allowing him credit for the frame which, aside from the motor itself, constituted the principal item. The frame and other parts of the chassis became part of the dealer's stock. A review of the returned sales during the previous year prompted the view that a rather liberal policy was followed with regard to credits, particularly policy adjustments. In fact it looked as if the dealer organisation had grown to expect concessions from them in the way of relief from surplus stocks, rebates on account or price reduction, allowance of various and sundry claims, etc. in return for accepting the delivery of cars.

Reviewed payroll is recorded in considerable detail with particular regard to routine and forms. Work received very satisfactory attention throughout. "Under the five day week, the plan as understood at this Plant was to divide the men into three groups, according to relative merit and grant an immediate increase to the most efficient employees". A group, including approximately 30% of the men on the roll were given an increase of 25 centimes per hour and other increases under the five day plan were granted in addition.

Regarding Travelling Expenses Reports, travelling representatives were allowed a maximum of an average of 25 PTAs. a day to cover room and meals. A record was

kept and if an individual's expenses for a month exceeded an average of 25 PTAs. a day for the period, the excess was deducted from the final report of the month. The reports of many travelling representatives, although distributing the daily expenses over room and three meals arrived at the prescribed maximum of 25 PTAs a day with surprising accuracy and regularity. This 25 PTAs was really a *per diem* rate. Departments heads were allowed a maximum average of 30 PTAs a day. The manager considered these sums adequate and the method described the best for satisfactory handling of the situation.

General Stores Stock was also in good condition according to the American auditors and records were handled in accordance with instructions. There were on hand about 450 Ford service books in Spanish remaining from a shipment of 1200 originally from Detroit. Owing to the difficulty experienced in disposing of these books to dealers, to whom arbitrary shipments had been made, arrangements were being made with a book agent to peddle the books on consignment.

As regards the General Ledger and Monthly Statement, the July 31 monthly statement was also correctly compiled and the General Ledger was in good condition throughout. In order to avoid the necessity of keeping a separate Spanish ledger, a plan was introduced whereby the Spanish equivalents of the titles on American regulation ledger sheets were inserted and the sheets bound and legalised. This arrangement complied with the law and obviated the necessity for keeping a duplicate ledger as had been the case previously.

The Branch Manager's Monthly Progress Report for July 31st showed a total of 45 dealers with no cars in stock. However, since the total of 1028 listed on the same report as cars in stock also includes units covered by pending drafts, which on July 31 numbered 994, it was found that the dealers' stock represented by cars actually paid for did not exceed 34. In other words, more than 200 dealers, in July 1927 actually had no paid for units at hand. In the case of trucks, the same calculation showed that on July 31, paid for stocks totalled approximately 268. The entire force of roadmen numbering eleven were now actively engaged in moving pending

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units to the exclusion of other duties. In addition to roadmen there were five tractor and four Lincoln representatives. At that time, in 1926 dealers totalled 249. Of this number it has to be noted that 15 had yearly estimates of six cars or less per year. Moreover, it was also noticed that the Plant had on file, or promissory notes to the value of two thousand pesetas, signed in blank, to be paid by each of the dealers. The object of the documents was to control price cutting and other violations of sales policies. For example, in case a dealer was found guilty of price cutting, the procedure was to fill out the promissory note for the required amount and present the offending dealer with the document. The promissory note for the Madrid and Barcelona dealers amounted to 5,000 pesetas. In addition, the Barcelona city dealers were each required to maintain cash deposits of 2,000 pesetas.

Finally, the following pages will show the last of the auditors report of this decade, dated on June 1928, that is the year before the reorganisation of Ford operations in Europe, when Ford Spain passed under the tutelage of Ford UK rather than Ford US.⁴⁰³ The Spanish Plant occasionally received cheque or drafts on banks outside of Barcelona. In such cases it was necessary to deliver the cheque or draft to a Barcelona bank for collection, no entry being made until returns were credited to the account by the bank, and the only record of such cheques being a receipt on carbon copy of instructing letter transmitted to the bank. It was then suggested such checks or drafts be credited to the dealer's account as "Checks Deposited for Collection" when delivered to the bank for collection, such an account to be credited when collection was finally been made.⁴⁰⁴

Table 4-3. Bank Accounts

<i>Bank</i>	<i>Currency</i>	<i>Rate of interest</i>	<i>Interest</i>
<i>Royal Bank of Canada</i>	<i>PTAs.</i>	<i>2,5 %</i>	<i>quarterly</i>
<i>International Banking Co.</i>	<i>PTAs. (current)</i>	<i>2,5 %</i>	<i>monthly</i>
<i>International Banking Co.</i>	<i>PTAs. (customs)</i>	<i>2,5 %</i>	<i>quarterly</i>
<i>Banco Hispano Americano</i>	<i>PTAs.</i>	<i>2,5 %</i>	<i>semi-annually</i>

Source: *FMI Archives*, Barcelona

⁴⁰³ Auditor's Report, 26 June 1928, Box 7541, *FMI Archives*, Barcelona.

⁴⁰⁴ *Ibid.*

The Cheque Register. It was the practice to use both Royal Bank of Canada and Banco Hispano Americano for checking accounts for the payment of bills and current expenses. But it was suggested, unless otherwise instructed by Detroit, that ordinary checks be drawn only on one account, funds to be transferred from other accounts when necessary. Also, the Account Receivable Form in use for the dealer's statement was printed with a stub to be detached and returned by the dealer certifying the correctness of the statement. This had the effect of prompting a verification letter monthly. It was then suggested that this form be treated as a standard form when additional supplies were ordered, and that stubs be detached and not sent to dealers in the future, general verification of accounts receivable to be reserved for regular audits. All suggested for the future that any such arrangements be left entirely to the handling of the dealers themselves, particularly the details of collection of the numerous and small contributions, and the payment in full be required for all cars previously delivered.

As regards the Sales Record, the Plant had no Detroit authority for dollar prices at which Model A cars were being sold to dealers in Portugal. Portugal retail prices in escudos were established in accordance with head office's cable received January 6, 1928. However, the dollar prices charged to dealers were established without the Detroit authority, by the process of working back from the retail price. The prices in effect were those illustrated in a computation sent to Detroit Sales Department with Assistant Manager's letter of January 12, 1928. In this computation, the amount take up with duty and handling expenses which the dealer would have to pay of a total amount of 3,875 escudos was the same as had been used in a previous computation in arriving at the retail prices recommended. Those retail prices were increased about 7 per cent by Detroit "to assure you receiving full

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return on duties paid", although this Company paid no such duties; it was also stated in that cable, in connection with prices for Spain, "allowing dealers 20 and 22% discount on retail including duty." However in recalculating the prices in accordance with Detroit's cable, received January 6, this company merely increased the selling price to the dealer, still not including any amount representing the dealer's 20% on duty and expense.

The prices which were charged to dealers in Portugal had allowed them a total profit of less than 20 per cent (18 per cent on the Phaeton) calculated on the basis of 20 escudos to the dollar (the rate used in the original computation), whereas the actual rate had fluctuated as much as 26 to the dollar, in which case the dealer made correspondingly less profit. On the basis of 22 escudos to the dollar, which was the rate used by the Barcelona plant in its March 27 computations, and on the basis of the information the plant had as to the actual duty into Portugal, the dealer's profit on the Phaeton was only 12.05 per cent of the listed price. It was eventually discovered that those original computations did not provide for the dealer's profit on duty, so new computations were made and sent to Detroit, with a letter of the Wholesale Manager dated March 28, which was mailed with a letter of the Manager dated March 29 to the Detroit Sales Department. In those computations, the dollar stood at a different rate as in the original computations, no change in retail price being recommended, however.

The Model A selling prices to dealers outside Spain had also not been approved by Detroit and had not been in accordance with the usual calculatory methods. In this case, the computation of the net price to the dealer was made by deducting the amount of the duty from the Spanish listed price and then deducting 20 per cent from the remainder, instead of deducting the duty amount from the net price to Spanish dealers, resulting in overcharging on such sales by 20 per cent of the amount. A comparison of the net prices to dealers which were in use, and the correct prices, is shown below (in figure 4-4). It happened that, just as this matter was being investigated, the plant received instructions explaining the proper

method of making these computations, and the matter was thought to have been properly established for the future.

Table 4-4. Selling Prices in Portugal and other foreign countries

	<i>Portugal</i>	<i>Portugal</i>	<i>foreign countries</i>	<i>foreign countries</i>
<i>TYPE</i>	<i>Net Price Charged \$</i>	<i>Approved by Detroit</i>	<i>Net Price Charged</i>	<i>Approved by Detroit</i>
		\$	PTAs.	PTAs.
<i>Phaeton</i>	560	465	3080	2840
<i>Roadster</i>	548	460	3000	2805
<i>Coupe</i>	696	580	3756	3540
<i>Sport Coupe</i>	740	615	3996	3750
<i>Tudor</i>	696	580	3756	3540
<i>Chassis</i>	472	400	2560	2440
<i>Truck</i>	639,6	530	3471	3355

Source: FMI Archives, Barcelona.

It is evident from the comparison of prices above that the dealers outside Spain were overcharged very considerable amounts for the automobiles they had purchased prior to the establishment of the revised prices in accordance with the Detroit cable of May 26th. It was stated by the Manager that he would not considered refunding these overcharges, since his plant had incurred such heavy expenses in the past.

The Plant had established numerous special prices, however, for the purpose of meeting competition. With reference to these special prices, this plant had at that moment of time no information as to the price of competition, except an old 1926 typewritten list showing only price, who the competition is, or the quality of the parts sold by the competition. It is stated that such information was obtained when the prices were established in 1926, but the pamphlets, price list, etc. had been thrown away, and no information had been obtained since. That the matter of these special prices due to competition had not had a very close follow up was

shown by the fact that the price on part 3800-B which was at that moment 27,40 pesetas whereas the price based on the current US list price, which had been in effect at least since August 15, 1926 and computed even with recourse to the high old high coefficient of 11,75, would have been only PTAs 26,45. It was therefore the intention to change prices of Model T and TT parts to reflect reality, which would have in many cases resulted in lower prices than the prices then in effect.

The Spanish company enjoyed in effect a 20 per cent discount on motors, windshields, tops, tractor engines, tractor cylinders, and tractor cylinder assembly, instead of 25 per cent as the Detroit catalogue and Master Price List has stated. It is agreed that there was no good reason why the dealer should have been deprived of this regular profit on these items, and discounts were to be changed so they would have been the same as shown in Master Price List, in accordance with instructions which were contained in the Auditing Department letter of August 25, 1924.

4.2. Policy application during the Dagenham Period

During the decades of the thirties and forties, the Spanish subsidiary firm, now as Ford Motor Ibérica, with forty per cent of the stock capital in local hands, was dependent of the British Ford Motor Company, Ltd. The London office suggested the formation of several Committees. These were as follows:⁴⁰⁵ (a) Policy Committee: manager, assistant manager, office manager, assistant sales manager, works manager, purchase manager. Functions: consult with and advise the general manager upon policy matters relating to the administration of the company; determine and define major problems, assign appropriate problems to a Sub-committee; appoint the members of the sub-committee, receive, examine and decide upon reports submitted by sub-committees and, if all members agree, recommend a course of action; if a member of this Committee were unable to

⁴⁰⁵ Ubach to Hibberson (Office of Sir Standford Cooper, L. 8 November 1949. Policy and Management Committee. (fld FMC, Ltd. Dagenham 1950/53) Box 7534, *FMI Archives*, Barcelona.

agree, a decision would have to be taken by the manager. (b) Finance Sub-Committee: office manager, assistant manager, assistant office manager, costing, general ledger bookkeeper. Functions: prepare and approve financial forecasts; supervision of company funds; review and report on the progress towards the accomplishment of such forecasts; examination of financial statements; approve for submission price computations of Company products; review and advise upon production costs; approve for submission to general manager appropriation and disposal requests and estimated capital expenditures; review and approve year in inventory, and adjustments thereto. (c) Production Activities Sub-Committee: works manager, purchase manager, stock superintendent, asst office manager, asst sales manager, parts inspector, stock control specialist. Functions: Scheduling of production of units; reviewing procurement of locally purchased assembly and service material; supervise inspection activities with regard to quality; review and report on proposed Plant alterations; report on the advisability of the disposing of discarded equipment; approve repairs on plant equipment of unusual nature; examine and approve requests from the plant superintendent for the hiring of additional help; examine and submit to general manager recommendations for appointments and promotions of key men; review and approve suggestions for the social welfare and safety of employees; check upon fulfilment of Government regulations pertaining to Labour. (c) Commercial activities Sub-Committee: asst sales manager, asst office manager, service dept head, costing, advertising, tractor department, customs head, service clerk. Functions: Prepare and approve sales forecast, of units and spare parts; analyse and report upon progress towards forecast objectives; review distribution methods; analyse products activity and suggest, where necessary, cancellation or other means of improvement; review and approve applications for new dealerships; review and approve merchandising policies for submission to Policy Committee; review advertising and sales promotion policies, programs and budgets; review and advise as to pricing policies; maintain up-to-date files of competitive prices of cars, trucks, spares tractors and implements.

4.3. The Ford International Company (1949-1954)

In 1949, the Ford International Company was formed to co-ordinate and assist all international affiliates of FMC . This company had no financial interest in any of the 36 overseas subsidiaries branches or associated companies but the interest of FMC in its operation was to continue. "This is a further step towards extending substantially the activities of all Ford Companies in the international field (...)we believe that the world as a whole must increase its capacity to produce and thus to give the people of the world more food, more clothing, better transportation, more hope and greater security (...) such a world programme will inevitably create an expanding need for trucks, tractors and transportation (...) The International Company is designed to help our affiliated enterprises in various parts of the world to improve their products, increase their distribution, keep their methods modern and meet financial supply, exchange engineering manufacturing sales and human relations problems." ⁴⁰⁶

Ford Motor Company, USA through the General Office or Central Staff of Ford International, that is "Ford International", was equipped to supply advice and services regarding manufacturing and assembly, including production, industrial and plant engineering, quality control, and tool and fixtures procurement programs; engineering, including product planning, engineering specifications and standards, and engineering consulting work; financial matters, including: foreign exchange and related problems; banking and credit policies, project and investment planning; accountancy; budget and cost controls; audit programs; and economic research and analysis of economic conditions and foreign trade trends in all countries concerned; sales and distribution, including market research, sales performance and potential and preference surveys; legislation affecting foreign trade; and, public and

⁴⁰⁶ International Organisation, 29 January 1949, Box 7534, *FMI Archives*, Barcelona. For further references to Ford International Company, see Wilkins and Hill (1964).

employee relations, including personnel planning and training programme and public relations programs, etc.⁴⁰⁷

FMC was offering to furnish through Ford International certain technical and administrative services and advice under the new relationship agreement among the subsidiaries. In order that these services proved really effective and useful to FMI, it was necessary for Ford International to be in the closest possible touch with FMI operations. To this end, FMI was requested from time to time to send a number of different types of reports to Ford International, including a Manager's Monthly Letter (MML). This MML, as in the past, had contained considerable duplication of information given in other reports. It would therefore seem desirable to change the character of the letter, with a view to establishing a channel of information more directly useful to Ford International in New York in the exercise of their advisory function under the new relationship agreement. From then on, the MML had to be prepared more in the nature of an informal report commenting on major developments and problems for which the FMI's manager felt directly responsible, than continuing to be a report containing a mass of statistical information and data more appropriately covered in the current routine reports.⁴⁰⁸

Essentially the Letter had to review six basic activities: Sales Performance, Financial Performance, Parts and Accessories Activities, Inventory Status, Economic and Political Outlook, and General. The emphasis was on the interpretation of developments in each field. What follows is a more detailed account of the way in which Ford International visualised the Letter to be set up:

- Sales Performance: reference to the products from each source of importation; interpretation of actual accomplishment as compared to forecast; discussion on the trends in FMI competitive sales ratios. Since government

⁴⁰⁷ Technical and administration services, 30 December 1949. (fld Acuerdos comite S/T) Box 7539, *FMI Archives*, Barcelona.

⁴⁰⁸ G K Howard (Office of the Vice President of Ford Operations, New York 16 January 1950. Box 7534 (fld G.K. Howard) *FMI Archives*, Barcelona.

measure and restrictions had such an extremely important bearing upon sales, a report on all important changes in regulations and procedures relative to import permits and quotas had to be included;

- **Financial Performance:** actual results for the previous month and financial forecasts for the following four with regard to commercial expenses, productive labour and manufacturing expense, percentage of gross and operation profit and return on investment;

- **Parts and Accessories Activities** (which have come to occupy a very important part of FMI local business) comment on sales, expense ratios and gross and operating profits;

- **Inventory Status:** the unpredictable actions of government made it difficult to exercise the degree of inventory control desired but the important thing was immediately to evaluate the effect of any measures taken by the government on the inventory;

- **Economic and Political Outlook:** FMC was always interested in current political and economic development so far as they affected company's operations. Therefore, things like the national budget, international balance of payments, new trends in the pattern of Spain's foreign trade, negotiation of new trade or payment agreements with other countries, high spots of production and employment and changing trends of inflation, as well as major domestic political developments, were all included;

- **General:** advice to Ford International of any changes which FMI's manager had made or might have contemplated with regard to the company organisation or in the assignment of key personnel.⁴⁰⁹

⁴⁰⁹ In words of the Vice President of Ford Operations, "I cannot emphasise too strongly the value that such a MML will have for us in gaining greater familiarity with and understanding your problems and I hope you will look upon it as the real and primary channel of close and mutually beneficial contact between your organisation and ours. I should, therefore, like to ask you to

Conclusion

The present chapter has extensively reviewed the transfer of the internal procedures, rules and norms from the head office to the subsidiary firm. That is, the focus has been on what goes on inside the firm. Thus, I will conclude emphasising: first, that this internal process has been done with a significant degree of adaptation and recreation from the subsidiary firm. And second, that as firms acts and grows, the routines that it develops will in turn affect its future performance.

make your letter as informal and personal as possible just as if we were sitting together in your office or in mine discussing your problems and projecting 'where we are going from here.'

Part III. The Firm and the Environment

Chapter Five. Crisis and Conflict (1930-1939)

I. Introduction

The first quarter of the century in Spain saw noteworthy industrial expansion fostered by technological advances, in metallurgy, shipbuilding, the manufacture of railway material, furniture and food processing.⁴¹⁰ Among new industries which took off at this time was automobiles construction, even if it failed to consolidate its position as Chapter Two has shown.⁴¹¹ During the first half of the 1930s, the capital goods industry could not escape the depression and the production of iron and non-ferrous metals, which had reached a pick in 1929, fell drastically during 1931, 1932 and 1933, to recover slightly in 1934 and 1935. Imports of machinery decreased from the last four months of 1930, the lack of a market being the main cause for the decline. Moreover, the output of Spanish industry, mainly textile,

⁴¹⁰ Harrison (1993:14-15). On the Spanish economy during the first three decades of the twentieth century see, for example, Palafox (1991).

⁴¹¹ The domestic automobile industry as such did not exist in Spain; there was no such thing as an automobile industry in Spain. The extraordinary effort made repeatedly by Spanish automobile manufacturers such as 'Hispano Suiza', 'Elizalde', 'España' and 'Nacional Pescara', among other firms, in connection with the manufacture of a Spanish car, capable of being adapted to the domestic market and to the reach the purchasing power of Spanish consumers never reached fruition. All these attempts, however, ended in failure, and only two foreign firms, namely Ford and General Motors, had started gradual mover towards domestic production, which by the time of the Civil War, they had attained in part. Moreover, during the war years, GM was making quite a worthy effort in the direction of the Spanish automobile. Furthermore, none of the said Spanish firms, not even those of foreign extraction established in Spain - apart from Ford, to a certain extent, had by that time at their disposal the countless technical factors required by the manufacture of a motor car. These factories were in need of specialised engineers; they lacked invention of patents, test laboratories, commercial departments for the purchase of foreign material; they had no experience and -here is a very important point in view of the comparatively low rate of purchasing power of the country - they had no market as such which might have assumed their output in the event that all these difficulties were overcome. It might be suggested that a prohibitive tariff would have encouraged the manufacture and sale of a national car; to this it has to be objected that the motor vehicle was one of the first sources of income in the line of Spanish imports, and the country had to rely on the motor car to compensate its commercial balance for the outflow of her agricultural products on to foreign markets.

metal and chemical, had risen considerably. This increase had been the effect of the protective industrial policy of the second half of the twenties.⁴¹²

According to Carreras, from 1914 to 1935 Spanish and European industries passed through three clearly defined stages. The first, until 1922, was characterised by a stagnation of production that existed both during the expansion period of World War I and during the post-war depression. Industrial output grew a total of 9% until 1916, and it stayed more or less at that level except for the crisis of 1919. What really changed was the international distribution of production: weak Spanish growth contrasted with the collapse of European industry, and the result looked like a strong Spanish recovery. The distribution of national income also shifted in favour of profits, to the detriment of wages. The second stage, from 1922 to 1929 (in Spain until 1930), seems to have generated a strong expansion in industrial production in Spain as much as it did in the rest of Europe. The annual growth rate reached 5.6% over eight years, a situation unprecedented since the period 1869-1873. The third stage (1929-1935) covers the early phase of the depression. The slump does not seem to have been too steep in Spain. The various "indexes of industrial production" however, paint a contradictory picture of the period and of the intensity of the crisis because of the enormous changes in relative prices and, consequently, in the industrial structure.⁴¹³

As regards the automobile industry, the period 1929-1939 saw a further consolidation of the international motor industry and by 1939 there were only 20 independent car producing firms in the world. An important development in the car

⁴¹² Effectively, the "Law for the Encouragement of Spanish Industry", of the April 30, 1924, had established an "ingenious" system for the active encouragement of industry". This law allowed newly established industrial concerns engaged in producing unknown or scarce goods, to import raw materials, and semi-manufactured articles duty free for up to a period of five years. A second law was passed in 1926 that reinforced the import-lowering effect on the duties on coal, semi-and-wholly manufactured metal goods, motor vehicles, and machinery, by compelling all concession holders and public authorities to buy Spanish products. However, the industrial output increased was accompanied by high prices of the protected goods and thus, an increase general cost of living. See Lieppman (1938:176-7).

⁴¹³ Carreras (1984). See also Harrison (1993: 15).

market during the 1930s was an increased emphasis on price competition and an increase in the emphasis on quality competition and variety.⁴¹⁴ As has been already mentioned in chapter Three, in 1929 Ford reorganised its foreign activities in Europe by allowing local capital to be invested in its foreign subsidiaries. During those years the Ford automobile, which was originally an entirely foreign product, continuously increased the proportion of material and labour originating in Spain. By 1936, the Spanish inputs had reached sixty per cent of the total value, and fifty per cent of the weight of the unit on average.⁴¹⁵ The Ford Motor Company then proposed building a new factory in Barcelona. With this object in mind it had put aside a reserve of 6 million pesetas. The preliminary studies for this construction were underway when on July 18, 1936 the war broke out. According to the expansion plan of the assembly plant, on May 5, 1936 the Ford Motor Ibérica directors voted to establish a manufacturing operation. They took put in an offer land for a factory, and Dearborn engineers and architects prepared plans for the building. In May, the managers submitted a detailed report on the most appropriate location for the new factory in an area conerved by the Free Port of Barcelona to the Board of Directors. The Consortium was therefore requested to grant the Company, for an indefinite period, a ground site of 60,000 square meters, with the option on a further 60,000 square meters.⁴¹⁶ The new plant should have been finished in about fifteen months from May 1936. Initially, the area was planned to be equal to the Antwerp plant in Belgium with an output of more than 75 units per day, and to this was added portions of building suitable for the manufacturing scheme, but the whole layout was designed so that the future increase in local manufacturing programs could be coped with by adding extensions to the existing building. Although the new Spanish Ford plant was to be built to meet the demand of the business at that moment, it was impossible at that stage to envisage how the development of the business would shape up over a period of years. It was

⁴¹⁴ Maxey and Silberston (1959).

⁴¹⁵ Box 7531 *FMI Archives*, Barcelona. See also Wilkins and Hill (1964: 261).

⁴¹⁶ Minutes of the Directors' Meeting, May 5th 1936, Acc.608/Box 3, *Ford Archives*, Dearborn.

therefore essential that the area for development at a later date would be available, bearing in mind that the establishment of a Ford industry would bring ancillary firms into the industrial district.⁴¹⁷ However, plans never reached fruition. In effect, the outbreak of the civil war and the governance of the economy during the following decades would change the plans.

The remainder of the chapter proceeds as follows. Section Two is concerned with the fostering of the local ancillary industry through Spanish legislation on partial 'nationalisation'; and it also analyses the commercial development of the company. Then following sections turn to the Spanish Civil War. Section Three deals with business activity under the war and its outcomes. Section Four is more analytical; first it is concerned with agency problems, and second it turns to the plant's performance during the war and its financial position. Finally Section Five summarises and concludes the chapter.

2. Years of consolidation (1930-35)

2.1. Fostering the local ancillary industry. Spanish legislation on partial 'nationalisation'

By the beginning of the 1930s, Spain not only lacked a local motor industry but its overall automobile transportation was not as well developed as in other countries. In effect, the number of vehicles were still low compared with countries such as the United States, Britain, Germany or France, and even Argentina had four times more vehicles than Spain. One of the reasons for this underdevelopment was the inability to import as many vehicles as were required, largely because the chronic deficit of the trade balance had obliged the several Spanish administrations to dictate measures in order to restrict the entrance of foreign motor vehicles since

⁴¹⁷ "General particulars concerning the construction of the plant in the Free Port of Barcelona", May 4, 1936, Acc.760, *Ford Archives*, Dearborn.

1929. Consequently, the Spanish supply of motor vehicles was far below the demand of the market.

The contradictions between the trade policy and the domestic demand of motor vehicles was therefore an important problem to be solved. In reality, the nationalisation of the industry had not been considered an important and real problem before the realisation of the Public Works program under the dictatorship of Primo de Rivera.⁴¹⁸ Thus the first big step towards the development of the domestic motor activity had been the creation by the dictatorship of the transport infrastructure. Moreover, in order to promote a small core of national manufacturers, the law for the Protection of the Automobile Industry was passed in 1927. It was then that the import volume began to increase significantly. Foreign trade statistics show an accelerated rhythm of imports, reaching the figure of 24 thousand vehicles in 1929.

It is worth noting that as regards the tendency of the Spanish Government during the dictatorship to nationalise, the term 'nationalisation' did not connote exactly the same thing as it does in English. It did not necessarily mean a state take-over in every case. What it did mean was that all foreign companies should be owned, controlled and operated by Spanish subjects.⁴¹⁹ But, whatever form the interpretation of the term 'nationalisation' may have taken in Spain, the heart of the matter was the intention of the Spanish Government, where possible, to eliminate foreign interests from participation in the economic exploitation and activities of the country.⁴²⁰ This broad definition of the term will be also applied to the nationalistic economic policy of the Franco regime during the 1940s.

⁴¹⁸ Ben-Ami (1984), Palafox (1991), Nadal, Carreras and Sudria (1987), Comín (1987).

⁴¹⁹ For example, during this period the nationalisation of petroleum distribution meant the take-over of this business by a State formed monopoly company. See, for example, Shubert (1980).

⁴²⁰ This point is worthy of mention because, for example, the policy adopted by the Franco government after the civil war was very close to that of Primo de Rivera as regards nationalisation.

The State could give the Spanish manufacturers under the conditions of the law a maximum 50% tax reduction, fiscal allowance on machinery, and also custom advantages on the import of several elements, both intermediate products and raw materials which were necessary for the automobile manufacturer. Such a protective legislation fostered the industry, though in a disordered way, with many firms still producing short series of vehicles.⁴²¹ The protective regime lasted only three years. The new government that came after the dissolution of the Dictatorship abolished the aforementioned legislation. The factories and workshop that had been established either ceased the production of motor vehicles or were transformed into manufacturers of intermediate products.

The first governmental restrictive measure was the "Wais Law" of July 22, 1930. This Law handled the new international situation by raising the tariff of several chosen items, among which were the automobiles. The Wais Law provoked a great reduction of the motor vehicles trade and imports dropped from 24,000 units in 1929 to 7,000 in 1931. Then, the Republican Government abolished the customs increase on automobiles. It consequently left the industry without protection and, therefore, it had to substitute the protective law with other measures: the "contingents". However, even with contingents, imports grew considerably from 1934. The contradictions between, on the one hand, the increasing necessities of means of transportation and, on the other, the restrictions of foreign trade, grew considerably during those years.⁴²² The Spanish Administration then decided to dictate several conditions in order to ensure at least a partial nationalisation that, by the reduction of import costs, could allow the acquisition of vehicles with less outflow of foreign currency.⁴²³ In other word, the policy of partial nationalisation

⁴²¹ See Chapter Two.

⁴²² See Liepmann (1938), Palafox (1991), Viñas *et al.* (1979).

⁴²³ These legal provisions were laid down by the decrees of July 3 and December 10, 1931, known as the "Automobile Laws". The first decree had established a system of fiscal rebates for the import of unassembled vehicles that were going to be assembled in Spain with an increasing proportion of locally manufactured elements. The second decree specified the terms of application of the former law. It established a threshold of minimum percentages of local inputs at 70 per cent of the weight of the vehicle over a period of six years. It also determined

coincided with the interests of the foreign firms. The partial nationalisation of manufacturing meant that local manufacturers supplied materials of more weight and lower level of manufacture. By acquiring then in the same country foreign firms were saving transportation costs as well as custom duties. The nationalisation of 70 percent according to "weight" - the maximum limit imposed by the said decree - thus meant the possibility of importing the entire engine and transmission; i.e., the components produced at a higher technological degree of manufacture. The 30 percent overall weight of the latter was a 60 percent of the value.⁴²⁴ The host country would save foreign currency to a value of 30-40 percent of the cost of the vehicle. This saving constituted a partial and transitory objective for the host country. However, it is noteworthy that such a policy fostered the development of local ancillary industry. At the end of the Civil War there were in Spain small workshops manufacturing all the parts of the vehicle, including motor engines.⁴²⁵

Table 5-1. Local Purchases, FMI

	<i>for assembly</i>	<i>services et al.</i>	<i>Total</i>
1931	1,453,706	492,789	1,946,495
1932	1,668,250	586,924	2,255,174
1933	3,802,099	576,915	4,379,014

Source: *FMI Archives*, Barcelona

moreover the fiscal rebates that had to be established each year according to the level of achievement of nationalisation. These measures were, undoubtedly, the outcome of the trends exhibited by foreign enterprises to incorporate local materials in their vehicles assembled in Spain; such a policy was started with the establishment of foreign assembly plants in the 1920s.

⁴²⁴ With regard to the Spanish Ford subsidiary, the manager had stated as follows: "the activities under the Government program for nationalising the automobile industry were intensified during the second half of 1933. The Government allows a bonus on automobiles for whose construction domestic materials are used, ranging from 15 per cent of the amount of customs duties on imported parts, in the case of units with a minimum 10 per cent in weight of domestic material, to 45 per cent for a minimum of 40 % domestic, and 50 per cent bonus when a minimum of 50 per cent domestic is attained." Box 7531, *FMI Archives*, Barcelona.

⁴²⁵ Antonio Robert (1943) "La nacionalización de la Industria del automóvil en España", *INI Archives*, Seat 355, folder 8. Antonio Robert was Chief of the Planning and Research Division of the General Direction of the Industry at the Ministry.

By 1930-1931 the depression and the Smoot-Hawley tariff had created a disconcerting situation.⁴²⁶ The Smoot-Hawley act of 1930 raised tariffs on all imports to 19.0% and on dutiable imports to 55.3%. It sparked a global increase in protectionism.⁴²⁷ When the new American protective rates were announced in June 1930, the Spanish government at once raised its duties on cars. Ford in Barcelona closed in protest, but reopened, eventually, with a small work force. With the republic government, the Ford management "dealt so skilfully with the changing situation so as to maintain profits although it dipped sharply. In contrast to its position in Italy, Ford in Spain was still a factor in the market."⁴²⁸ In the latter country, Ford was still ahead with 18.3% of total vehicles registered, followed by Opel 16.2%, Citroën 11.6% and Fiat 9.5%. Truck registrations were 25.1 % Ford, 24.4 % Chevrolet, 5.7 % Blits and 4.8 % Bedford. Combined cars and trucks figures show Ford with 20.9% of total registration.⁴²⁹

To a certain extent, the Ford plan of 1929 accomplished what it expected. For example, one of its goals was to introduce European nationals into the Ford enterprise.⁴³⁰ In 1933, of the 14 European and North African Ford companies, only two had American managers. In almost every country there was local participation in ownership throughout the holding of Ford shares in their respective companies. All factories had been built by local labour, and by May 1931 not one of the European assembly plants used more than 50 per cent in value of American materials in making a standard Tudor unit. All factories were manned by local workers and local officials.

⁴²⁶ On the Smoot-Hawley Tariff, see Eichengreen (1989).

⁴²⁷ Lake (1983).

⁴²⁸ Wilkins and Hill (1964: 230).

⁴²⁹ 'Report to Directors 31st December 1933', Box 7531, *FMI Archives*, Barcelona.

⁴³⁰ Before the end of 1933, the Danish, Belgian, and Spanish Ford companies had to reduce their capitalisation by 40 per cent, returning the funds to the shareholders. Ford England used this cash for the completion of the Dagenham manufacturing facilities.

Across the continent, Ford Motor Ibérica made a 1935 report that showed a net profit of \$624.000, the highest in five years. Ford had 30 per cent of the automobile business in Spain, and showed the greatest profit of any European Ford company but Dagenham. Its earnings were better than those of the Belgian, Dutch or Danish concerns. Ford Motor Ibérica assembled its vehicles in a leased factory in Barcelona; about 50 per cent of each unit comprised local parts. As in France and Germany, the government was urging that the proportion of nationally-made parts be increased. Thus, because of the Spanish government pressure for home production with home-labour and home-materials, Ford Motor Company laid plans for expanding this assembly into a fully-equipped factory.⁴³¹

2.2. The firm's commercial development

The Ford subsidiary was among the most important motor firms established in Spain. After the initial period of establishment in the 1920s, the company underwent an expansion during the first half of the 1930s and consolidated its organisation in the country. An important feature was the incorporation of local personnel among its executive management. Undoubtedly, the most important was the assistant manager. He had visited Detroit several times in order to learn and introduce the policy of the head office. For example, with regard to the policy followed in Ford's approach to dealers in accordance with the General Sales Department (US), it was from the standpoint of Ford sales volume, irrespective of comparative percentages. Ford Detroit was interested in dealer volume and dealer profit rather than registration alone. Generally speaking, registrations were the basis of their analysis of the sales possibilities of any given area. After his visit to Detroit, FMI's assistant manager had pointed out that "the most impressive fact in Dearborn was to realise that all of the thinking for the whole organisation of dealers and salesmen is done there."⁴³²

⁴³¹ Wilkins and Hill (1964: 261). See also Tolliday (1995).

⁴³² "The conference with the Distribution Department at the Head Office was a very interesting one as the subsidiaries learned of the work of forecasting the monthly production well in

Effectively, everything was thought, done, compiled and handed over to the sales organisation of the country from the Administration Building as a result of the work of the officials there.⁴³³ All that the dealers and salesmen had to do was to go out and work under systems devised by the Ford Motor Company. Statistics to show all kinds of sales ratios, literature to offset sales resistance, comparisons of price and specifications, advertising material, salesmen's equipment and all the sales material was prepared at the head office. The company, through its specialised employees, had been able to prove to the majority of dealers the necessity of a detailed analysis of their accounts. The Company had likewise shown how the different items of the shop account had to be dealt with, how the overhead had to be distributed in order to know whether the transactions shown as profitable actually produced such profit, since other operations which the dealer considered profitable were not so if all the expenses of the dealership were improperly apportioned. One of the duties of the Sales Promotion Department was the training of salesmen, to which end everything possible was done as the Company was convinced that the salesmen were the most efficient link between the factory and the public. In order to close a sale it was necessary to make on average 40 contacts, 7 appraisals and 12 demonstrations, and that for each new car sold in the US 1.70 used cars were sold.⁴³⁴ The Branch Sales follow up and Dealers & Salesmen coverage was based on a detailed analysis of the registrations. There were Branch contact men who travelled the entire territory, and whose duties were mainly the development of Roadmen. When considering the activities of the Commercial Sales Department, it has to be pointed out how valuable the sales

advance, based on the orders from all the branches, which in turn received estimates from the dealers. Although of a much more complicated nature this Department, when ordering the production, had to take into account the matter of the workmen and had to distribute production in such a way as to avoid fluctuations, try to keep production on a steady basis, which would not be obtained without a through analysis of the branches' orders, which generally order in excess." Ubach to Jenkins, January 3, 1936. Report on visit to Dearborn, Box 7557, #UK-US, *FMI Archives*, Barcelona.

⁴³³ See Yates (1989), O'Brien (1997), Tedlow (1990).

⁴³⁴ According to the records, there were 17,000 Ford salesmen in the US for a population of 120 million inhabitants; 87 per cent of the population of the US earned less than 1,000 dollars per year, 71 people out of every 1,000 bought one automobile in 1934.

material was when placed in the hands of the salesmen in the form of an analysis and comparison of costs between trucks of different types, information which was of great value at the time of approaching the prospects.⁴³⁵

3. Years of conflict (1936-39)

3.1. Running a business during the Civil War

When the war broke out, all the industrialist areas of Spain were on the Republican side.⁴³⁶ In the parts of Spain loyal to the Republic, the war accelerated the left-leaning process which had begun with the electoral victory of the Popular Front in February 1936. There were also attempts to introduce revolutionary forms of collectivisation. In Catalanian industry at the top of the organising structure was the Council of the Economy composed of delegates from the parties and the unions. The industries were of two types: collectivised firms (run by the workers) and private firms still run by their owners or managers, but with the right of inspection by the Worker's Control Committees. All concerns employing more than a hundred workers were collectivised, as were also those abandoned by their owners, and those considered of economic or military importance. Despite the difficulties caused by the war, which caused an immediate decrease in production, this type of organisation succeeded in keeping industry running satisfactorily enough.⁴³⁷ The automobile industry nevertheless suffered a tremendous stagnation on account of the war,⁴³⁸ with hardly any sales of new vehicles and only a certain amount of work in connection with the repairing and the handling of used units for

⁴³⁵ Ubach to Jenkins, 3 January 1936. Report on visit to Dearborn Box 7557, # UK-US, *FMI Archives*, Barcelona.

⁴³⁶ I am not intending to survey the enormous literature on the Spanish Civil War, Sánchez Asiaín (1992: 10) in footnote 2, refers to more than 20,000 titles. Neither is the intention of this chapter to describe the Spanish economy during this period. Examples can be found in: Bolloten (1991); Broue and Temine (1970); Thomas (1961); Carr (1993); Preston (1986); Preston (1993); Preston, ed. (1984); Payne (1987); Fraser (1979); Jackson (1965).

⁴³⁷ Fontana and Nadal (1976).

⁴³⁸ I am referring to the automobile industry as such and not as a branch of the war effort, inasmuch as in this condition it was kept in full operation

the requirements of the war. It did not seem therefore advisable in these circumstances to apply for the collective appropriation of the automobile industry. Furthermore, even assuming that all possible difficulties were overcome, who would furnish the exorbitant amount of cash required for the hundreds and hundreds of men dependent on the automobile trade (with production rates at 70 per cent below the normal figures) after exhausting the bank accounts of the owners? The Decree of Collective Appropriation covered this case by means of establishing the Commercial and Industrial Credit Fund, but as the situation stood this was merely an utopia if we consider the poor financial state of the Government of Catalonia.⁴³⁹ Thus, under such unfavourable conditions, it seemed inconvenient to go ahead with the collective appropriation.⁴⁴⁰

There was no doubt, therefore, that in the case of appropriating the total line of the motor vehicle business without previous indemnification, foreign interests would have been considerably hurt and, as had been the case in other branches of the industry, the negative reaction of the countries of the West. And it was believed that if those foreign countries imposed isolation upon them, it would all have ended in a complete failure because in order to win the war there was a dire need of cars, trucks and tractors. For instance, the Republicans had not yet secured a perfect system of supply. The failure to carry out the definite civil evacuation of Madrid was due mainly due to the lack of sufficient means of transportation. In conclusion, it was suggested that in view of the nature of the different factors composing the automobile industry, the almost complete dependence on foreign markets and the abnormal conditions prevailing at that moment, not to apply the collective appropriation system. However, in spite of the arguments produced on

⁴³⁹ In the Trade Union's opinion, the appropriation of an industry in precarious conditions was equivalent "to appropriating a destroyed building without having the means of erecting it a new." Moreover, as regards to the fact of the tremendous share of foreign interests in the automobile industry in Spain, a definite step towards collective appropriation would have led to direct failure and to the misery of a great number of working people. "Report" (1937) Acc. 38/ Box 38 # ffd Spain, *Ford Archives*, Dearborn.

the subject, if there were in the automobile trade and branch, body or firm whose workers may have felt able to successfully appropriate their concern in accordance with the law that is to say, by decision of the majority, the syndicate was ready to show the way and help them to the best of their ability.⁴⁴¹

Therefore, as regards the Catalan legislation for the collectivisation of industry, the decree of the November 20, 1936 authorised the Councillor of the Economy of the Generalitat to order the direct and total intervention by the Generalitat in industrial and commercial enterprises for reasons of urgency or economic necessity. This intervention could take the form of the appointment of an individual inspector, or of a Commission, the latter in accordance with the precedent established for the light and power industry in the decree of the Generalitat dated October, 5. This

⁴⁴¹ Moreover, as a consequence, with the obstacles created by the war and those of a technical and economic nature, if they were to establish the collective appropriation of the automobile line, they would only have got, as a result of the exhaustion of the actual stocks, a total liquidation of what had been, up to that moment, the automobile business in Spain. Furthermore, this industry (which was not exactly an industry but a line of business), would have also stopped being a line of business and fallen into practically nothing. According to the said "collectivisation" law, all firms employing over 100 persons had necessarily to be put under collective appropriation. Firms of less than 100 workers could also take the form of collective appropriation, provided that the majority of the personnel would so agree with the owner or owners. This meant to say that the law specifically provided that in the case of concerns of less than 100 men, it had to be precisely the workers who agreed to appropriation as a decision of the majority and with the consent of the owner or the responsible party. Supporting this theory, the law said, literally: "the collective appropriation of branches shall not be made by the trade unions. The trade union cannot work, on their own account, public services, factories, plants, shops nor agricultural lands. The working must be handled by the workers in each case and the trade unions have no rights but only the obligation of directing them and facilitating matters for the successful development of the enterprise." Therefore, thinking accordingly in line with the spirit of the law, if they had decided on an appropriation of the automobile line in mass they would have hurt the rights of the workers who, according to the law were entitled to the last say as to whether their own concern should be appropriated or not. Furthermore, in Spain the commerce and the industry of the automobile were in the hands of a high percentage of foreign firms, or concerns that, in spite of being Spanish for fiscal purposes, were really foreign since most of their shares or interests were in the possession of foreigners and it was left to foreigners to dictate their rules and impose their decisions. On account of this fact, it was literally said in the article of the Decree of Collective Appropriation: "as for the firms comprising the property of foreign subjects, the Enterprise or Control Committees, as the case may be, shall report to the Secretary of Economy, who will congregate all the parties concerned or their delegates in order to discuss the case and reach a decision for the proper protection of such property. See the Report on the advisability and means of applying the collective appropriation scheme to the automobile industry". "Report" February 1937, Acc. 38/ Box 38 # fld Spain, *Ford Archives*, Dearborn.

power of intervention by the Generalitat was justified in the decree by the autonomy of Catalonia in industrial matters, which automatically delegated to them the powers granted to the state by a decree of the central government of February 23, and an order of March 4, 1937, to seize or intervene in business for reasons of national necessity. The decree of the central government defined industries intervened in article 2 as those where the management remains in control and retains responsibility, but where the management's activities are directly superseded by the State. A number of interventions were made on the strength of this Generalitat's Decree but for differing reasons.⁴⁴²

We shall turn to the economic conditions in Government territory in Spain with particular reference to their effects upon the interests of foreign concerns (mainly British undertakings).⁴⁴³ Long before the outbreak of the war, the economic situation in Spain was serious. The currency was over-valued with the result that imports greatly exceeded exports; there was wide-spread unemployment and, particularly after the general election of February 1936, a lack of confidence in the future caused stagnation of business and flight of capital. Drastic action by a strong government seemed to be necessary in order to improve the position, but the government of the Frente Popular was ineffectual and failed to tackle any of the very serious economic problems of the country. This fuelled rapid growth of the

⁴⁴² For example, the companies exploiting the potash mine (there were foreign interests there) were taken over to ensure that this source of wealth was used to maximum effect. One or two collectivised firms were taken, because of mismanagement by the Executive Board, against whom the Generalitat had to take disciplinary measures and several firms succumbed "to protect foreign interests." Moreover, two textile firms, the 'Cotonificio de Badalona, S.A.' and 'Edmundo Belsie S.A.' of Girona, employing 500 and 1000 working people respectively, in which there were important Swiss interests, were taken over, at the request of the Swiss Consulate, to prevent them being collectivised. A number of breweries in which there were French interests, the Galeries Lafayette and the Renault works were also taken over. According to the Swiss Consulate, the intervention of which they had experienced was a very valuable protection to Swiss interests, and a similar report in regard to French interests was received from the French Consulate. This new development could be ascribed to two tendencies; first to a desire for increased state control in industry to check for abuses of the trade unions and secondly, to a desire to restore the confidence of foreigners by protecting their interests. *Public Record Office, London (PRO) FO 371/22670* (5 January 1938).

⁴⁴³ British Consulate at Barcelona, "Memorandum" *PRO FO 371/21381* (24 March 1937).

UGT and CNT, which were becoming more conscious of their strength. For some time before the rising, the tendency was steadily growing for workmen to seize unoccupied houses for their own purpose. The absence of many managers and directors of firms, either because they had fled the country after the February elections or because they had gone away at a later date for their personal safety, or even genuinely on holiday, rendered the process of seizure all the easier.

To sum up, at the outbreak of the civil war the Government attempted to obtain control for war purposes of vital industries and services and a decree was made at the end of July 1936 providing for government intervention in any industry or business where control was considered desirable, especially in those connected with public utility services. An "Intervention Committee" was created for the purpose of recording the introduction of such control, and government delegates were appointed in some industries as a result of this decree. In the main, however, control was exercised by the workers themselves or by their Unions. Control by the workers had a revolutionary object and was not intended as a war measure, but it was found possible to include the establishment of worker's committees under the terms of the intervention Decree of intervention with the result that the government's measures served to give official sanction to actions which interfered with its original purpose.

As their committees lacked in many cases the know-how of running a business, they insisted in referring every decision to their Union for approval. The result for the first few weeks was chaotic. Practically every industry of any importance in Governmental territory was under the control of workers committee. The procedure adopted in each separate case of expropriation varied little. In a firm where the manager was lacking, a Worker's Committee was formed to continue the business. Where the manager was still present, the committee formed was sometimes a "Control Committee", which nominally did not interfere with the running of the business; on other occasions, the committee formed as a "Managing Committee". The result was frequently the same; 'the manager was obliged to sign

what was put before him'.⁴⁴⁴ Often, however, the control-committee after drawing up minutes of its constitution, which the manager was obliged to sign, obtained an order grating the control of all funds in the name of the firm and of the directors, partners or managers. Where Spanish companies were concerned there was no means whereby a bank would hand over funds. When the companies were foreign or when they were Spanish companies with foreign capital and held accounts in a foreign bank, it was sometimes possible to protect their funds. Further difficulties of running businesses were noteworthy: raw materials became unobtainable, transport, at first rendered impossible by the requisitioning of all trucks, etc., was still difficult, and in any case only articles for immediate consumption could be sold as there were no private buyers for other goods, and the state requisitioned wherever possible without paying. Firms which were been able to carry on notwithstanding the difficulties under which they had struggled since February 16, had to pay the wages not of employees still at work but of those earning at the same time equal or higher pay as militiamen. For example, all the employees of Ford Motor Iberica in Barcelona, both factory and office were receiving their salaries and wages, although the Company was doing no business and there was not sufficient work for all these people. This was in accord with the agreement of Edsel Ford and Sir Percival Perry in London. However, the authorities in Barcelona passed a decree compelling all companies to continue the payments of their employees. The Nationalists issued a decree similar to that of the Republicans to the effect that all industrial and commercial establishments had to keep their operations open and pay salaries and wages to all their men, even though the workers men were often enlisted in the Nationalist army (see table 5-2).⁴⁴⁵

⁴⁴⁴ "Memorandum" PRO FO 371/21381 (24 March 1937).

⁴⁴⁵ Report on Spanish Conditions as affecting 'Ford Organisation', 12 November 1936 in Acc 38/Box 34, *Ford Archives*, Dearborn.

Table 5-2. Personnel, salaries, wages, and total expenditure, July 1936 to May 1937, FMI

	<i>total employees on salary/payroll May 31, 1937</i>	<i>Amount of wages monthly</i>	<i>Total Jul./Dec. 1936</i>	<i>Total Jan./May 1937</i>	<i>Grand Total</i>
Factory & Office Employees	81	89,177	615,831	456,423	1,072,254
Factory workmen	333	170,357	1,100,332	837,671	1,938,003
Temporary workers	110	49,560	100,560	207,568	308,128
Total	524				
Bonus employees/workmen	370	53,039		268,524	268,524
Total		362,133	1,816,723	1,770,186	3,586,909

Source: Box 7534 FMI Archives, Barcelona

The policy of the Government had enforced the provision of credit to the committee of any firm which showed signs of being able to manage its business in order to prevent an economic collapse and an increase in unemployment and discontent. Banks were obliged to allow credit against an order bearing the stamp of one or other of the political parties. Foreign shareholders were not distinguished from Spanish ones but there had been a tendency thereafter on the part of the Spanish Government to consider the interest of foreign shareholders. In Barcelona, a manifesto was published to which all parties had subscribed, declaring that the capital of foreign companies which had suffered from the revolution would be repaid.⁴⁴⁶

⁴⁴⁶ It must be remembered, for instances, that most of the investments of British capital in Spain had taken the form of shareholdings in Spanish subsidiary companies, as the provisions of Spanish law made it difficult for a company which was not Spanish in law to carry on, and it was problematic to say the least whether the Spanish Government authorities would have been prepared to reimburse the foreign holders of capital of Spanish companies. There were over 40 million pounds sterling worth of English money invested in Spain, the greater part of it in government held territory.

The situation in Catalonia called for separate consideration as has already pointed out. The process of expropriation of property was much more complete in Barcelona where the CNT - the anarchist syndicate - was much bigger and more effectively organised than in Madrid. Barcelona was the largest industrial and manufacturing centre of Spain and it was there that very large amounts of foreign money were invested (see table 5-3).⁴⁴⁷ In normal times, it imported raw materials and marked the finished products throughout the Peninsula. Throughout the civil war, the Generalitat acted as though they were separate entities (Generalitat and Central Government). The Generalitat had even assumed control of all public finance in Catalonia.⁴⁴⁸

Table 5-3. Foreign capital in the main Catalan firms, 1935

<i>Local Firm (Foreign Firm)</i>	<i>(in million ptas.)</i>	<i>capital</i>	<i>bonds</i>
<i>Companyia Barcelonesa d'Electricitat (Barcelona Traction)</i>		30.5	34.4
<i>Energia Electrica de Catalunya (Barcelona Traction)</i>		50.0	98.8
<i>Societat Productora de Forces Motrius (Barcelona Traction)</i>		23.0	43.5
<i>Unio Electrica de Catalunya (Barcelona Traction)</i>		20.0	40.2
<i>Tramvies Barcelona (Barcelona Traction)</i>		58.5	57.5
<i>Companyia Gral. Tramvies (Barcelona Traction)</i>		5.9	26.1
<i>Ferrocarrils de Catalunya (Barcelona Traction)</i>		12.0	27.4
<i>Ferrocarril de Sarria (Barcelona Traction)</i>		2.0	5.1
<i>Carbons de Berga (Barcelona Traction)</i>		8.8	2.3
<i>Companyia de Aplicacions Electricques (Barcelona Traction)</i>		5.0	4.9
<i>Mines de Potassa de Sùria (Solvay & Co.)</i>		30.0	18.4
<i>Potasses Iberiques (Minerais et Metaux)</i>		30.0	
<i>Filatures Fabra i Coats (Coats Ltd.)</i>		50.0	13.3
<i>La Seda de Barcelona (Akzo NV)</i>		6.2	5.5
<i>SA Fibras artificiales (Rhône-Poulenc)</i>		17.0	
<i>Siemens Ind. Electrica (Siemens-Schuckert AG)</i>		7.0	3.7
<i>Pirelli</i>		18.5	3.4
<i>Electroquímica de Fliz Elektrizitats AG</i>		3.0	
<i>Ford Motor ibérica (Ford Motor Company)</i>		9.0	5.0
<i>Nestle</i>		20.0	

Source: Sudria (1988: 69)

⁴⁴⁷ On the Catalan economy during this period see, for example, Sudria (1988); on the iron and steel industry, see Maluquer de Motes (1989).

⁴⁴⁸ Bricall (1970).

The programme of the Economic Council of Catalonia issued on August 19, 1936 is noteworthy in that it declared that in assuming the tremendous responsibility of ordering the economic life of Catalonia, it was going to direct its efforts firmly towards the establishment of a collective economy. It put forward the following proposals with calling for immediate realisation: First, regulation of production, in accordance with the needs of consumption. Second, monopoly of foreign trade in order to obviate attacks from outside against the new economic order that was being created. Third, Collectivisation of large rural estates to be exploited by peasants' unions with the help of the government. Four, partial devaluation of urban property through the reductions of rents or the establishment of equivalent rates where it was not considered advisable to benefit the tenants. Five, collectivisation of large industries, of public services and public transport. Six, confiscation and collectivisation of concerns abandoned by their owners. Seven, progressive development of the co-operative system in the distribution of products. Eight, trade union control in all industries which continued to be operated on a private ownership basis. Nine, worker's control of banking until the nationalisation of banking was carried out. Ten, vigorous re-absorption in agriculture and industry of the unemployed. And, eleven, rapid suppression of widely applicable taxes with the aim of replacing them by a single tax.⁴⁴⁹

The Generalitat of Catalonia carried out an enormous number of decrees on financial and economic matters. The following decrees promulgated by the Generalitat were however of particular interest: first, that of August 29, 1936 by which the Generalitat took over the complete control of the branches of the Bank of Spain in Catalonia. This decree was practically a declaration of financial independence from the central government. Secondly, the decree promulgated in September 1936 compelling Banks to maintain an increase in existing loan facilities and giving the Generalitat authority to interfere in bank management. Thirdly, the

⁴⁴⁹ The Economic Council of the Catalan Government approved the so called "Plan for the Socialist Transformation of the Country", see Sudria (1988: 114) and also Bernecker (1985).

decree of October 23, 1936 applying to foreign nationals and earlier decrees demanding the surrender of all goods, foreign securities and currencies. Fourthly, the collectivisation decree of the October 24, 1936. This decree provided for the "collectivisation" or taking over by the State of all concerns employing over a hundred workmen who so desired it. The decree was, in effect, an attempt to give legal form and some standardisation to the expropriation of business which had already taken place on an enormous scale. The decree was interesting as it contained vague but elaborate provisions for the compensation of foreign interests. These provisions, however, left the worker's control committee in the business concerned the responsibility of notifying the Generality of the existence of foreign interests.⁴⁵⁰ Among a series of 58 financial and economic decrees published *en bloc* in January was one which provided for the compensation of foreigners for losses and damage suffered, that at that moment (March 1937) was being studied. Its terms were vague and it was not clear what claims had been admitted by the Generalitat, but in any case it was not seen how the Catalan authorities could ever possibly be in a position to give adequate compensation or that it was likely that they would be prepared to do so when it came to the crunch.⁴⁵¹

Finally, as regards motor vehicles, it is worth mentioning that large numbers of motorcars and motorcycles belonging to foreign interests were requisitioned in Barcelona, as well as in other parts of Spain. For instances, from Ford Motor Ibérica alone 225 cars and trucks valued about 2 million pesetas were taken by various organisations and the Generalitat had since made requisitions to the value of 4 million pesetas, while 290 Bedford trucks and 125 Vauxhall cars were

⁴⁵⁰ It is worth pointing out that up till that moment none of these provisions came to the notice of the British Consulate at Barcelona (the only case in which such a possibility was noted was that of the subsidiary Company of J & P Coats in Barcelona, which because of the exceptionally good treatment of its employees enjoyed freedom of control of all kinds for a long time). See British Consulate at Barcelona, "Memorandum" PRO FO 371/21381 (24 March 1937). The most important companies, and in which foreign interest were involved, which were collectivised in Barcelona, was the Riesgos y Fuerzas del Ebro (The Barcelona Traction Light and Power Company).

⁴⁵¹ See British Consulate at Barcelona, "Memorandum" PRO FO 371/21381 (24 March 1937)

requisition from General Motor Peninsular S.A.⁴⁵² There were also many foreign interests (mostly British) in governmental territory which suffered the consequences of the civil war.⁴⁵³

3.2. The War and its consequences

Ford Motor Iberica in its efforts to construct as much of the Ford vehicle as possible with Spanish inputs managed in the middle of June 1936 to reach a threshold whereby all units contained a minimum 35 per cent of Spanish material and in some cases 50 per cent.⁴⁵⁴ FMI's policy of nationalising the Ford vehicle reached its peak in May 1936 when the Company's Board of Directors decided to build a new factory in the Free Zone at Barcelona; eight million pesetas were to be

⁴⁵² General Motor Peninsular, a totally-owned subsidiary of the parent firm, owned an assembly plant and warehouse in Barcelona and a network of one hundred and fifty dealers all over Spain. Two days after the outbreak of the civil war, the company closed down. On July 22, the plant was taken over by a committee of workers who ordered the managers not to attempt to enter. The bank accounts of the company were seized, and the Workers' Committee announced that, over the protest of the management, it would pay out full wages irrespective of the amount of work done. On July 30, GM's properties were taken over by the Department of War of the *Comite Antifeixista of the Generalitat de Catalunya*. Several days afterward the factory was back in operation assembling trucks for use in the war from materials in the company's warehouses. By October 2, 1936, the company estimated its losses to date in Spain (excluding damage to plant, equipment and real estate) at over \$ 3.3 million. When the supply of parts for the assembly of cars and trucks ran out, the Catalan government converted the GM plant into a munitions factory producing bombs and equipment for releasing bombs from aeroplanes. See Elston (1976: 191-3).

⁴⁵³ As an example and by no means a complete list of the British interests affected we might mention 'Barcelona Traction', a large electric supply company in Barcelona with a capital of 6 million pounds, 75 per cent British owned, which was taken over by a workers' committee in August 1936 and later "collectivised"; 'Fuerzas Motrices del Valle del Leccin' (Almeria), an electricity company with a capital of 14 million pesetas and a loan capital of 12 million pesetas, 90 per cent of its shares belonged to Whitehall Electricity Investments, and it was confiscated by workers. Other firms were Azaon S.A., subsidiary of Imperial Chemical Industries Ltd, with its head office in Madrid, which was taken over by workers' committee. Autoaccesorios Harry Walker, S.A. with a capital of Ptas 1 million, 1/3 owned British interests. 'Alcoy and Gandia Railway' with a capital of half a million pounds taken over provisionally by the State. Great Southern of Spain Railway Company Capital 1.6 million pounds taken over by workers' committee at an early stage. 'Phoenix Assurance Company'; 'Anglo South American Bank' Barcelona branch; 'Royal Bank of Canada'; 'Cables and Wireless'.

⁴⁵⁴ FMI decided in 1933 to start using Spanish raw materials in the units it produced. In 1934, the percentage of Spanish inputs was used greatly, and FMI's policy of making as much as possible of the Ford vehicle in Spain resulted in a situation where Spanish inputs used in the production of Ford's units amounted to fifty million pesetas.

spent on the building and 2 million on the machinery and fitting. This undertaking would have been partly realised if it were for the outbreak of the Spanish civil war, and would have been a logical outcome the practically of the commercial policy of FMI, that is of making a Spanish Ford car. To this end, the new factory would have manufactured many of the parts that were being imported at that time from overseas, thereby reducing the company's need for foreign currency.

Table 5-4. Layout of Antwerp and Barcelona New Plant

	<i>Antwerp</i>	<i>Barcelona</i>
Size of Property	750' x 440'	833' x 1312'
Area	7 acres	23 acres
Assembly Capacity	75 units	75 units
Grand Total Floor Space	148000 sq ft	263630 sq ft
Square Feet of Space per Car	1973 sq ft	3515 sq ft
Total Floor Space	103200 sq ft	228657 sq ft
Size of 1st Floor	320' x 215'	558' x 328'
and Floor Space	68800 sq ft	182926 sq ft
Size of 2nd Floor	215' x 160'	558 x 82'
and Floor Space	34400 sq ft	45731 sq ft
Size of Craneway	560' x 80'	427 x 82'
and Floor Space	44800 sq ft	34974 sq ft
Manufacturing Space		558 x 82'
and Size		45731 sq ft
Office Space	19166 sq ft	43040 sq ft

Source: Acc. 760 # fld. Particulars of New Plant, Ford Archives, Dearborn

In June 1936, FMI employed 750 workers and 2,500 workmen worked in its suppliers' factories exclusively towards the manufacture of Spanish components for Ford's cars. Of the many different articles of Spanish manufacture Ford utilised, the following are worthy of special mention: tires and tubes, batteries, to full range of springs, front axles, windcreens and windows, mats and upholstery, complete

seats and springs, parts of the rest axle, parts of the motor engine, wheels and hub caps, the chassis of several types, etc. In like with the company's commercial policy of nationalising the vehicle, it would only have required a further two years from June 1936 for seventy per cent of Ford's units to have been supplied nationally. FMI's plan would have permitted in a short number of years the manufacture in Spain of other cars by other companies already established in Spain or that had established themselves for that purpose. It is worth mentioning that due to the policy of nationalising the Ford car, the company had created new industries and had developed the growth of others.⁴⁵⁵

However, the act of nationalising the Ford car could only be carried out in stages as the Spanish industry was only gradually prepared to produce all that was necessary to manufacture of the Ford car. It was necessary therefore to rely for a relatively short period on the assistance and co-operation of the foreign Ford Companies that supplied FMI with that material that was impossible to obtain in Spain. These foreign companies had to paid punctually - something that never happened in the last few years - in foreign currency as otherwise they would not sell FMI their products.⁴⁵⁶

At the beginning of 1935, FMI had great difficulties in obtaining foreign currency from the "Centro de Contratación de Moneda."⁴⁵⁷ It was not possible therefore for FMI to pay for the material imported from its suppliers and in June 1935 the Associated Ford Companies of England, USA and Canada blankly refused to supply FMI with further material if they did not immediately settle their debts in sterling and dollars. The Board of FMI protested that such a decision would cause the eventual shutting down of the Spanish organisation and the unemployment of more than two thousand and five hundred workmen. The *Centro de Contratacion*

⁴⁵⁵ "Jenkins' report on the company's activities during the Civil War" Box 7557, *FMI Archives*, Barcelona.

⁴⁵⁶ *Ibid.*

⁴⁵⁷ See, for example, Viñas (1984) and Sánchez Asíaín (1992).

promised foreign currency to normalise their payments, and relying on these promises on several occasions, FMI insisted that its suppliers re-start supplying its raw materials. FMC of England was alone in guaranteeing FMI debits to American suppliers with the end of avoiding the shutting down of FMI.

Ford Motor Company of England had paid on FMI's account 1,8 million dollars to the American companies whilst its debit with them of 100,000 pounds still existed, thus bringing FMI's foreign debit to approximately 2,3 million. FMI had in the years 1935 and 1936 sufficient assets in cash held in banks, credits and governments bonds to liquidate its foreign debit at any time.⁴⁵⁸ The assets of FMI, with the exception of 5 million pesetas frozen in Nationalist territory, were in Barcelona. A great part of those assets had been lost. The depreciation of the peseta was also causing a great loss. And therefore, once the war had ended, what had remained of their assets could go to cover their foreign debt.

Thus, FMI was seeing the necessity of having sufficient pesetas to guarantee its foreign debit as the only way of guaranteeing the continuation of its normal business in Spain. When everything returned to normality in Spain, the continuation of their business necessarily implicated the settlement of their foreign debit, as their suppliers would not have the slightest intention of supplying them with materials, without them having settled their outstanding debts. Without their supplies, it would have been impossible to continue their plans of nationalising their product and the existence of their organisation in Spain. Therefore, FMI had to look in Spain for the means of reconstruction of its business and the necessary amount of capital to guarantee its foreign debt, which to them was a "legal and

⁴⁵⁸ This debit could not be settled due to difficulties at the Centro de Contratacion de Moneda. "The frozen debits of FMI had been contracted therefore strictly for the benefit of Spanish labour, of the future Spanish automobile, and for the industries created and developed by FMI, in brief for the benefit of the national economy of Spain at the expense of FMC of England who had had to settle FMI's delayed payments and for FMI who, if it had settled its debits in due time, would have saved parts of its assets now lost." Therefore, "FMI thought that logically its debits should deserve special attention on the part of the government of Spain." Report", Geo D Jenkins. During the Civil War, Box 7557, *FMI Archives*, Barcelona.

moral obligation, and a moral obligation on the part of Spain, because the said debt was contracted for the benefit of the Spanish workers and industries." Their business of giving direct and indirect employment to 2,500 workers and to 180 dealers spread across Spain, and who employed in their turn a further 2,500 workmen, contributing in their localities to the development of the national economy had to be borne in mind.⁴⁵⁹

Consequently, in view of all of this, FMI had requested that the following concessions be made to all producers of automobiles in Spain who might have been in the same position as FMI:

- The automobile industries established in Spain or in the Spanish free zone, who had received permission to work under the regime of "*bonificaciones*" (i.e., rebates) in accordance with the decree published in the '*Gaceta de Madrid*' and who employed at least fifty per cent of nationally produce material in their vehicles according to weight, to be exempt from customs duties of the other fifty per cent for a period of five years.

- All the automobiles assembled in Spain with a minimum of fifty per cent of national material contributed by producers working in the regime of "*bonificaciones*" previously mentioned, to have the right to a reduction of 50 per cent on the amount of the corresponding circulation tax.

- To avail themselves of the benefits to which the previous paragraphs refer to, it would have been a necessary condition that the industries of the automobiles had worked under the regime of "*bonificaciones*" before the July 15, 1936, date of the outbreak of the civil war, and who had continued working under such a regime.

⁴⁵⁹ "Report", Jenkins. During the Civil War, Box 7557, *FMI Archives*, Barcelona.

• That a guarantee be given to FMI that within four years that they would be able to retain 600,000 dollars or 180,000 pounds each year above their normal needs to enable them to liquidate their foreign debt.⁴⁶⁰

Table 5-5. Production and deliveries 1936-1937, Ford Ibérica

<i>No. of units</i>	<i>Production</i>	<i>Deliveries</i>	<i>Production</i>	<i>Deliveries</i>
	<i>1936</i>	<i>1936</i>	<i>1937</i>	<i>1937</i>
<i>January</i>	484	587	34	51
<i>February</i>	487	309	7	33
<i>March</i>	295	418	29	47
<i>April</i>	185	364	22	34
<i>May</i>	206	326	150	159
<i>June</i>	350	323	55	73
<i>July</i>	308	233	28	28
<i>August</i>	63	38	71	30
<i>September</i>	167	176	61	71
<i>October</i>	34	47	1	18
<i>November</i>	0	5	0	10
<i>December</i>	57	13	0	10

Source: FMI Archives, Barcelona

4. Agency problems: the role of Ford during the war years

4.1. Agency problems

This section illuminates the head office and subsidiary's position as regards the decisions and policy to be adopted during the period as well as the subsidiary

⁴⁶⁰ Ibid.

manager's position (who had left the country) before the firm's assistant manager and his performance (within the country during the years of the conflict).⁴⁶¹

The core idea of the principal-agent literature is that managers of the firm can have interests that differ from those of the owners, and that the latter may have only a limited capacity to control what the former are actually doing. However, principal-agent analysis extends beyond the problem of stockholders' versus managers' interests to embrace the interactions among managers of different categories and even to all employment relations within the firm. Also, conflicting ideas and interests of different managers within a firm can prevent a firm's management from functioning smoothly.⁴⁶² This section explores the way in which the firm co-ordinate economic activity in the face of information problems and disagreement among managers within a business unit.

When in Barcelona the Loyalists seized both Ford and General Motors they assured Ford managers that the company property would be protected, and expressed their appreciation that, in contrast with General Motors, which had closed down,⁴⁶³ Ford would remain open and was "paying the wages and salaries decreed."⁴⁶⁴ They promised that when the war ended, their control would also cease, and Ford would be "the master of the market as it deserves."⁴⁶⁵ The workers, through anti-fascist committees, controlled the Ford plant in Barcelona; the assistant manager was there to protect Ford property and advise on production. However, the general manager, who had gone to England and then to Lisbon, had

⁴⁶¹ For more theoretical underpinnings on performance and choice see, for example, Lane *et al.* (1996).

⁴⁶² A good introductory summary to principal-agent problems is Milgrom and Roberts (1992). See also Fama (1980); Fama and Jensen (1983).

⁴⁶³ The GM plant remained in Republican hands until close to the end of the war when Barcelona fell to the Nationalist forces. GM never considered re-supplying its plant in Barcelona during the course of the civil war. However, the company did not let the loss of its factory and confiscation of its stock impede sales to the Loyalist government. GM sold trucks to the Loyalists for cash: it had sold at least 3,500 trucks to the Loyalist government until September 1938. Elston (1976: 193-4).

⁴⁶⁴ Wilkins and Hill (1964: 261)

⁴⁶⁵ *Ibid.*

become a Francoist partisan and had instructed all Ford dealers in the national territory to sell cars and trucks to the insurgents. On the other hand, in London, the head office believed that Ford should sell to neither side. But FMI's general manager pointed out that if Ford refused to sell to Franco, who he thought was winning, the company would lose the trust of the new government. Finally, the head office agreed that Ford Portugal dealers could sell in Franco territory. The final outcome was that sales were made to both sides.⁴⁶⁶

The company's headquarters was in Barcelona, but this headquarters was controlled by the "*Comite de Industrias de Guerra de Catalunya*" (Catalan War Industries Committee) according to a communication sent by them to the "Factory Workers' Committee" dated August 18. Therefore, the headquarters of FMI as an independent company had ceased to exist, in the opinion of the general manager.⁴⁶⁷ Moreover, if the Chairman or the Board of Directors went there, they could not lay down any policies. "They would have been simply tolerated there, because it was their convenience to do so, as they can be useful to them. If the industry had been 100 per cent Catalan and they did not need us for further parts, they would have told everybody to get out long ago, as they have done with other industries located in Catalonia."⁴⁶⁸ However, the status of the company and the laws of Spain permitted the Board of Directors to meet in any place in Spain and in abroad countries. The company had already met in Paris and a general shareholders meeting could also be held away from Barcelona. The Board of Directors could decide the policies of the company supervision of dealers, sources of supply etc.,

⁴⁶⁶ In Barcelona, production sank to less than 50 units per month (against the 75 per day that were forecast in May 1936), but finally reached 150 in May 1937. Altogether, the Franco forces received 5,978 vehicles with spare parts from Ford Portugal. Wilkins and Hill (1964: 262).

⁴⁶⁷ "Jenkin's Report on Spanish conditions as affecting the Ford Organisation", 12 November 1936, Acc 38/Box 34, *Ford Archives*, Dearborn.

⁴⁶⁸ *Ibid.*, Acc 38/Box 34, *Ford Archives*, Dearborn. Accordingly, he had reported that "the Madrid and Catalan authorities had taken over the "Bank of Spain" headquarters in Madrid and branches in military controlled territory. Nevertheless, the Bank of Spain branches in military controlled territory continued to function and ignored any entirely orders issued at the headquarters in Madrid. The headquarters of the Bank in Madrid ceased to exist as an independent bank. The shareholders had no say and neither did the Board of Directors."

and were only responsible to the shareholders. The domicile or headquarters of the company, as far as company policies indicate the domicile, was naturally Barcelona.⁴⁶⁹

Moreover, as regards dealers supervision, out of a hundred and eighty dealers under Barcelona's supervision, FMI had ninety two located in territory occupied by the Nationalist authorities. These dealers could not get in touch with the Barcelona office, nor were they willing or able to carry out any instructions from Barcelona so long as FMI ceased to exist as such, and was under the control of the Catalan War Committee. Many of these dealers located in territory occupied by military authorities had represented Ford for more than fifty years and were the "backbone" of the Spanish organisation. Ninety per cent of these dealers had their entire resources invested in Ford's business. They were hard hit by the civil war and some of them were on the verge of ruin. However, they were ready to start their recovery if Ford intended to keep from bankruptcy and ruin. The number of these dealers increased shortly after to ninety nine, due to the fall of Madrid where Ford had seven dealers. The military authorities had issued a decree compelling all establishments and industries to keep open, to keep their full staff of employees with salaries and wages. The salaries or wages had to be paid even though the men were enlisted with the troops. This was similar to a decree issued by the Republican authorities. Therefore, Ford's dealers were obliged to remain open, pay wages and salaries and sustain their expenses as in normal times. However, they were not able to do business, because they had no spare parts to sell, no units to sell, and therefore they could not give service due to the lack of parts. By having parts they could at least have kept their men employed. These ninety nine dealers were represented roughly estimated about 4,000 employees. The FMI and the Ford policy had forced these dealers to have shops which meant workers. Dealers of other makers however only had showrooms and a parts department. Thus, their expenses were considerably lower than those of Ford dealers.

⁴⁶⁹ Ibid., Acc 38/Box 34, *Ford Archives*, Dearborn.

The military authorities of the National side thought that all foreign concerns, which had done business in the past in Spain, had to send representatives to Burgos⁴⁷⁰ and arrange to carry on business in the territory occupied by them. With regard to the Ford Company their attitude was that it should supply the parts of which there was a great shortage. They needed Ford parts for the trucks which were used for the transportation of troops, munitions, clothing, food supplies and ambulances. With regard to supplies from America or Britain the National military authorities did not understand Ford's attitude and thought that they were trying to be too strict by refusing to supply what was considered as war material. They had understood that "the Ford Company in Spain was Spanish." Therefore the military authorities attitude about everything Spanish was that one had to accept either one side or the other. They were claiming that no one could object about the outside companies shipping direct to Spain to Spanish dealers, except the Board of Directors of FMI, and they wanted to know what the directors were doing about it. They also claimed that as Ford Lusitania was a subsidiary company of FMI the directors of both companies could decide that the military territories be supplied from Lisbon, as there would be no opposition from the Lisbon Government. Moreover, as regards service and owner's positions, there were thousands of owners of Ford vehicles located in territories occupied by the Nationalists. Many of these owners' vehicles had been requisitioned by the military authorities, but many of them were still in operation by their owners and many had been returned by the military. It was the object of the military to requisition the cars and trucks of wealthy people and large companies. The vehicles belonging to people earning a living from them were left untouched. Such people were small freight transporters, taxi, and public service car drivers, doctors, salesmen, etc. Several thousands of these vehicles were then laid up for lack of services.⁴⁷¹

⁴⁷⁰ Burgos was the headquarters of the provisional national government.

⁴⁷¹ Ibid., Acc. 38/Box 34, *Ford Archives*, Dearborn.

Summing up whether to supply material or not, and why should not supply the 'nationals', the opinion of FMI's general manager was stated as follows. First, as far as compliance with the neutrality pact of non-intervention was concerned, automobiles and parts were not war material, but materials of peace and necessary for the normal development of any country and its transportation. Secondly, as regards shipments to dealers controlled by another company, he was of the opinion that the directors of FMI could give their approval to supplying dealers who for obvious reasons could obtain supplies from the Barcelona plant. Thirdly, the approach towards the non-partisan attitude was, according to him, a question of viewpoint. Undoubtedly, they would have become opponents of the Nationalists if Ford had refused to accept orders from dealers in their territory, and its plant in Barcelona was delivering parts and units to their opponents. If Ford USA or England had supplied its Barcelona plant with further material, to enable them to continue the assembly of incomplete units and continued to refuse the other side spare parts to repair vehicles in their territory, it would have been impossible to convince the national military authorities or Ford's dealers that they were not partisan. To be non-partisan, it was necessary to convince both sides that Ford was absolutely neutral. Even though they were under duress in Barcelona, their associated companies were not in this position. A fourth factor was the fear of reprisals from the Barcelona authorities. In this regard, there was a possibility that if Ford furnished parts and units to the nationalist territory, reprisals would have been made against their plant, stock, bank deposits, and Barcelona employees. The risk of the destruction of Ford's property there, existed whether it had supplied the opponents or not. And finally, consideration of Henry Ford's policy not to supply equipment for warfare was also made. On this particular point, Jenkins was aware of Ford's policy in regard to the use of his product for military purposes and not countenancing war in any shape or form. This was according to him the most difficult point to answer for. However, he was of the opinion that "if Henry Ford

was well informed of the actual situation in Spain, he would not consider the circumstances the same as a war between two nations or a political controversy."⁴⁷²

To sum up FMI's general manager was thinking that to better protect FMI's interest, to observe neutrality and keep both sides satisfied, the following procedure had to be adopted. It was recalled that the Barcelona authorities owed FMI 3 million pesetas. They wanted parts to complete trucks and which required 5,4 million pesetas owed to FMI (at the old exchange this was roughly \$700,000). FMI was to tell them that they had no spare capital in Spain, that FMI owed about \$3 million and that the English and American Companies were not disposed to ship any more unless it were paid for. The authorities were invited therefore to pay off their total indebtedness in pounds or dollars (140,000 Sterling Pounds or \$700,000).⁴⁷³ Every day they were releasing gold from the National Treasury and they had plenty of foreign exchange. In order to be neutral and non-partisan the Nationalist were to be told the same thing. The English and American Companies were not disposed to ship to Spain without receiving dollars or pounds. If the rebels wanted spare parts, they had to pay, otherwise not. This policy he thought would have kept everybody happy. FMI in Barcelona was controlled by English shareholders holding 60% of the shares. The Barcelona Light, Traction and Power

⁴⁷² In this regard, it is worth mentioning Jenkins opinion in his own words: "I have the greatest respect and admiration for Mr Ford's policy regarding warfare, but I do not think that the policy is intended for people struggling for life, liberty and religion (...) What I ask myself is: how long are we going to wait to supply this nationalist territory, which now represents 31 provinces out of the 49 Spanish provinces and the protectorate of Morocco? I hope and think that all of Spain will be in possession of the Nationalist by the end of January (...) The fact that Barcelona and other territories are still ruled by Communist and Anarchist forces, does not signify that the greater part of the people in these territories are in sympathy with the Reds. In every town and city taken by the Nationalists, the inhabitants, including workers, have acclaimed the nationalist troops, thankful that they have been freed from the red tyranny. The Nationalist government represents the true government of Spain, the will of the majority of the people and the traditions of the country." See Report on Spanish Conditions as affecting "Ford Organisation" by Geo Jenkins, FMI's General Manager, 12 November 1936. Acc 38/Box 34, *Ford Archives*, Dearborn.

⁴⁷³ "They will know that if they pay their debt in good money, which is what interests Dagenham or Dearborn, they will get the parts, otherwise not. They can get this money if they want to". Ibid., Acc 38/Box 34, *Ford Archives*, Dearborn.

Company which controlled the Spanish Company was going to claim for damages and losses. The Spanish telephone company that was Spanish, with large amounts of American investment, were also making a large claim for losses.⁴⁷⁴ If the company later had decided to make claims for losses or damages, either as a Spanish company or as a foreign controlled company, they would have been unable to collect these claims if they were voluntarily delivering materials to these authorities.⁴⁷⁵

On the other hand, London's head office sustained that FMI and all of its Executive Officers should abstain from any conduct which might be construed as partisan. "Your responsibility and mine is first of all to Spain as a nation, and afterward to shareholders and creditors who have investments in FMI."⁴⁷⁶

4.2. Manager's position before the War Committees.

From July 19, 1936, the factory of FMI, SA. was under the Defence Committee of 'Poble Nou'.⁴⁷⁷ This Committee was formed by members of the National Workers Confederation (CNT) and the Anarchist Federation (FAI).⁴⁷⁸ The Committee took over both the control and the management of the company. Consequently, following the legal provision of the Generalitat of Catalonia, the company was run by a large committee whose members were workers belonging to the two big syndicates, UGT (socialist) and CNT (anarchist), mainly the latter. At first, the

⁴⁷⁴ On ITT see, for example, Little (1979); on other British and American interests in Spain, see Little (1985).

⁴⁷⁵ "Jenkins' Report on Spanish Conditions as affecting the Ford Organisation", 12 November 1936, Acc 38/Box 34, *Ford Archives*, Dearborn.

⁴⁷⁶ Letter of Perry to Jenkins, 1 January 1937, Acc.38/ Box 38 # Spain, *Ford Archives*, Dearborn.

⁴⁷⁷ Poble Nou was the most important industrial district in Barcelona. See Nadal and Tafunell (1992).

⁴⁷⁸ As related before the Francoist policemen by José Diego Roselló, Chief Editor of "Revista Ford" and correspondent of several foreign press services. He had belonged to the "Juventud Patriótica" as a President of the University Section. He had acted as 'españolista' in the University of Barcelona against the FUE. During the Republic, he sympathised with Calvo Sotelo's ideas. After July 18 he did everything to gain control of the factory. Jointly with Eusebio Otero, he managed the obstruction and sabotage of production. *Ficha Policial y Declaración Jurada de José Diego Roselló*, 1 February 1939, Box 7557 #1936-39, *FMI Archives*, Barcelona.

administration of the company was characterised by a high degree of chaos. Several employees close to the former executives had decided, in accordance, with the former managers, to become members of the newly formed management of the company with the purpose to reduce the effects of such Committee. Their intentions were, on the one hand, to protect members sympathetic with the revolutionaries, and on the other, to hold up as much interference as possible of the Committee.⁴⁷⁹ They had organised armed security patrols. The assistant manager, for instance, had been accused of being a Franco spy. He had also been death threats from a former Ford employee.⁴⁸⁰

The management of the organisation had organised actions of support for the right wing workers of the factory sympathetic to the rebels. This support was made in three ways. First, they assured the entire salary plus supplies of foodstuffs for the families of the workers who were fighting in Francoist army. Second, the same assurance was made to those families whose members were in prison. And finally, if those workers died, their salary and supplies of foodstuffs were paid until the end of the war. They further gave support for escaping to the 'national' side as well as protection against army mobilisation. This argument was produced that, as members of an organisation that was producing army material, the workers were already mobilised, and thus exempt from being enlisted and forced to leave the factory for other destinies. These managers had argued further that the company was a foreign subsidiary and therefore it could avoid 'militarization', that they had facilitated the almost direct control of production and manufacture of war materials. It has to be pointed out equally that some members of the organisation in accordance with the management had promoted undiscipline and insubordination at the workshops to the point that the factory that in normal conditions had produced

⁴⁷⁹ Ford management was clearly pro-Franco. For instance, G. Jenkins had stated that "Franco forces are justified in defending themselves against the invasion of Russia to implant communism and atheism and against the criminal atrocities committed by the reds in Spain" Jenkins quoted in Elston (1976: 177-78). See also Little (1985: 259).

⁴⁸⁰ Ibid.

eighty units a day, had reduced its production to 1 1/2 a day. They had also reduced working hours from eight to six; moreover, the personnel was divided in two shifts, working for just three days a week, foremen had lost their authority, sometimes fifty per cent of the employees were ill without any control over the authenticity of such claims. Moreover, disagreements were fomented between the two trade unions, through long meetings that interrupted work for long periods of time. As regards the production of domestic material it was systematically 'sabotaged', with the result that in the first two years and half of war it was impossible to produce certain components necessary for the manufacturing of 1,000 units that were in stock. It could be argued, finally, that the working situation at the factory and workshops was characterised by a complete state of 'breakdown and demoralisation'.⁴⁸¹

Finally, in a situation of increasing salaries and prices, the management of FMI had adopted a policy of preventing any increase in salaries that could have meant the workers bettering their conditions. They only received a small bonus, while wages and salaries stood unaltered. Finally, the dealer network was under the tight control of the company in order to prevent seizures of material and assure the commercial life of the agencies.⁴⁸²

4.3. The plant's performance during the war.

The plant in Barcelona had produced some 96 trucks chassis during October 1936, which were taken by the authorities and used for war purposes. Moreover, there were in stock in Barcelona materials for 290 more trucks, but this stock was unbalanced and they were short of a number of parts needed to produce the trucks. The government "Committee of War" was very anxious to obtain these trucks, in order to harness them for the war efforts. They could not build these trucks unless they were furnished with the missing parts, therefore it was obvious that Ford was

⁴⁸¹ Ibid.

⁴⁸² Ficha Policial y Declaración Jurada de Manuel de la Asunción Dasi Molina, Dept. Account, Box 7557 #1936-39, FMI Archives, Barcelona.

saving this material for the time being. According to the report corresponding to the first quarter of 1937, the Catalan authorities already owed Ford 3,0 million pesetas for parts and units which they had seized from the Spanish Company, and they had not as yet paid them anything. They now wanted to take the other 290 trucks, which would represent at least another 2,3 million pesetas, rendering their total debts to FMI around 5,4 million pesetas.⁴⁸³

The factory was occupied by a large number of temporary workers headed by some members of the Board of the Syndicates who, with guns in their hands, forced their way towards FMI's offices to get their work badges where violent discussions took place between the representatives of the two Syndicates (CNT and UGT). Government power was meant to emanate from the workers as represented by the two Syndicates, CNT and UGT. Ford wanted to avoid further trouble with the Authorities. Finally, it was agreed that the company would pay 112 ptas per week to each of the temporary workers.⁴⁸⁴ At a meeting held in the Office of Ford Motor Ibérica between its management and representatives of the two Syndicates CNT and UGT to discuss and resolve the status of all men that were working with FMI as temporary workers up to July 17, 1936 these Syndicates did not in any way permit that, at that moment, any difference exist among the working classes. The Control Committee therefore had decided to proceed as follows:

First that all men who had worked for FMI up to the July 17, 1936 be admitted as fixed workers as from March 3, 1937; this condition not being applicable to those workers whose contracts expired before the July 17, 1936. And secondly, that those men enrolled in the army and working in the repair-shops on the battle fronts

⁴⁸³ "Jenkin's Report on Spanish Conditions as affecting Ford Organisation", 12 November 1936, Acc 38/Box 34, *Ford Archives*, Dearborn.

⁴⁸⁴ Letter of Ubach to Perry, 6 March 1937, Acc. 38/ Box 38 # Spain, *Ford Archives*, Dearborn. Regarding factory activity, production for the month of February was only 7 trucks chassis, 34 units worth having been delivered. There were orders for 85 units, 70 of which had to be produced.

would have no excuse for abandoning their current duties in order to come to work for Ford, but they would have the same rights as the others and their places would be reserved until their work in the battle fronts was concluded.⁴⁸⁵

Table 5-6. Personnel taken off from the pay roll during the Civil War

<i>Date dismissed</i>	<i>Time Unpaid</i>	<i>Monthly Income</i>	<i>Total Unpaid</i>
<i>Dismissed by the revolutionary committee</i>			
08/08/36	30 months	770	23100
08/08/36	30 months	690	20700
08/08/36	30 months	515	15450
01/08/36	30 months	900	27000
			escudos
<i>Left voluntarily. They claimed to have joined the National Army</i>			
26/09/36	28 months	960	26880
10/10/36	27 "	535	14445
30/11/36	26 "	515	13390
08/08/36	30 "	600	18000
03/10/36	28 "	635	17780
11/09/37	17 "	840	14280
15/10/37	16 "	515	8240
<i>Imprisoned by the Republican Army</i>			
05/09/36	29 months	690	4830
<i>Left voluntarily. No claim</i>			
19/12/36	25 "	900	22500
11/06/38	7 "	840	5880
18/07/36	30 "	500	15000
Total			267485

Source: Box 7534, FMI Archives, Barcelona

⁴⁸⁵ Control Committee of Ford Motor Iberica, formed by representatives of the syndicates of the automobile industry of the CNT (Anarchists), UGT (socialists) and War Industries of the Catalan Department of Metallurgical Factories, February 25, 1937 in Acc. 38/ Box 38 Spain, Ford Archives, Dearborn.

4.4. Ford's financial position and the consequences of the war

The conditions in Spain were changing and, in London's opinion, the time had arrived when arrangements had to be made for the supply of Ford products to the portion of Spain which was not an arena of war.⁴⁸⁶ According to all reports, a large part of the peninsula controlled by the Nationalist forces was striving to resume industrial activity. There existed in Spain an organisation known as Hisma, which had an "opposite number" in Germany known as Rowak. These organisations had made it their business to barter German products for Spanish products, and to collect and provide the funds necessary to carry out such transactions through individuals.⁴⁸⁷

Unfortunately for the company, its funds could not be withdrawn from Barcelona at that moment, but FM had assets in other parts of Spain, and it was for the specific purpose of mobilising these assets and using them that Ford actively campaigned. No Ford product had been supplied to Barcelona since the outbreak of the war. Before there was any form of control, all the Company's stock of finished vehicles (in excess of 200) was stolen. Since the authorities in Barcelona established some form of control, the works had been commandeered and approximately 4,5 million pesetas worth of Ford products had been taken by the authorities, in addition to which, wages had been consistently and continuously paid in accordance with the instructions mentioned above.

The goods, and the substantial balance of FMI's inventory, represented, from London's point of view, real losses. It should be emphasised, in Perry's opinion, that the Ford Motor Iberica incurred very heavy foreign liabilities in its endeavour to accede to the policies and desires of the Republican Government. The American and Canadian Ford Companies, from whom most of FMI's imports were derived,

⁴⁸⁶ Perry to Diestel (Ford Motor Company A/G Koln, Germany), 1 January 1937, Acc. 38/ Box. 38 # fld Spain, *Ford Archives*, Dearborn.

⁴⁸⁷ On Hisma-Rowak see, for example, Catalan (1995: 211).

had decided, almost two years previously, that they would not ship any more goods to Spain, unless and until foreign currencies, sufficient to pay for the accrued indebtedness, were procured and foreign debts paid off. Ford Motor Co. Ltd, England, then guaranteed the payment of Spanish debts, and, solely because of that guarantee, FMI continued to receive necessary supplies, thereby enabling it to carry on the building up of Spanish industry in accordance with the explicit desires of the Spanish Republican Government.⁴⁸⁸

As has been emphasised, the civil war affected Ford in many ways: facilities, political persecution and repression, scarcity of petrol and spare parts, and inability to commercialise its products. Ford Iberica claimed an indemnity for all the damages caused by the military revolt (the company was under a Free Zone Regime since 1928 in accordance with an order of the Treasury Department dated March 25, 1927). The damages suffered by Ford as a consequence of the military revolt, were classified in damages which had produced definitive losses and speculative damages, the losses of which could not be exactly fixed.⁴⁸⁹

Damages causing definite losses were: first, at the time of outbreak of the military revolt, Ford had 190 new units under free zone regime which were confined or seized by people who had taken up arms to put down the rebellion. This confiscation constituted a definitive loss for the company. Second, similarly, spare parts and automobile accessories were seized by armed groups. Third, Ford Ibérica had a Credit Department which discounted bills of exchange covering part of the price of Ford units sold by its dealers, which bills were drawn by the said dealers, except the buyers, and endorsed to the company. Simultaneous to the discounting

⁴⁸⁸ Ford Motor Company Ltd had already paid, and had undertaken to pay a sum exceeding 350,000 sterling pounds, which was represented entirely by the assets in Spain which had been requisitioned by the Authorities, or remained in hand at the Barcelona factory. In addition to this, the debt owed by the FMI for goods supplied by FMC Ltd was 100,000 Sterling pounds. The English Company, therefore, in addition to its interest in the Capital of FMI, had provided the enormous sum of 450,000 Sterling pounds by supplying assembly and service stocks. See 4 January 1937. Perry to Ubach. Acc. 38/ Box 38 # ffd Spain, Ford Archives, Dearborn

⁴⁸⁹ See "Ford Motor Ibérica to Counsellor of Finances", Generalitat (indemnity and assistance fund), 5 April 1937. PRO FO 371/21307.

of the said bills by the company, dealers would transfer to the company those rights derived from the Retail sales contracts, the price of which was partly represented by the drafts in question. The said contracts had a clause referring to property rights, which stipulated that the units continued to be the property of the seller until the price of the same had been fully paid by the buyer. By virtue of the aforementioned transfer of rights, the Company was actually the proprietor of all the Ford units sold on credit, the price of which represented by the bills of exchange, had been reimbursed to the dealer. On February 28, 1937, the amount of unpaid discounted bills of exchange in the hands of the company, covering the price of Ford units sold on credit, amounted to more than eight million pesetas. Fourth, Ford Ibérica was debtor both to Ford Detroit and Ford England for material acquired from the two companies mentioned, which had to be reimbursed in dollars and sterling pounds. Since April 1935, the date on which the corresponding petition was filed with the Central Exchange Bureau for foreign currency to pay for the amounts owed to the aforementioned foreign companies up to the previous February 28, the top date was taken as a basis for the current claim for damages, the loss in exchange as per official quotation of the date amounted to Ptas. 4,4 million. This amount referred to the material already sold and the price of which was calculated on an exchange rate which had since been enormously exceeded, bringing about a loss which cannot be exactly determined.

Damages causing probable losses: Ford Ibérica had on July 19, 1936, a total of 20 units of its property on deposit in the hands of dealers. These units disappeared from the dealers premises as a result of seizure by anti-fascist organisation. Lastly, there were a large numbers of bills of exchange, discounted to dealers, in the hands of Ford Iberica on its bankers, which had not become due but which as they reached maturity were not being paid.

To sum up, the amount of damages suffered by Ford were: first, damages caused through seizure of Ford units at the Free Port of Barcelona: US\$ 20,3 thousand; Can\$ 25,0 thousand; Sterling Pounds 6,9 thousand; German mark 5,1 thousand;

Ptas 746,5 thousand. Second, seizure of parts and accessories which were in shops and warehouse: US\$ 280; Sterling 12 ; Ptas 32,611; German mark 108. Third, default in payment of bills discounted by the company: Ptas. 8,0 million. Four, differences in exchange and the depreciation of the Peseta in foreign currency up to February 28, 1937 Ptas: 4,4 million. Five, probable damages caused through seizure of units in the hands of dealers under the Credit Stocking Plan: US\$ 41,249; Can \$ 10,050; Sterling Pounds 6,692; German mark 3,141; Ptas 654,994. And, six, probable damages caused through non-payment of bills of exchange discounted by Ford Iberica which had not yet become due Ptas. 4,7 million.⁴⁹⁰

6. Conclusion

The present chapter has reviewed the entire decade of the 1930s. Two clearly differentiated periods separated by the outbreak of the civil war have been considered. Firstly, it has argued that the company entered the decade with good perspectives in spite of the world economic crisis. On the one hand, the Spanish policy of partial nationalisation was promoting the incorporation of domestic components in the construction of Ford units. On the other, within the Ford's strategy for Europe, the Barcelona's subsidiary was called to play an important role. To this end, they had planned to enlarge its facilities by erecting a new manufacturing plant. Then, in the second part, the chapter has turned to the civil war. It has argued that the war significantly changed the co-ordinates governing the activities of the company; moreover it changed the control and management of the company. In effect, first the general manager left the country (he would never return) and tried to run the company from the FMI's subsidiary in Portugal, second the assistant manager was then in charge of the company, though, control was ultimately taken over by the War Committee (Trade Unions). Therefore, the management of the company was split into three part: the Spanish assistant manager, the War Committee and the London office run by Percival Perry, the

⁴⁹⁰ Ibid.

President of FMI, each of them with different points of view. The final outcome was that the company was almost unable to carry on its activities. This was promoted by the management itself, in effect, by the purposeful fostering of an internal lack of discipline. Facilities, however, did not suffer very much.

Chapter Six. Economic Nationalism, State Intervention and Foreign Investments: Ford in Spain during the Second World War (1939-1945)

1. Introduction

Things were not the same after the civil war. The almost immediate outbreak of the international conflict and the political and economical options of the new regime changed the governing co-ordinates of the country. In this context, it could be stated that the experience of Ford in Spain represents an interesting case study of the situation and activities of foreign private enterprise during Autarky.⁴⁹¹ The political system which emerged after the Civil War (1936-39) sought to make Spain industrially self-sufficient, especially in the so-called "strategic sectors" and those related with defence. Moreover, in a situation of scarce resources, during and after the civil war, the promotion of state-owned enterprise was made to the detriment of private enterprise.⁴⁹² In many cases, the prejudice of the state leaders against private ownership went beyond any economic rationality. This policy was effective during the two governments with Suanzes as a Minister of Industry and Commerce (1938-39) and (1945-51) and his presidency of the National Institute of Industry 'INI' (1941-1963).⁴⁹³ It can be stated that Spanish business of the forties and early fifties, maintained and promulgated by the official authorities, was full of patriotism. This state of affairs, characterised by a strong nationalistic feeling, prevented foreign companies from adapting themselves to the new environment. After a period of disastrous results in 1954 with stagnant production, Ford Motor Company abandoned its Spanish interests. It did not return until the 1970s when a new state strategy more open to foreign capital allowed the establishment of

⁴⁹¹ There were also other interesting cases of foreign concerns during autarky apart from the Ford Motor Company. For example, on Rio Tinto, see Mendoza (1994); on ITT, see Little (1979, 1985).

⁴⁹² Carreras *et al.* (1997).

⁴⁹³ Schwartz and Gonzalez (1978), Comín and Aceña (1991).

multinational enterprises and therefore the modern development of the motor vehicle industry. It will be argued that these decades are decisive to understanding most of the country's backwardness.⁴⁹⁴ Indeed, the decisions adopted during the period of the World War II had consequences in the long run. The economic growth guidelines promoted by the first Franco regime period from the end of the civil war meant a breaking point with the development path of the two previous regimes, i.e. the Restoration and the Republic. Not only did it lose the ground gained with respect the industrialised countries during the first three decades of the century, but even more importantly it changed the structural basis of the Spanish economy which has subsequently conditioned her economy until recently. This structural modification came through a complete break with the parameters of successful business. Accordingly, the roots of contemporary Spanish backwardness have to be found, above all, in the origins of the Francoist regime and the decisions adopted freely by the Spanish authorities of the moment.⁴⁹⁵

The present chapter describes the history of Ford Motor Company during the years of Second World War, that coincide with those of autarky and intensive economic nationalism.⁴⁹⁶ It will stress the close relations that Ford managers, both from the home office and the Spanish subsidiary, had to have with the military authorities that sprang from the civil war years. In the first place, the company was a clear exponent of foreign capital in an industry considered strategic. However, because Ford did not give support to Franco, its position after the war was weak with

⁴⁹⁴ Catalan has studied the impact of the Second World War in the Spanish economy from a comparative perspective. He points out, after examining the costs and benefits of the external conflict and the position of the European neutral economies, that the Second World War, even more than the First World War, implied a frustrated episode for the Spanish economic development. In effect, the Francoist regime, on the one hand, boosted an economic and social policy inspired by those adopted in Nazi Germany and Fascist Italy from the mid-thirties and, on the other hand, they adopted a foreign policy favourable to both countries during the first years of World War II. Catalan (1995).

⁴⁹⁵ Catalan (1995).

⁴⁹⁶ There exist different interpretations as regards the Spanish autarkic period. Here the term autarky refers only to the first years of the Franco regime. The term 'economic nationalism' embraces a broader perspective.

respect to other initiatives.⁴⁹⁷ Second, the chapter studies the relations between, on the one hand, the government of General Franco and, on the other, the parent and subsidiary firm in the context of the Second World War. Moreover, it will be worth noting the repercussion of the autarkic policy on the performance of the company, such as the establishment of a complex control system that through bureaucratic intervention aimed at the preservation of the business for the newly created state owned companies sponsored by the INI.

It has already been stated how the civil war affected Ford in many ways such as facilities, political persecution and repression, scarcity of petrol and spare parts, and commercialisation of its products (see chapter five). An increasingly exhaustive bureaucracy surrounded foreign transactions, whilst price control and sales quotas were the priorities of the new regime. As a result, the civil war brutally changed the framework that governed the Spanish economic and business life. Thus, Ford and other foreign companies were unable to adapt themselves to the new forms that ruled the way of doing business in the country.⁴⁹⁸ These new forms, created by the strong economic nationalism, caused the ineffective operation of the old established companies. Three important reasons for this inefficiency have to be

⁴⁹⁷ For example, the relations of GM with the Franco regime were very favourable. The company engaged in a large scale trade with the rebels both from its American and German factories. Germans exports of GM were handled through Hisma-Rowak and received automatic payments in marks. American exports were financed through long term credits. Some of the Spanish debts to GM were to be paid off after the end of the war by deducting customs duties from all GM imports in post-war period until accounts were even. Other payments were made in monthly instalments in unexportable pesetas. GM's peseta holdings were often used to purchase other Spanish goods, through Hisma-Rowak, for export and conversion into dollars and pounds. Moreover, GM Peninsular, once reorganised at San Sebastian to supply the market of the Franco Spain, established close relations with high officials of the Franco regime. In 1938, GM was asked to organise the entire transportation system of rebel Spain. The company was clearly establishing a strong position in Nationalist economy which could easily be carried over into the post-war period. See Elston (1976: 194-5).

⁴⁹⁸ In relation to this economic nationalism some characteristics should be pointed out, such as the increased level of control, barriers to entrance, absence of competition, and consolidation of sectorial 'status quo'. Moreover, the period from the end of the civil war to 1959 was characterised by strong regulation and control over commercial and financial operations with the outside, direct control over the internal agents, regulation of prices and salaries, regulation of the creation of companies and regulation of the supply of raw materials. See García Delgado (1985).

pointed out: first, the absence of a strong growth "mentality"; second, a strong centralisation of decision-making, which in turn provoked further difficulties in the administration, management and human relations; and third, inefficient co-ordination of labour.⁴⁹⁹

The implementation of strongly nationalistic economic policies and the eruption of new forms of business style were determinant for the performance of the already established foreign concerns. In the Spanish case, autarky and intervention are two phenomena which cannot be separated when discussing the Spanish post-civil war economy. The intervention was originally justified because of the necessities of the civil war. However, it continued even after the war, with the Francoist regime claiming intervention was necessary to protect the Spanish economy from the effects of the Second World War. Despite this claim, the economic authorities of the regime, far from eliminating the existing controls at the end of the Second World War, kept them with more or less the same intensity for at least fifteen years.⁵⁰⁰

To sum up, the role of the government was one of the most influential factors in the poor performance of the Spanish business economy.⁵⁰¹ After the civil war the State became responsible for a great deal of the new business promotion.⁵⁰²

⁴⁹⁹ García Delgado (1985). It is important to emphasise how the environment changes and modifies forms and modes of businesses. In effect, as stated elsewhere, "individual motivations thereby still exert propulsive forces on the system and in this sense there is still teleology in the system. But this is simply the view from the individual's perspective. When one stands back, the formation of these objectives itself is the outcome of a complex set of historical forces; and the way that individual actions sum together may produce outcomes that none had intended. The problem facing the social scientist, therefore, is to explain these habits and propensities in terms of the institutional environment which gives rise to them, and provide an explanation of the manner in which the institutional environment itself evolves as a result of these habits and propensities." See Argyous and Sethi (1996: 477).

⁵⁰⁰ Gómez Mendoza (1994).

⁵⁰¹ Clavera *et al.* (1978), González (1979), Braña *et al.* (1983).

⁵⁰² Within the frame of the Industrial Law Regulation between 1939 and 1941, an industrial system of norms was established with two main objectives: first, a long term interventionism, and, second, import substitution or autarky. The law of "Industries of National Interest" of October 24, 1939, incentivised investment in those activities considered strategic for the national economy through classical instruments such as tax benefits, grants and market quotas.

Foreign capital was strongly limited and many companies were nationalised. These nationalisations took two forms. On the one hand, "nationalisation" strictly speaking meant the transfer of property rights from private enterprise to the state-owned firms.⁵⁰³ On the other hand, in a broader definition, "nationalisation" meant the process through which the property of a private foreign company followed into the hands of a private firm whose capital was in the majority held Spanish capital.⁵⁰⁴ How did this process affect the foreign firms operating in Spanish territory? What were the consequences of Franco's autarkic policy? The remainder of the chapter will try to answer these questions by looking at what happened to Ford in Spain during this period.

The interventionism during the period of the Second World War, was originally justified by the necessities of the civil war, though once the war ended, intervention did not disappear. Indeed, the Francoist regime sought justification to maintain its intervention in the need for protecting the Spanish economy from the effects of the Second World War. This is of special relevance because the particular historical course of each nation's development creates a political economy with a distinctive institutional structure for governing the markets for capital (which includes the market for companies), markets for labour (which includes markets for managers) and the state as the market for rules.⁵⁰⁵ That national institutional structure shapes the dynamics of the political economy and sets the boundaries within which government policies and corporate strategies are chosen. As Chapter One has already pointed out, there are several ways of organising market economies, and

The other important law was that which created the National Institute of Industry (Instituto Nacional de Industria, INI). See Farre (1986).

⁵⁰³ See, for example, Myro Sánchez (1987).

⁵⁰⁴ See Gomez Mendoza (1994). He uses the term "nationalisation" in the sense of giving national character to a thing, in order to illustrate the transfer of the property of a private foreign company to a private firm with majority of Spanish capital, as was the case with Rio Tinto in 1954 and also Ford, in the same year. He is conscious that in the strict sense nationalisation usually means transfer of the property rights from a private enterprise to a public firm as a result of a legislative measure. The "nationalisation" of both Rio Tinto and Ford was a result of the convulsion of the Spanish social and political environment after the Civil War.

⁵⁰⁵ Zysman (1994: 243).

the institutional approach considers that markets are embedded in political and social institutions, and created by government and politics. Thus, markets do not exist or operate apart from the rules and institutions that establish them and that structure how buying, selling and the very organisation of production takes place. Historical institutionalism frames problems and provides answers to puzzles that concern microeconomic-based institutionalism. The institutional structure induces particular kinds of corporate and government behaviour by constraining and by laying out a logic to the market and policy-making process that is particular to that political economy. These typical strategies, routines approaches to problems and shared decision rules create predictable patterns in the way governments and companies go about their business in a particular national political economy.⁵⁰⁶

The remainder of the chapter is organised as follows. Section 2 is concerned with the aftermath of the Civil War. Section 3 introduces the topic of foreign concerns under autarky. Section 4 turns to the first governmental attempts to the development of the motor industry as well as Ford's interests in this regard. Finally, Section 5 looks at the problems of running a business during World War II.

2. The aftermath of the Civil War

Official interpretations of Spain's poor economic performance in the first decade after the Civil War usually put the blame on factors beyond the control of the Spanish authorities such as the three years of civil conflict, the Second World War, and the ostracism of the international community after 1945. Yet to most Spanish economic historians, such explanations are little more than 'post hoc' excuses for failure,⁵⁰⁷ since, many industrial sectors (textiles, chemicals and metallurgy in Catalonia) were hardly affected by the war.⁵⁰⁸ The fundamental cause of the

⁵⁰⁶ The focus is on the historically rooted national institutions which frame choices of individuals and structure the terms on which issues such as agency and contract problems are confronted. See Zysman (1994: 245).

⁵⁰⁷ Harrison (1993: 17). The following account is based on Harrison (1993) and Lieberman (1995).

⁵⁰⁸ Catalan (1989, 1995).

undistinguished economic record of the new regime, particularly in the first decade of its existence, was the Francoist authority's obsession with interventionist schemes aimed at bringing about some form of self-sufficiency. Major economic decisions, meanwhile, were largely entrusted to a group of army officers and military engineers who tried to run the country with military criteria.⁵⁰⁹ The opportunity cost of their pet projects was of little or no concern to them. Technical feasibility was the paramount criterion when it came to policy making.⁵¹⁰ The regime's autarchism imposed arbitrary bureaucratic controls to any decision, even the most trivial one.⁵¹¹ Likewise, after the civil war, and for twenty years, the State became principally responsible for the financing of projects. Foreign capital was strongly limited and in many cases industries were nationalised. Moreover, the role of the Spanish banks increased dramatically. The "status quo" in the banking sector (the creation of new banks was prohibited from 1936 to 1963) and the lack of foreign competition allowed for high banking profits and for them assuming a more central place in Spanish economic life.⁵¹²

García Delgado has referred to this first period of Franco's regime as "the night of Spanish industrialisation", a period during which Spanish industrial production stagnated and was unable to surpass the level it had attained in 1929. The indices computed by Carreras show that post-Civil War Spanish industrial output only exceeded that attained in 1929 in 1950. For García Delgado, "the night of Spanish industrialisation" represented not only the end of a long and sustained period of slow economic growth which was maintained from the last third of the nineteenth century to the end of the first third of the twentieth, but also because it widened the gap separating the growth path of Western European economies from that of Spain. It forced Spain into greater relative economic backwardness. The Franco government did away with independent labour unions, deprived workers of their

⁵⁰⁹ Catalan (1989); Carreras (1989).

⁵¹⁰ Harrison (1993).

⁵¹¹ Harrison (1993: 17-18).

⁵¹² Carreras and Tafunell (1993, 1994).

legal right to strike, fixed salaries and wages and lost valuable human capital in emigration.

According to Fontana and Nadal, the Second World War, which immediately succeeded the Civil War, drastically reduced the invisible assets of the balance of payments (emigrants' remittances and capital imports).⁵¹³ Under such conditions, imports could only be financed by equivalent exports from 1939. The problem was made even worse by an inflationary internal policy and the maintenance of overvalued exchange rates, retained for traditional prestige reasons, which put obstacles in the way of the export of home products, calculated in gold pesetas at a fixed value, the total (exports plus imports) of Spanish foreign trade, which already had decreased to 35.9% in 1931-35 of the figure applicable for 1926-30, reached a nadir in 1940-44 (29.7%). This drastic reduction of foreign trade was the dominant feature of the whole economy.⁵¹⁴

Two industrial laws, both enacted in 1939, clearly expressed the strong support given by the Franco regime to economic autarky. The first of these laws was the Law of Protection and Development of National Industry of October 24, 1939. The preamble of this law stressed "the capital importance in the life of the nation of the availability in the home territory of industries necessary for war and of the primary resources indispensable for life". It further added that the post-Civil War economy would have to engage in "considerable efforts to liberate Spain from imports of foreign products, which could be produced or manufactured by our nation". One of the principal objectives of the law was to induce Spanish private enterprise to produce most goods which until then had been imported; it was thought that the failure of Spanish producers to do so in the past was due to a lack of proper incentives in the form of economic privileges. These privileges were to be extended to domestic firms that would be declared to be of 'national interest'. Firms so designated by the government were to receive significant advantages for a

⁵¹³ Fontana and Nadal (1976:503-4).

⁵¹⁴ Lieberman (1995:26).

period of fifteen years: their taxes would be reduced by as much as 50%; they were entitled to acquire land under the power of eminent domain; they could import needed machinery and equipment under special customs treatment; and the government guaranteed a minimum return of 4% on invested capital when the latter did not exceed 7% of their capital, and one half of the excess would have to be paid to the government.⁵¹⁵

The second industrial law was that of November 24, 1939, known as the Law of Regulation and Defense of National Industry. The law purported to 'create a prosperous national economy, free of dependence on abroad, able to re-evaluate national primary resources'. Article 10 of this law provided that all public enterprises and all private firms receiving any type of economic benefit from the government would use exclusively in their production and distribution processes domestically produced inputs, except when needed inputs were not produced or were available in Spain, or when, though available, domestic inputs were not of a suitable quality. The law forced many Spanish firms, both public and private, to purchase domestically produced inputs at prices much higher than those prevailing on world markets. Another major goal of the early Franco administration was to create a state holding company, capable of developing large-scale industrial enterprises which the private sector was unable to finance or to manage.⁵¹⁶

Therefore, after 1939, there was an actively developing group of public companies in the industry and the tertiary and nationalising "strategic" sectors.⁵¹⁷ However, the interventionist system performed very poorly. Finally, the liberalisation of 1959 put an end to the experiment. In 1964, a new planning policy was implemented which developed barriers to entry, organised privileged credit channels and promoted mergers for a few 'strategic' sectors. These sectors were those where we find the big manufacturing firms of 1960 and 1974.⁵¹⁸ Consequently, it is

⁵¹⁵ Lieberman (1995: 29).

⁵¹⁶ Lieberman (1995), Schwart and Gonzalez (1978), Comín and Aceña (1991).

⁵¹⁷ Carreras and Tafunell (1993, 1994), Carreras *et al.* (1996).

⁵¹⁸ Carreras and Tafunell (1993, 1994).

possible to argue that the rise of public enterprise constitutes the main discontinuity in one century of Spanish big business.⁵¹⁹ The Spanish 'national enterprises' were created with autarchic goals and without parliamentary consent. They were thus quite different from the other Western European public firms.⁵²⁰

To sum up, the state intervention after the Spanish Civil with its autarchic and isolationist economics opened an era of small and less competitive firms; definitively smaller than the large previously private ones.⁵²¹ The inheritance of the Francoist period marked and shaped the nature of Spanish business development. This inheritance was reflected in economic, political and social fields; in the regulating and legislative framework, of labour relations and, most importantly, in the development of a managerial and business class influenced for too long by bureaucratic restraints and military officials of the dictatorship. All this consequently isolated Spain from its European neighbours.⁵²²

3. Foreign concerns under the autarkic regime: the case of Ford

3.1. The immediate consequences of the War: the government's initial approach to the motor industry and its negotiations with Ford. (1939-1940)

When Franco's army captured Barcelona in July 1939, the company had reported as follows: "the entrance of Franco's troops to Barcelona, which took place on the January 26, 1936, found our Plant entirely vacated by our personnel since the previous day at noon, when in view of the circumstances Ubach had ordered all employees to go home and stay home. The troops entered Thursday and Friday morning. FMI's assistant manager was summoned to the plant by the military authorities who had sent a car for him, and requested him to call everybody back to work, which was gradually done between Friday, Saturday and Sunday (on which

⁵¹⁹ Carreras *et al.* (1997).

⁵²⁰ Carreras and Tafunell (1993, 1994).

⁵²¹ On different approaches to state intervention see, for example, Shapiro (1994).

⁵²² Serrano Sanz and Costas Comesaña (1990).

days they had worked) and Monday when all employees in town attended to their duties. Captain Sheriff, an old employee of the company, was put in charge of the plant for some fifteen days, after which he was withdrawn and Ubach was put in full charge of the plant.”⁵²³

It can be firmly stated that the conflict had been disastrous for Ford. In 1936, the company (together with most of the country) had entered into the “dark tunnel” of autarky. Ford did not exit from this tunnel until 1954, when it abandoned its financial interest in the country. Therefore, it suffered almost two decades of difficulties dealing with an abnormal environment. Three different kinds of adverse consequences are worth noting. First, in terms of figures, the 7.6 million pesetas in profits brought forward from 1935 against the wartime losses of 1936-1939 resulted in a total deficit, at the end of 1939, of nearly 11.7 million pesetas. However, even more important and transcendental would be that the plans for erecting a new manufacturing plant were indefinitely deferred. Second, as regards human resources, Ford had also lost, for various reasons, an important part of its staff; the following executives had broken with the company since July 1936, when the Spanish Civil War began: the manager, the chief clerk, the head of the sales department, the assistant superintendent, the head of the service department, the stock superintendent, the head of the advertising department, car distribution, the head of the tractor department, the chief inspector and the credit department head. Third, the war also left a legacy of government ill-will. Franco disliked the company because it did not give him his war supplies on credit, as did General Motors, Chrysler, and other American firms.⁵²⁴ This ill-feeling persisted for many years. The Spanish authorities insisted that it was well-known in all Government circles that “Ford had not helped White Spain (sic) as much as the competition.”⁵²⁵ According to the information of high official offices of the new government, Ubach

⁵²³ Ubach to Perry, March 13, 1939, Box 7531, # Perry/Cooper, *FMI Archives*, Barcelona.

⁵²⁴ Wilkins and Hill (1964: 262).

⁵²⁵ See memorandum of the interview with Juan Antonio Suanzes, Minister of Industry and Commerce at Bilbao, June 5th 1939 in Acc.608/Box 3, *Ford Archives*, Dearborn.

reported to the home office that Ford organisation had lost its prestige in National Spain and "*much will have to be done to regain our prestige*". Ford's unfortunate position in the face of the government was mainly due to the fact that whereas (in the first year and half of the Spanish war) the government had purchased Ford units at comparatively high prices, strictly on a cash basis, General Motors was selling several thousand units on term and at lower prices than Ford's.⁵²⁶ Moreover, the commercial organisation also suffered the consequences of the war. Before the war and during the whole inter-war period Ford had approximately 300 dealers throughout the country. At the end of the war, dealers' establishments in the small towns still existed, but stocks had disappeared and most dealership had no assets left. According to the head of the credit department, 56 per cent of the dealers were in good conditions, 18 per cent fair, while 9 per cent had died.⁵²⁷

In spite of the precarious situation, the company soon tried to re-launch its local Ford factory at Barcelona. In doing so they tried, first of all, to provide employment for its several hundred workers as well as the thousands of others from the approximately sixty Spanish manufacturers and suppliers.⁵²⁸ However, the company was facing problems of finding effective work for its existing employees. It is worth noting that this matter did not improve in the post-war years because the immediate international conflict slowed down all possible improvements.

The home office was also concerned with the problems affecting its subsidiary in Spain. Despite appreciating FMI's difficulties, however, it had been pointed out that they could not lose sight of the fact that: "no Company can keep on sustaining an excessive staff." Moreover, and though they were "aware that the present misfortunes of the commercial position are mainly due to the international situation" they were arguing "that it should not be a reason for using up the reserves of only those companies which happen to have reserves. The problem is a

⁵²⁶ See letter Ubach to Percival Perry, March 1939 in Box 7531, *FMI Archives*, Barcelona.

⁵²⁷ Report on "Dealers Organisation after the War", January 1940, Box 7531, *FMI Archives*, Barcelona.

⁵²⁸ See letter to Edsel Ford, 13 June 1939 in Acc.608/Box 3, *Ford Archives*, Dearborn.

very wide one. My own feeling is that the situation should be reviewed in order to minimise your losses. Would it not be advisable for you to ask your directors in Spain to meet and talk this important problem over again with a view to finding some solution."⁵²⁹

Ford representatives from England and the United States came to Spain to speak with the Minister of Industry and Commerce,⁵³⁰ and see what the government's plans were for the industry, as well as the chances for an early restart of the factory at Barcelona. The minister stated that Spain was without gold or foreign exchange, the balance of trade before the war had for many years been unfavourable, and that, although there was a tremendous need for everything, Spain simply could not afford to import anything that it was in a condition to make. In addition, the minister's belief was that automobiles and trucks could and had to be made in Spain. On the other hand, Ford representatives had pointed out that, prior to the war, they had purchased 50 per cent of their product in Spain, and that they would resume doing so at once, trying to increase local purchases to the maximum as soon as possible, while providing badly needed transportation with the minimum expenditure of foreign exchange.⁵³¹ Moreover, the Company also offered an initial supply on a credit basis. However the Government's policy with reference to the automobile industry had not yet been definitely established, and it was the minister's personal idea that a "company should be formed under government sponsorship and should guarantee that foreign capital would participate to a maximum of 25 to 35 per cent." This would have been a monopoly with an estimated requirement of 40,000 units annually. This first plan regarded the use of Ford's local assets. Then, Ford representatives pointed out that at least five years would be needed to develop a manufacturing plant and that Spain needed

⁵²⁹ See Cooper, Office of the Lord Perry, to Ubach, Box 7531, in # Perry-Cooper 1940, 27 September 1940; *FMI Archives*, Barcelona.

⁵³⁰ The Minister of Industry and Commerce was a Colonel in the Army, and formerly an engineer and naval ship designer with very little commercial experience.

⁵³¹ See Memorandum of interview with Suanzes, 5 June 1939, Acc.608/Box3 *Ford Archives*, Dearborn.

employment and transportation urgently.⁵³² The Minister stated clearly that “the Army had suffered the War and the people would have to suffer now until Spain could build up her own industry.”⁵³³

The fact that the motor industry was considered strategic by the state meant that any establishment of new concerns or enlargement of previous ones had to have the authorisation of the state. In this regard it will be worth addressing the government’s policy with regard to certain vital industries, including the automobile industry. It had been outlined as follows: first, Spain had no gold or foreign exchange; second, operative companies would receive government financial support and guarantees, and even monopolies; three, capital needs would be discussed and agreed with the government and ultimately share capital would be spread among promoters, the trades directly interested, officials, public etc. No one section would be able to control. Fourth, directors would be selected from each section and the government would nominate a representative; five, the company would be required to work in close conjunction with the government so as to effect proper wage rates, proper provisions for amortisation and reasonable profit (varying according to the industry). And, six, foreign capital and technical assistance were required and special facilities would be given.

⁵³² According to Ford representatives, other automobile companies, including General Motors, were not interested in the proposition and it was doubtful if it could be developed as outlined. Nevertheless, San Roman (1995:158) has pointed out that, in 1939, a few months after the end of the civil war, the general manager of General Motors offered to introduce an automobile concern in Spain. The proposition was an immediate importation of 1,000 trucks and the establishment of two workshops, one in Barcelona and another in Madrid, followed by the construction of a big motor vehicle factory. The Spanish authorities made several objections to GM’s proposal and finally rejected it. The control of the firm was the main point of disagreement. The management of the firm should be in the hands of managers of State trust. See also Catalan (1995:153), who following Knoblaugh (1949), states that General Motors entertained the project, once the war was over, to construct a manufacturing plant in Barcelona with a capacity of 20,000 units annually. However, the Spanish government refused the proposal because it did not want a foreign company to have predominant control over such an enterprise.

⁵³³ Following paragraphs are based on the Interview with Suanzes, Minister of Industry and Commerce, June 1939 in acc. 608/ box 3, *Ford Archives*, Dearborn.

The government enumerated these facilities under the six following items: first, capital could be in the form of cash, machinery or materials or a combination of any of them. Second, foreign participation in the share capital of any Company would be limited to 25-35% and a reasonable return, say 5% would be permitted. Third, any balance of foreign value could be repaid over a period of 10 to 15 years. Interest and repayment would be guaranteed by the government. Fourth, with regard to technical assistance, the cost of this would be guaranteed by the government and the amount would be spread over the cost of the manufacture in agreement with the Government. Fifth, while improvements were desirable, the government would "go slowly" for a few years so as to cushion the plan provided. Spain would have to do without most modern things for a period of few years. The government would give the necessary protection to industries against competition. And finally, if the industries could provide export business this would be welcome and the government would not interfere in the export market.

With regard to the automobile industries, the government "was prepared to grant a monopoly to one company as they did not desire the usage of a variety of types." Likewise, they desired a Spanish factory "not in Barcelona but somewhere in Northern Spain-Vitoria." However, while the Government wished to proceed with "speed", Ford realised that no scheme could be completed in less than three to five years. The economic cost of production was of great interest to the government, and it supported the idea of buying locally but not approving a factory which was merely an assembly plant. In this sense, the Spanish government wanted the factory to make as much as possible. The Spanish market was believed to be approximately 40,000 units. Moreover, with regard to the Ford funds frozen in Spain, the Spanish government was prepared to discuss the use of these for the building of a factory. Discussion then centred around the problem⁵³⁴ of restarting the Barcelona factory at once, but the Minister hesitated to give consent because it would prejudice the success of his plans. It is worth noting that after the war,

⁵³⁴ Ubach to Perry, March 13, 1939, Box 7531, # Perry/Cooper, *FMI Archives*, Barcelona.

the Ford plant, as well as all other industrial properties in Catalonia, was under military control and an officer was nominally in charge. The only two motor vehicle factories in running condition had army licenses and the army provided the petrol. The Minister also mentioned sending an official to England and the USA to study automobile manufacture.

To conclude. As a result of the visit of Ford Motor Company's representatives from US and Britain, the Spanish subsidiary offered "its devoted co-operation to assist in solving the unemployment problem and its collaboration with the local authorities, with regard to the solution of the transportation problem." The offer was briefly contained in the following proposition: in order to be able to complete the 675 units still kept in the factory, the Ford companies were willing to ship immediately the necessary materials of foreign origin so as to add the same to national materials and labour, and thus help in solving the transportation problem. Evidence of this co-operation was found in the terms of payment for the imported materials, since a credit of six months was allowed, starting after the end of the first year. Moreover, the Ford directors did not limit themselves to put the motor industry into operation; it was their intention to resume the program of national production. They counted upon the co-operation of Ford England which was willing to ship to Spain the necessary materials for an additional lot of one thousand trucks to be assembled with Spanish materials according to their offer to the Ministry of Industry. Moreover, in order to assist the agricultural recovery of the country, they were also ready to ship one thousand tractors on compensatory terms.⁵³⁵

The difficulty with the above proposals, which the Ford directors pointed out in their conversations, was that General Motors was offering Chevrolet trucks to the Spanish Government at American prices, whereas Dagenham was quoting their

⁵³⁵ See Memorandum of interview with Suanzes, 5 June 1939, Acc.608/Box3 *Ford Archives*, Dearborn.

material at English prices, which were about \$150 higher per unit.⁵³⁶ Dagenham's contention was that England had always been the most important market for Spanish products and that it had again to become so and that, for this reason, even if their prices were higher than competitive products from America, the Spanish government should be willing to pay an additional amount for them. Ford believed that if Dagenham quoted higher prices than the competition, it would have created an extremely unfavourable reaction. In order to offset the unfavourable position in which the Spanish company was placed, they should have offered prices and terms at least equivalent to the competition.⁵³⁷ Furthermore, the English company's claim was considered by the Spanish government along with the claims of all other foreign creditors and without any preferred basis. While they realised that the Spanish Ford debt to Ford England had to be paid, consideration should have been given to the fact that Ford was dealing with a country which had just been through an exhausting experience, and with the unfavourable attitude of the new Spanish Government towards the Company, the proposition outlined above was certainly not likely to improve their disposition towards the Ford organisation.⁵³⁸

⁵³⁶ An order for another 1500 Chevrolet truck chassis was given to General Motors. After May 1938, General Motors obtained the following large orders: 1800 Chevrolet trucks in May 1938; 1200 in January 1939; and, 1500 in February 1939. The first order was sold on terms of 30 per cent in advance and the balance in seven monthly payments. The orders for 1200 and 1500 trucks were for payment in twelve monthly payments with no down payments initially. All of these orders were given to the General Motors because they had offered repayments over time instead of demanding cash payment. Other concerns, such as Fiat, Renault, etc. had also offered payments on instalments. The prices of the trucks sold by General Motors were \$685 CIF Bilbao on the 1800 order; and \$657 CIF Bilbao on the last two orders. Both of these sales were for trucks with certain commissions. The prices quoted by Ford were \$629 on the first 1800 and \$637 on the 1200 and 1500 lots. The Franco government was thinking of ordering 5000 additional trucks, which they needed very badly to solve their transportation problems, as a lot of the railway material had been destroyed, as had also many of their coastal steamers and many trucks. This made it difficult for the Franco government to transport merchandise and foodstuffs from one part of Spain to another. The 5000 trucks which they ordered were probably distributed in several lots, but preference was also given to those concerns who offered to sell them on credit. See letter to Cooper, 24 Feb. 1939, Acc.608/Box 3, *Ford Archives*, Dearborn.

⁵³⁷ See letter of Ubach to Sorensen, 16 May 1939, acc.608/box 3, *Ford Archives*, Dearborn.

⁵³⁸ Both Ford Spain and the Spanish Government were impressed with the fact that the primary consideration of the English organisation seemed to have been the Spanish Company's debt to them of approximately 2 million dollars for material supplied prior to hostilities. See Memorandum with Suanzes, *ibid.*, acc.608/box 3, *Ford Archives*, Dearborn.

3.2. Reviving the firm's activities

Ford Motor Iberica was contemplating reviving its activities after the war, by relying upon permits for importation of certain material secured by some of its dealers in consequence of compensation transactions involving cork and other exports. While these steps were helpful, according to the home office, they were not calculated to place the company in the leading position it should hold. Indeed, during his visit to Spain, Perry had urged the Spanish company to take the lead and endeavour to secure such business direct.⁵³⁹ Moreover, the home office did not necessary want FMI to rely upon the influence of its dealers to secure business because they could not secure delivery of local supplies. Neither could Ford. The consequence was that six months from the end of the war, the company had not made progress on the subject.

Under the unfavourable circumstances' a shutdown of the Barcelona's plant was becoming imminent. Production was nil during June 1940 due to the lack of certain US parts, as well as the lack of tires.⁵⁴⁰ Consequently, the local purchase of service materials was the main object of the company' attention in order to revive its activities. The last quarter of the year had seen an improvement: Spanish-made parts for the last months of 1940 were being produced on a much larger scale than in the past. The company's efforts, however, were not very successful, due to the increasing scarcity of raw materials, which had to be distributed between the many demands of the "Nation's Reconstruction Program", depending upon the metal industry.⁵⁴¹

Nevertheless, the financial situation which appeared to be disastrous at the end of the Civil War, had recovered to a certain extent during the years of the Second World War.⁵⁴² Indeed, the company did not only rebuild the capital stock and

⁵³⁹ See letter Cooper to Ubach, December 1939, Box 7531, *FMI Archives*, Barcelona.

⁵⁴⁰ See letter Ubach to Cooper, 1940 Jun 26, Acc. 608/Box 3, *Ford Archives*, Dearborn.

⁵⁴¹ *Ibid.*

⁵⁴² When the resumption of operations after the Spanish war had got going effective, the financial position of the Company was most deficient, as a large part of the funds were blocked.

reserves, but it was able to built up reserves which covered the debtor balance of the profit & loss account of previous years. In addition, the company's activities in regard to production of both assembly and service materials were intense. In effect, with only two thousand trucks produced, they had developed the use of local materials from thirty nine per cent of the truck's total weight, in 1940, to seventy six per cent in 1945. Much of this achievement was attributable to the credit facilities granted by Ford Motor Company, Ltd. in 1939 for the supply of materials to complete units held in the plant during the war and the production of one thousand trucks, all of which greatly helped the re-establishment of the Spanish Company.

In parallel with the production of trucks, and despite the scarcity of raw materials, the local production of service parts continued to increase.⁵⁴³ However, the considerable competition of independently produced spare parts is worth noting. They greatly developed in Spain during the years of World War II, and blossomed under the autarky. Third situation, which was common to many countries, had a detrimental effect on Ford sales, because original Ford parts were not covered by

However, a large part of the financial investment was recuperated in 1942 for the 40 per cent of its value. This settlement produced a loss of PTAs. 10,5 million which was greatly compensated by a reserve of PTAs. 7,5 million created during the three years previous to 1939, which was built up by the exchange differences in excess of ruling rates, as applied in price computations of sales effected during those years. Another reason for concern was the pre-war debt to FMC of England, Dearborn, and Canada the disbursement, which amounted to PTAs. 20,0 million as freely met with FMC's own resources, thereby cancelling the Company's debts for goods received from England and the USA. See Report to the Board of Director of Ford Motor Iberica, October 1945, Acc. 608/Box 3, *Ford Archives*, Dearborn.

⁵⁴³ **Parts Business, FMI.** (in ptas.)

Year	Purchases	Sales
1939	154,739	280,342
1940	2,015,454	1,304,510
1941	3,705,785	3,172,417
1942	6,465,672	4,812,674
1943	5,492,046	6,132,819
1944	4,568,890	8,144,710

Source: *FMI Archives*, Barcelona

any registered property rights in Spain and imitations were flooding the market. In addition, a further reason for concern was that the army, which owned five thousand Ford units, had showed little preference for genuine parts, and in their aim to foster local industry was buying independently produced spare parts as well.

In spite of the extremely precarious financial position of the company, it seemed that the directors decided to continue the policy of over ten years standing to gradually nationalise the production of Ford automobiles in Spain. To this end, they wished to re-start local manufacture and assembly operations in Barcelona forthwith and for this purpose to erect in Barcelona or in another suitable location a new factory, as had been decided before the outbreak of the war in July 1936. In order to rehabilitate the former plans it was necessary for the company to recover its frozen funds. However, any action had to be approved, explicitly or implicitly, by the Spanish authorities. Percival Perry referred accordingly, to the fact that: "the company would be greatly influenced in its decisions by the degree of sympathetic assistance which the National Government might be able to give the Company's claims with respect to money deposited in various banks, inasmuch as, according to information submitted, the Company lost a sum much in excess of its share capital and accumulated reserves, and in consequence was unable to discharge its present liabilities."⁵⁴⁴ The construction of a new factory was never consequently put into operation.

To sum up, the company hoped to be able to count upon the sympathy of the State to re-launch an industry which was one of the essential bases of the national economy at that time. Counting on this co-operation, Ford Motor Ibérica believed that it would had been able to obtain from the other Ford companies, especially the English Company, the necessary assistance to undertake the construction of cars and trucks, which were so indispensable for the day-to-day running of the country. This would have increased the nationalisation, as far as possible, of the industry.

⁵⁴⁴ Minutes of the Meeting in London, 13 March 13, 1939. Acc.608/Box 3, *Ford Archives*, Dearborn.

thus favouring Spanish labour, and re-invigorating the numerous ancillary industries.⁵⁴⁵ On the other hand, the new structure that the State wanted to introduce in the automobile sector was going to be governed by the possibilities of the market, and it was decided that the said market be composed of three larger groups: the popular low-priced car, the intermediate truck with a loading capacity up to four tons, and a group of larger capacities, such as the fuel oil burning engines.⁵⁴⁶ On the other hand, the State was giving due consideration to foreign capital invested in Spain, so that same it might obtain adequate remuneration; since, according to the government, there was no enough room in any of the three groups for too many manufacturers, especially given the preferential measures of a political or diplomatic character that the government was adopting, aside of the reduced Spanish market. Moreover, there was a tendency of the state to exert pressure so that the capital invested in such industries as motor vehicles be mostly Spanish in order to be considered of 'national interest'. There was also an attempt to fix a time schedule for the companies to complete with such requisite. However, there was an apparent contradiction in the need of foreign capital for the recovery of the country, but it seems that the possibility of coming away with a minimum annual percentage of interest was guaranteed to the foreign investors.

As regards the plan evolved for the reorganisation of FMI, everything had been indefinitely suspended because the international situation was such as to curtail progressive steps. In Perry's opinion, the plan evolved was exceptionally favourable, although, governmental practice had to be based upon statutory realities and not upon intentions. If the latter conditions existed, then there was no confidence in making commercial proposals. Perhaps the fundamental difficulty was the possibility so far as Dagenham and Dearborn were concerned, of finding new finance and surrendering existing rights to such an extent that British and

⁵⁴⁵ Ibid., March 13, 1939. Acc.608/Box 3, *Ford Archives*, Dearborn.

⁵⁴⁶ Very much akin to the plans set up in the second half of the twenties by the government of Primo de Rivera. See, for example, García Delgado (1985: 142), Catalan (1995: 60). Both authors have emphasised that the roots of the Francoist policy are to be found in the dictatorship of Primo de Rivera (1923-30).

American interests had become entirely subservient to local stockholding rights. It was felt that FMI had contributed considerably to the Spanish economy and it was also felt that the new legislative proposals were entirely unattractive, particularly when further support in capital and plant was necessary. As regards the question of the Fordson tractor, production could not be considered because the Ford Motor Company, Dearborn, in association with Harry Ferguson, had developed a new tractor. Therefore, from the point of view of FMI, it was unjustified to invest sums in plant for a product that might soon become obsolete.

4. First governmental attempts towards the development of the local motor industry in opposition Ford's interests and definitive position on the subject

To recapitulate, Ford soon after the war had approached the Spanish government in order to know which were the latter's plans as regarded automobile production in the country. On the other hand, the Spanish government, conscious of the importance of the automobile sector and because of the scarcity of means of transportation wanted to develop a plan for the industry. However, this plan was based more on intentions than on enactments. The expectations of the Spanish government after the civil war might be summarised as following:

- Ford Motor Ibérica would start the assembly of the units that had been agreed at its Barcelona plant as soon as possible.
- that Ford would present its project for the construction of its factory and for the import of the necessary machinery as soon as possible which, together with that available in the country, might have rendered the Spanish Automobile industry independent.
- to be able to guarantee the necessary foreign currency for the deferred payment of the said machinery, providing that its importation was not considered by the importer as an increase in capital.

- Due to the absolute lack of means of transportation means, the government would be compelled to call for bids for the purchase, in deferred payments, of several thousands trucks and they were expecting the Ford organisation to co-operate.
- And, finally, the State intended that the capital of companies such as Ford, which could be of classified of "national interest", be largely Spanish.

Although it was possible that due to their previous debt to Ford US, the balance between assets and liabilities may not have shown at the end of the said twelve or fourteen months a liquid surplus, it would have been a fact that its actual available cash would have acted against any financial policy that might have been adopted in opposition to the social policy not only by the Spanish State, but of the one which was now evident in Dagenham; and furthermore, with its harmful demoralising effects on the personnel (all of them old employees) who had lived those times when the Company paid dividends of 25 per cent and carried out amortisation of 40 per cent.

However, in spite of the above mentioned intentions, the reality for the company reality was that it was not able to reach pre-war levels of activity. Consequently, during the years of World War II, Ford had to find a way of giving productive employment to its work force, who under the labour regulations of that moment could not be discharged. Indeed, in dealing with the question of unproductive personnel which was being maintained by the company, the principal reason due to which said personnel was not utilised was that the legislation in force did not permit the establishment of new industries, nor the enlargement of those existing, unless Spanish capital contributed 75 per cent of the total.⁵⁴⁷ This had prevented Ford Motor Iberica from engaging in other activities, whilst other motor vehicle subsidiaries such as General Motors Peninsular had definitively closed its plant at

⁵⁴⁷ "Letter reorganisation" Cooper, Office of the Lord Perry to Ubach, 15 August 1940, Box 7531, *FMI Archives*, Barcelona.

Barcelona, and moved a reduced personnel to a little office in town. Also SEIDA, the Chrysler representatives in Spain had their premises in Bilbao reduced to inactivity and like Ford felt pessimistic about the automobile trade in Spain and had adopted a passive attitude. This practically left the automobile business in Ford's hands, apart from Hispano-Suiza, whose activities were spread into building aeroplane engines, automobiles on customer's orders, and the manufacture of certain machinery, thus not presenting itself as a serious competitor to Ford.⁵⁴⁸

To conclude, during the autarkic years the Spanish government was in pursuit of a national industry; on October 24, 1939, the Law for the Protection of New Industries of National Interest was launched; one month later, the Law of 24 November of 1939 was launched regulating the establishment and development of all national industries. As a continuation of the policy embodied in these laws, and in order to provide for their enforcement, the National Institute of Industry was created by a new Law dated September 25, 1941. Among the terms of this law, which was composed of 18 articles, provisions were made for granting financial help by the State to those industries that may required it, as well as the expropriation of existing industrial installations, when the urgency of the case or the difficulties encountered make it advisable.

4.1. The situation of the ancillary industry during World War II

In order to approach the state of the ancillary industry, it will be interesting to mention research that several technicians from the Spanish Ministry of Industry as well as executives of Fiat had carried out.⁵⁴⁹ The purpose of their study was to investigate the actual situation of the industry with an eye to Fiat's future establishment in the country. The survey, however, had not included first, any type of industry that was considered in a good state in terms of quality and quantity,

⁵⁴⁸ "Expediente Hispano Suiza sobre fabricación de automóviles." *INI Archives*, 243, no. Legajo 3 (1943), Carpeta 3.

⁵⁴⁹ "Informe Sánchez Bautista (INI) sobre las visitas efectuadas a las industrias españolas relacionadas con el automóvil" Mayo 1943, Exped. Planell/Fiat, *INI Archives*, Madrid.

such as for example accumulators, spark plugs, rubber and glass items etc. Also ignored were those industries which had to be set up anew instead of overhauling existent plant ; as was the case with, brake linings, paints work, etc. The survey also covered some industrial concerns that did not belong strictly to the automobile sector. But, they were included for two reasons. First because they could manufacture ancillary elements for the future factory, and, second, because in a first phase of production foreign concerns could undertake some kind of production until others more suitable were found, as for example, forge and gear mechanisation. The study was also concerned with the state of human capital generally, the skills and the employment level of training, both from the shopfloor and technicians. Finally, aspects regarding organisation and levels of performance were also taken into account.⁵⁵⁰

The report's conclusion was that, in general, the Spanish industry was not ready to undertake either the production of the heavy truck and nor the 'touring' car, the production of the light truck being the only immediate productive possibility. In could be argued, moreover, that none of the concerns were completely ready to manufacture any of the elements of production in full scale. However, on the other hand, all of them had the determination to invest in the modernisation and enlargement of their plants and facilities with technical support from the INI as well as from the future 'Automobile Factory'.⁵⁵¹ It was necessary therefore to establish new industrial concerns that could help the establishment of motor vehicle production, like foundries. However, the country also lacked high quality industries, rendering it necessary to rely on foreign aid in order to plan and set up foundry production. On the other hand, as regards the manufacturing of body metals and cabins, it was also necessary to rely on foreign markets, at least in the first phase of production, just as much as it was necessary to set up an aluminium foundry. However, there were also private concerns willing to undertake such

⁵⁵⁰ "Ideas sobre la formacion del personal obrero para la fabricacion de automoviles" (1945) Seccion 355, Carpeta 21, *INI Archives*, Madrid.

⁵⁵¹ This factory refers to the future factory that Fiat was planning to undertake.

production providing there was market for it. As regards the elements which were necessary to be imported in the short term, they did not exceed ten percent of the value of the vehicle and it was supposed that in a medium term private initiative, with the perspective of a secure market, they could start the manufacturing of most of those elements.

It is worth noting that all the concerns were manufacturing their own machine tools, such as lathes, presses and all kinds of convertors. Production was carried out in imitation of those already in use, which were usually old and out-dated and thus resulted in low quality outcomes. This was a serious problem, though it could be solved through the intervention of the state: first, through the efficient reorganisation of production, and second, by preventing sales of products below a minimum level of quality. The intervention was especially necessary because in a situation of scarcity, thousands of kilograms of worthy material were wasted, instead of going to better uses. Consequently, it was necessary to import machinery for almost the entire ancillary industry. This would have been the only way to reduce production costs and stabilise the industry. Moreover, the state was conscious that it was necessary, on the one hand, to organise the production and, on the other, to train employees, both from the shopfloor and white collar levels. It was thought therefore that the collaboration with Fiat could be advantageous for Spanish industry because it would bring positive outcomes to the whole mechanical industry.

Let us now turn to the survey and consider the main conclusions drawn from it.⁵⁵² The total number of concerns visited was sixty seven (forty two in Santander, Bilbao and Zaragoza; fifteen in Barcelona; nine in Madrid and one in Valladolid). Half of them were producing under total capacity, while the remaining half was partially inactive. Such inactivity had two main causes: first, the scarcity of raw materials and, second, the scarcity of the workforce. As a consequence, nineteen

⁵⁵² "Informe Corzatto (FIAT) sobre las visitas efectuadas a las establecimientos industriales españolas para determinar sus posibilidades como auxiliares a la industria del automovil" Mayo 1943, Exped. Planell/Fiat, *INI Archives*, Madrid

concerns out of the total seventy six were completely useless. These factories were incapable either of supplying raw materials, raw pieces or finished products. As regards the remaining forty eight factories: six could supply raw materials; thirty four were also able to supply semi-manufacturing parts; and, finally, eight could supply machinery and materials for the facilities. According to the importance of the factories, they could be divided into the following three groups: first, there were twelve concerns of a certain importance which employed between 500 and 3,000 workers. Second, there were twenty six of minor importance but with industrial characteristics which employed less than 500 workers. And, finally there were ten concerns with just artisan workshops. Despite their differences in size and organisation, all of them lacked a modern work organisation. Moreover, even in those concerns with good facilities and efficient means of production, they lacked technical services. Finally, monitoring, supervision and even, in certain cases, performance at the shopfloor was organised and carried out by the work master, a sort of departmental head depending directly on the technical manager of the factory, who, in general, was seldom in contact with the workshops. Thus, they did not monitor the works masters, leaving them almost completely independent. The existence of apprenticeship schools in each seemed, conversely, to be very widely spread, and even workshops with no more than a few hundred employees had their own well provided school for apprenticeships. Likewise, there existed laboratories for research. In addition, some factories had been completely re-located in a new setting with plenty of free space for the future enlargement of plants and facilities.

To conclude, and as regards the ancillary industry, there existed the possibility of undertaking the automobile manufacturing, on certain conditions. First, the planned factory should set up an aluminium foundry as well as a large section for machinery and machine tools. Second, directly or indirectly technical support had to be given for several automobile elements. Third, some elements such as special steels for the main elements, body metals and the frame etc., would have to be imported. Finally, the main difficulty would be the training of the workforce as well as all the technical personnel.

5. Running a business during the Second World War

The overall picture was greatly affecting the performance of Ford in Spain. Indeed, during the period of World War II, the speed of production, of both spare parts and assembly material for one thousand trucks, was not meeting the company's requirements, a poor showing consequently in Ford's financial results.⁵⁵³ According to Ford managers, this was mainly due to its forced obligation to keep unproductive personnel employed.⁵⁵⁴ The company was aware of the difficulties which were being encountered, on an ever increasing scale, in obtaining raw materials due to the insufficient metallurgical national output for the reconstruction of the country in its different aspects: the building of ships, railway engines and cars, bridges, armaments and many others, Ford trucks among them. From a total of more than 70 different kinds of ingots, common and special steels, non-ferrous materials, scrap, etc. amounting to 1,347 tons, Ford Spain had only received 631 tons, which left 716 tons to be received, that is, more than 53 per cent, composed mostly of special steels destined for the manufacture of the most difficult parts. Among other important raw materials, they had not received a single kilogram of special steel destined to forge such essential parts as wheel-hubs, nor a single kilogram of copper sheets (later substituted by brass sheets for the greater ease of the manufacturer) for the manufacture of the indispensable radiator fins.⁵⁵⁵ In addition, all sorts of manufacturing difficulties had to be overcome in their

⁵⁵³ However, during 1941 it was easier than the previous two years to obtain raw materials and therefore they were able to start the production of 724 new service parts, which was achieved because the purchasing department was able to give its entire attention to the national production of spare parts. In 1942, the purchasing department had had to divide its attention between the usual production of spare parts - 2,648 different parts - and the production of new parts, as well as the engaging task of producing national parts for the new trucks and gas generators, which made a total of 820 new parts for the period January-October 1942. See letter Ubach to Hibberson (Office of the Lord Perry). "Report", 27 April 1943, Box 7531, #Dagenham 1942-46, *FMI Archives*, Barcelona.

⁵⁵⁴ This had represented a loss of 0,6 million pesetas; or 42 per cent of the total loss sustained during 1941, as the total 1,1 million pesetas was formed by the above amount, plus 0,6 million pesetas destined to cover the amortisation of units that had disappeared during the civil war.

⁵⁵⁵ In spite of the differences in measurement, it could be stated that during World War II Spanish imports of basic inputs reached levels between 1/3 and 1/2 to those of 1935. See Catalan (1995: 158-179).

intention to produce the first series of 300 units, having in the company neither an engineering department nor a research and development department, having to rely on the goodwill of the personnel and on the co-operation of their suppliers.⁵⁵⁶

Ford believed that the expenses incurred in its efforts to produce those trucks, which meant a jump from 40 per cent in 1939 to 70 per cent of nationally produced materials constituting its trucks, would not in anyway be out of line. However, while speaking about the increasing role of the purchasing department, it is worth noting that in spite of being the most active one of the organisation, it lacked skilled personnel to attend to the fundamental and important work entrusted to it.⁵⁵⁷ The production of one thousand trucks in 1940 and the incorporation of the above mentioned 724 new parts in 1941 justified the efficiency of the purchasing department, the only one which drove the company's activity at that moment. As it was necessary to increase the production of parts in 1942, so the number of persons in said department was also increased, albeit through employees of their own organisation. Typically, the mechanical experience of such person was lacking in the last instance, but it was important to make use of the human capital available, since: first, due to the war and the consequent paralysis of imports, it was not likely that they would receive material which would make necessitate the production and incorporation of domestic materials, necessarily reducing the activities in the purchasing department. And second, it was further undesirable to hire new personnel, because of the difficulty of getting rid of any employee whose service was no longer needed. Increasing the production of sale parts depended on the obtention of raw materials, whose scarcity was increasing daily, besides the difficulty for obtaining special steels, equally scarce and frequently deficient, as

⁵⁵⁶ Ubach to Hibberson, 27 April 1943 in Box 7531, # Dageham 1942-1946, *FMI Archives*, Barcelona.

⁵⁵⁷ In this sense, the department was managed by a man who, after his training in America, continued to be considered by the said Headquarters the "best one among the European Continental Companies to fill this job". He had been assisted since 1939 by a number of persons picked up from those Company's employees who seemed to possess more and a better capacity to promote the production of parts, a job in which some of them had been engaged before July 1936. Ubach to Hibberson, 27 April 1943 in Box 7531, # Dageham 1942-1946, *FMI Archives*, Barcelona.

very often manufacturers lacked essential elements to produce them. Difficulties in obtaining adequate manufactured parts equally affected the purchasing and inspection departments, and in order facilitate co-operation and mutual understanding between them, it was also needed to find a person with sufficient technical knowledge to give advice on these engineering problems; whereby an engineer and inspection department could perhaps been formed, which would had been of great assistance to the purchasing department.⁵⁵⁸

To sum up, the possibility of increasing Ford sales was directly related to the possibility of increasing its production which, in turn, was governed by the possibility of obtaining raw materials. Had they, as a consequence of efforts, obtained raw materials, it would then had been the undeferable moment to look for the necessary technical assessors for their purchase, production and inspection departments, that besides taking care of increasing the production in accordance with their methods, may have handled successfully the production of those parts whose quality were governed by current possibilities.⁵⁵⁹

Difficult circumstances forced Ford Motor Iberica to maintain its level of employees' salaries and wages, causing desertions, which aggravated the precarious situation created by the shortage of executive personnel since July 1936 even more. A comparison between the Company's personnel on that date and April 1943 showed that they were short of twelve Department Heads, seventeen Sales and Service Roadmen and three Foremen, with the result that in order to face the

⁵⁵⁸ To fit the Inspection Department out as best as possible, Ford managers had ordered a testing machine from Sweden.

⁵⁵⁹ Regarding the personnel, it has to be mentioned that the resignation of one of the best roadmen in the Sales Department based on insufficient remuneration, brought into light again the precarious economic situation of the Company's staff, due to lack of work in the production of automobiles, the basis of the Company's business. At the demand of the trade union and complying with the social policy of the State, the Company was compelled to carry in its pay-rolls 184 men, which for the lack of production during 17 months up to 30th September 1942 caused a disbursement of 1,4 million pesetas. The reflection of this on the remuneration of other employees was obvious, inasmuch as unproductive wages due to the inactivity of assembly departments rendered an average monthly loss of 82,258 pesetas, which created an absolutely unfavourable situation to think of adjusting personnel salaries to the cost of living.

extremely abnormal and difficult circumstances existing, they were obliged to make do, apart from: with one Purchasing Department Head, one Chief Clerk, one Assistant Sales Manager, one Assistant Services Manager, one Works Manager and one Assistant Stores Superintendent. Roadmen had been reduced to three in number, one of whom was in Madrid acting as a link between the company and official authorities; another one was handling the Tractor Department, and the other was traveling the country visiting dealers and appointing new ones, work which was shared with the assistant sales manager.

More than once the direction of the company thought whether it was pursuing a false economy on such a course, while keeping cash in the banks or in values a capital which was being undervalued daily, instead of investing a part of it in preserving their own internal organisation, in the same way as they tried to preserve their dealers organisation in Spain. As they were persuaded that it was necessary to remedy this situation for the benefit of their future organisation, it seemed advisable that salaries should have been readjusted without any further delay, calibrating them with the present cost of living, even at the expense of increasing monthly losses in an apparently exaggerated way, which would however have become "beneficial to the morale of our people and would permit the complete re-establishment of an internal discipline in accordance with Ford's methods".⁵⁶⁰

Data from the General Direction of Statistics relative to the cost of living showed that, taking the year of 1936 = 100, the average index for food, clothing, house and general expenses, had increased to 247.7. An examination and comparison of remuneration disbursed to FMI personnel between July 1936 and July 1942 gives an increase which fluctuates from 36 per cent to 41 per cent for office employees, and reaches up to 55.27 per cent for workers. The company - with balance sheets in the red figures - was not prepared to cover the difference (247-141=106 per

⁵⁶⁰ Ubach to Hibberson, 27 April 1943 in Box 7531, # Dageham 1942-1946, *FMI Archives*, Barcelona.

cent) in pesetas, which would have been necessary to balance the budgets of all and every one of the employees, so much unsettled due to causes beyond their control.⁵⁶¹

**Table 6-1. Personnel on Salary Roll and Schedule of Recommendations
Employees forming the skeleton of the organisation, FMI**

Position	Current Salary	Pay Bonus	Last Adjustment date	amount	Revised Salary	Bonus
Chief Clerk	2500	-	Jan-40	850	2950	-
Works Manager	3000	-		450	3450	-
Asst. Chief Clerk	1140	100	Jan-41	180	1140	280
Asst. Sales Manager	1650	400	Mar-40	300	1950	400
Asst. Stock Superint.	1380	370		270	1500	500
General Led. Bookpr.	780	220		120	900	220
Acting Service Manager	960	160		60	1260	160
Cost Clerk	840	160		60	960	160
Buyer	1260	100	Jan-40	180	1500	100
Traffic Dept Clerk	840	280		180	960	280
Act. Custom Dep. Head	900	220		120	1080	220
Secr. Management	1020	100	Jan-40	180	1080	220
Service Clerk	810	160	Mar-40	60	930	160
Credit Department	960	220		120	1080	220
Tractor Department	870	220		120	870	520
Purchase Head	3750	-	Jan-40	-	4350	-
Sales Clerk (1)	4.5	175		75	900	175
Act. Chief Inspector (1)	4	260		160	840	260
Buyer (1)	4.5	175		75	1080	175
Chaser (1)	3.8	220		120	900	220

Source: Box 7534 # Personnel, FMI Archives, Barcelona (1) Present salary refers to an hourly rate.

⁵⁶¹ However, FMI's manager, Ubach, pointed out that Mr. Ford "conceives the management as having a clearly defined responsibility in seeing that every operative was relieved of cares and worries which might tend to reduce his efficiency." Moreover, he stated: "Should it be decided to improve our employees' remuneration in such a way that, as stated above, it may be in turn beneficial to our organisation, the general expenses would be increased by 103,000 pesetas monthly, a part of which would be covered by the increased income to be derived from the sales of trucks and gas generators, over and above the ordinary income from the sale of spare parts which at present does not cover by itself the expenses we are forced to cover." Ubach to Hibberson, 27 April 1943 in Box 7531, # Dageham 1942-1946, FMI Archives, Barcelona.

6. Conclusion

The long lasting consequences of the civil war profoundly affected the activities of the company. It not only had to rebuild its organisation in the light of the large scale abandonment of the company by its executives, but it had also to change gradually the profile of its structure. Indeed, the growing scarcity of raw materials and spare parts meant that the company shifted its core business from one oriented towards the assembly and commercialisation of motor vehicles to one oriented towards the acquisition of spare parts. Consequently, sales lost ground while purchasing became the most important activity of the company.

Moreover, in pursuance of the policy of stimulating Spanish industry, several meetings were held at the Metallurgical Syndicate at Madrid during the second half of 1944. The conclusions revealed, according to the direction of FMI, a lack of knowledge of the issue, as there were parts already being manufactured in Spain which were in the list of imports and viceversa. Moreover, there was no Official Testing Laboratory to guide or to control the manufacture, or set the standards, and while it was generally accepted that those local parts made for Ford, which had undergone Ford inspection were within specifications and were preferred by the public, this alone was not enough to get the support of the Syndicate, whose duties were "to protect the whole industry and not a single firm".⁵⁶²

Furthermore, a National Meeting of the Party's Syndicates which covered all industrial activities of the country, took place during January 1945.⁵⁶³ Within the Metallurgical Committee, a Sub-Committee of the Automobile Industry existed, and a set of "conclusions" were drawn up and approved for submission to the highest authorities at the Ministry of Industry. Their conclusions suggested that, as the national consumption of motor vehicles was sufficient to warrant their

⁵⁶² Ubach to Cooper. "Report.", 4 November 1944, Box 7531, #Perry-Cooper 1944-45, *FMI Archives*, Barcelona.

⁵⁶³ "Report on the Falange's syndical Congress", 3 February 1945, Box. 7531, # Perry-Cooper 1944-45, *FMI Archives*, Barcelona.

manufacture on a paying basis, the Spanish state had to give its support so that the said manufacture could become a fact at the earliest possible opportunity. Initial production was to consist of: 15,000 passenger cars, of utility type, with gasoline engines; 4,000 medium weight trucks, with diesel motors, and 4 cylinders 75-80 CV (4 Tons); 1,200 Heavy trucks, diesel, 6 cylinders 110-130 CV (7 Tons.) The necessary support from the state was also requested to carry out the following manufacturing schedule and the development of the construction of electric passenger cars and trucks over the next five years: 3,000 economic type passenger cars, with gasoline engines, 25-30 brake horse power (7 HP) and whose public price should not be over 20,000 pesetas; 2,000 basic trucks, with gasoline engines, 25-30 horsepower (7 hp) and whose maximum public price was not to exceed 16,500 PTAs; and 40,000 2.5 ton trucks of a light American type, which should include the maximum amount of local materials, their construction to be allowed if 50% of their component parts were supplied by the Spanish automobile accessory and spare parts industries, and whose public price should not exceed 50,000 pesetas.

A final set of conclusions are worth to mentioned. First, the manufacture of automobiles in Spain should be carried in connection with the automobile support industries then in existence. Second, to form a Committee, composed of representatives from the Ministries of the Army, Navy, Air, Industry and Commerce, Public Works, Treasury, Interior and the Trades Unions, to direct the automobile policy. Third, the Ministry of Industry and Commerce was immediately to enforce a quality standard for automobile accessories and spare parts produced nationally. Until the Ministry of Industry and Commerce installed the laboratories for testing and controlling material, the granting of quality standard was made by the said ministry based on the certificates issued by the appropriate official laboratories to the effect that the products tested met the minimum conditions stipulated in the technical specifications approved by the Minister, based on the report from the trade union organisation. And, five, to fix the present customs

tariff in accordance with the industrial situation created in Spain by the development of this industry.

Appendix

Table 6-2. Price Calculation of Locally Made Parts, Ford Ibérica, FMI

	Dec-42
1. Cost Price (ptas.)	60.2
2. Transportation to Plant, 5%	3.0
3. Commercial Expenses, 30% (average years 1941/42) 32.4%	13.1
4. Interest on capital invested, die, mould and tool amortisation, 15%	9.0
5. Additional charge for new social (labour) burdens, 5%	3.0
6. Packing, 5%	3.0
(ptas.)	96.3
7. Profit, 12%	11.6
(ptas.)	107.8
8. Profit to Dealers, 42% on sales' price (as in 1936)	78.1
9. Public Price (ptas.)	185.9
10. Ratio of public price to cost (item 1)	3.1

Source: elaborated from FMI data, Box 7531, FMI Archives, Barcelona. Note: this study shall be taken to be the standard, and gives the multiples or factors to be used as the basis of calculation for all car, truck and tractor parts of the same origin. Part nu. B-6395-fly-wheel housing.

Table 6-3. Price Calculation of "Y" and "C" Model Parts of British Origin, FMI

	Dec.-42
1. Cost price	£0.61
2. Increase, 20 plus 5% = 32.30%	£0.20
3. Net cost price	£0.81
4. Converted at the exchange rate of 41.50% to the pound (PTAs.)	33.6
5. Freight, transshipment, storage, insurance, unloading, etc., 19.31%	6.5
6. Laid Down Cost	40.1
7. Duty, actual figure as per tariff	15.3
8. Laid down cost plus duty	55.4
9. Transportation to plant, 5% on item 4	1.7
10. Commercial expenses 30% (average 1941/42=32.37%)	16.6
11. Interest on capital invested and compensation for surplus and obsolete stock, 12%	6.6
12. Additional charge for new social (labour) burdens, 5%	2.8
13. Packing, 5%	2.8
	85.8
14. Profit, 12%	10.3
15. Sales Price to dealer	96.1
16. Profit to dealer, 42% on sales price (as in 1936)	69.6
17. Price offered to the public (PTAs.)	165.7
18. Factor to convert cost price (item 1) into laid-down cost (item 6)	65.48
19. Factor to convert laid-down cost plus duty (item 8) into public price (item 17)	2.9928 4.9366
20. Ratio of public price (item 17) to convert net cost price (item 4)	

Source: elaborated from FMI data, Box 7531.A34FMI Archives, Barcelona. Note: this study shall be taken as a standard, and gives the multiples or factors to be used as basis of calculation for all parts of the same or similar models of British origin.

Chapter Seven. Controlling Subsidiaries under Economic Nationalism: Ford and Franco (1945-54)

1. Introduction

From the civil war to the beginning of the 1950s, the Spanish economy remained characterised by a high degree of government interventionism, the pursuit of autarky, and the acute inflation accompanied by stagnating production. These years of economic stagnation, and even of economic regression, have been explained in terms of damage inflicted on Spain's means of transport, country's loss of its gold reserves, it's inability to import foodstuffs, fertilisers and fuel; and, finally, badly needed capital equipment throughout the 1940s. Moreover, the slow growth of the Spanish industry in the 1940s and early 1950s can be ascribed to a variety of factors, including the damaging effects on consumer spending of a long sequence of bad harvests, shortages of capital and foreign reserves, difficulties in obtaining raw materials and capital goods, energy bottlenecks and the dominant mood of political uncertainty.⁵⁶⁴

However, according to the apologists of the Franco regime, in the immediate post-World War II years the victorious nations chose to ostracise the Franco government and therefore forced the Spanish head of state to embrace autarky until the early 1950s when the development of the cold war induced the US government to support the Spanish government as an ally in the anti-Communist campaign.⁵⁶⁵ According to the Department of State on Spain; the shortage of dollars and the corrupt and inefficient control of economic affairs in Spain by the regime were, however, the chief obstacles to an increase in private US-Spanish trade.⁵⁶⁶ Franco's administration, strongly nationalist, and very much influenced by

⁵⁶⁴ Lieberman (1995:26).

⁵⁶⁵ Lieberman (1995: 27).

⁵⁶⁶ Without gold as collateral, private US banks had been unwilling to extend loans to the Spanish government or to private Spanish firms. While private loans would have served in certain measure to stimulate private trade, a real improvement in Spanish internal economic

Hitler's Nazism and Mussolini's Fascism, had adopted a dogmatic belief in the virtues of a national economy and military self-sufficiency.⁵⁶⁷

The main argument of post-1945 research on the first period of the Francoist regime, in direct contradiction to the view of the regime's propagandists who exclusively stressed external constraints to economic recovery, hold that Spain's poor economic performance during the late 1940s was the result of domestic policy measures adopted in pursuit of economic isolation. However, recently, Guirao⁵⁶⁸ has revealed "that the *severity* (stressed in the original) that characterised trade controls and currency intervention in Spain was due to the lack of financial resources and not to an ideological commitment to autarchy. The Spanish commitment to join the Marshall Plan implied, to a certain degree, a commitment to the American goal of a world-wide system of multilateral trade and payments. Foreign financial assistance would have allowed progressive economic liberalisation as early as 1947. However, the Western powers' insistence on linking the granting of financial assistance to political democratisation, frustrated an earlier evolution of the Spanish economy towards any greater degree of liberalisation."⁵⁶⁹

conditions, particularly as they applied to foreign trade, would probably have been a necessary prerequisite on purely commercial grounds before US firms would have felt inclined to trade with Spain in substantially greater volumes. In 1948 it was reported that: "we do not now contemplate either direct governmental financial assistance to Spain or indirect financial assistance such as US Government participation in credits extended by private US firms to Spanish firms or to the Spanish government. Positive economic assistance from this government should await, and serve as an inducement for, the taking of concrete steps toward liberalisation in Spain." US was expected to co-ordinate economic assistance with political developed in Spain. The inclusion of Spain in the European Recovery Program depended upon the degree of international "respectability" which Spain was willing and able to attain. Moreover, the Spanish question was still a domestic political issue in many of the western European countries and the US had taken the position from the beginning that the initiative for inviting Spain to participate in the ERP lay with the participating nations. Thus, the US did not suggest and had no intention of suggesting to these nations that Spain should be included. Whether these nations in fact eventually invite Spain to participate would have depended upon steps which the Spanish government was willing to take to improve its international reputation and thus make it politically possible for a majority of the ERP countries to invite Spain to participate. See 26 July 1948. *Foreign Relations United States, FRUS, 1948 III*: 1039ff.

⁵⁶⁷ Catalan (1995).

⁵⁶⁸ Guirao (1993: 626-7).

⁵⁶⁹ The US Embassy believed that several measures could have been adopted by Spain to amend economic policy and eliminate objectionable practices. The following measures were mentioned: First, the establishment of a valid exchange rate. Second, the removal of current

Moreover, "Spain's relations with the US neither explain Spanish economic performance before 1955 nor the survival of the Franco regime." And, he challenges the belief that the US played a role in promoting economic liberalisation and stabilisation in Spain.⁵⁷⁰

In their quest for autarky, the Spanish authorities had adopted a set of policies with regard to industry which included the regulation of private investment, the foundation of public sector enterprise, quantitative restrictions on foreign trade and the manipulation of the exchange rate.⁵⁷¹ However, the failure of the Spanish

restrictions on: the limitation of foreign capital and management participation in Spanish industry to a maximum of 25 per cent; and, the transfer or local investment of profits. Third, the modification of state control, ownership, and operation economic enterprise so as to: eliminate unfair state competition and encourage private enterprise; and, restrict operations of the state holding company INI to its original objective of fostering essential industry not realisable by private capital; the removal of the unproductive intervention of 'vertical syndicates'; the abolition or at least limit substantial limitation of official intervention in secondary distribution imports and discriminatory allocation of domestic products. Fourth, the revision of foreign trade policy to avoid uneconomic channelization through bilateral clearing; the provision of equal treatment on transfers of profits and earnings; the correction of discriminatory practices in the issuance of import licenses as between state and private entities, national and foreign entities, and as between countries of origin; the elimination of costly delays in licensing procedures; the abolition of minimum price restrictions on exports. Five, the modification of price control to allow prices to reflect the true value of product; to terminate the current misrepresentation of real costs of production and the cost of living; to eliminate forced employment by private industry's recourse to the black market for obtaining raw materials arising directly from a discriminatory system of allocations. Six, the abolition of various uneconomic trade policies and practices such as employment in the registration of patents and trademarks as a protective measure; use of excessive export and import levies for subsidy purposes. Spanish business, banking, and industry were opposed to the economic policies of the current regime including those above enumerated. However, in spite of this position, Franco had taken no corrective measures. Likewise, lucrative vested interests many Franco supporters sure prove stumbling block. *FRUS* III: 1017 ff. 13 June 1948

⁵⁷⁰ The interest of the US in efforts toward the economic liberalisation of the Spanish government had been stated by the Chief of the Division of Western European Affairs resident in Spain: "(...) We do not want to see the economic situation in Spain deteriorate further (...) Spain will be on the same footing as all other European countries with respect to export licenses." However, "inclusion of Spain in the European Recovery Program would be a question for the sixteen countries concerned. They would be most unlikely, judging from their attitude at the UN Assembly, to agree on the inclusion of Spain in the absence of substantial political and economic changes within Spain. (...) We would like to give (Franco) positive help, but we cannot do it unless (Franco) first shows convincing signs of his intention to work toward a regime which would in democratic eyes be respectable (...) in democratic eyes his record causes considerable suspicion (...) What we need before we give him any sympathy or material assistance is convincing evidence of his intention to undertake orderly democratisation." *FRUS* III: 1017 ff. 5 January 1948.

⁵⁷¹ Donges (1976: 48).

industry to effectively respond to government measures convinced the policy makers of two factors. Firstly, they were firmly resolved that the market was an ineffective mechanism for the allocation of resources. Secondly, Spain's entrepreneurs lacked business acumen. Thus only through state intervention, it was believed, could the country achieve the goals of self-sufficiency and rapid industrialisation.⁵⁷² To counter these supposed defects, the INI was created in 1941.⁵⁷³ As regards the motor industry, the incapacity of private enterprises was the main argument used to entrust the car industry to the INI. Consequently, the INI used its power to block any private initiative and take responsibility for the creation of the first mass production motor vehicle company into its own hands. Within the automobile industry, the INI did not protect domestic firms but on the contrary defended its own projects.⁵⁷⁴

Evidence of the shortcomings of the Francoist regime's industrial strategy has been provided by data on factory size. Donges has showed that, on the eve of the Stabilisation Plan, Spain's industrial structure was dominated by a large number of tiny enterprises, which comprised eighty five per cent of total industry.⁵⁷⁵ Even in such sectors as chemicals, basic ferrous metals, machinery and equipment, where the optimum size of firms was generally considered to be over a thousand workers, there was still a predominance of small concerns. Moreover state intervention, linked to the structural transformations of the Spanish economy, caused profound changes in the sectoral composition of large companies. In the case of the principal

⁵⁷² For different approaches to State intervention see, for example, Shapiro (1994).

⁵⁷³ See, for example, Schwartz and Gonzalez (1978); Martín Aceña and Comín (1991).

Opinions differ greatly with regard to INI's overall contribution to Spain's economic development. According to Braña et al., during the 1940s and 1950s the INI built up the basic infrastructure which made possible the rapid industrial growth of the development era (1960-74). For Schwartz and Gonzalez, a number of its projects were undertaken for reasons of national prestige, with little regard to their opportunity cost. Donges (1976) accuses INI of failing to benefit from economies of scale, omitting to provide details of its investment plans, refusing to co-ordinate its activities with those of the private sector and receiving preferential treatment in the form of tax rebates, lower customs duties, favourable exchange rates and so on. See Harrison (1993: 41-46).

⁵⁷⁴ San Roman (1995).

⁵⁷⁵ Donges (1971).

industrial firms, sectoral specialisation tended to correspond to comparative advantage since the Civil War. This gave the most important firms a considerable size in international terms. Subsequently, the large Spanish firms became smaller with respect to their counterparts.⁵⁷⁶

Table 7-1. Spanish Motor Vehicle Production, 1948-1955

Year	no. of factories	* Total vehicles	workers line	employees staff	total personnel
1948	5	587	1.732	477	2.209
1949	2	169	1.881	544	2.425
1950	2	178	1.908	585	2.493
1951	2	369	2.634	630	3.264
1952	2	278	3.167	751	3.918
1953	4	951	3.317	816	4.133
1954	5	6.478	4.401	1.671	6.072
1955	7	16.159	5.660	1.971	7.631

Source: INE (National Institute of Statistics) in the *Anuario Automovilista de España*, 1956-57.

* including passenger cars, commercial and industrial vehicles and buses.

Chapter 7 concerns the last years of Ford in Spain (1945-1954). These years were marked not by the elimination of the existing controls and moves towards a more open regime once the world war ended, but by their strict maintain for further years.⁵⁷⁷ Economic activity was clouded by the scarcity of raw materials and basic intermediate products, and no fuel.⁵⁷⁸ The chapter concludes that: the disastrous results of FMI during those years were not an isolated case,⁵⁷⁹ that in the rest of the Spanish economy we see a very difficult recovery of the pre-civil war levels. The remainder of the chapter is organised as follows. Section 2 is concerned with

⁵⁷⁶ Carreras and Tafunell (1993, 1994).

⁵⁷⁷ It is difficult to separate politics and economics during the entire period, as the political and ideological domain were conditioning all economic decisions.

⁵⁷⁸ Carreras (1993).

⁵⁷⁹ See, for example, the case of Rio Tinto, Gomez Mendoza (1994).

the post-war years from the standpoint of the influence of the head office (1945-1949) on the subsidiary firm. Then, Section 3 turns to the National Institute of Industry and its plans for the development of the motor industry. Section 4 deals with business activity under scarcity. Section 5 looks at a broader issue: firms and markets and the boundaries of the firm. It studies the creation of a separate manufacturing firm. Section 6 turns to forward expansion, that is, the distribution and dealer organisation. Section 7 and 8 will attempt to focus on management issues. It will be concerned with Ford's strategy as well as planing and forecasting under uncertainty. Finally, last Section 9 summarises and concludes the chapter. It is argued that by the mid-1950's governments around the world were putting pressure upon foreign builders of cars to manufacture locally. In Spain, the government wanted a national industry, but Ford Dearborn felt that the size of the market and various other factors made it impossible. Consequently, Ford sold its share of the Spanish Company in May 1954 to local interest.⁵⁸⁰

2. The post war years (1945-49): currency restrictions and changes in internal routines

Passage through two wars, that is, the Spanish Civil War (1936-1939) and the Second World War (1939-1945), in connection with foreign trade, had fundamentally changed the usual routine of importation of vehicles in to Spain.⁵⁸¹ Moreover, regarding the volume of work handled by the sales, purchase and service departments over those same dates, the sharp reduction in sales department output is especially noticeable, which eloquently expresses how elaborate and painstaking was the individual sales system under which the company had to

⁵⁸⁰ India, for example, wanted its own automotive industry and called upon firms like Ford to help create it. Yet India did not seem to offer good conditions for a private manufacturing enterprise. In both India and Spain, one important consideration deterring Ford from engaging in local production was the insistence of the respective governments that the controlling interest in any joint venture should rest in Indian or Spanish hands. Wilkins and Hill (1964: 402).

⁵⁸¹ Ubach to Branch Account Depart. Dearborn. 10 December 1946. Sales of trucks in Spain Box 7534 # Visit Dagenham, *FMI Archives*, Barcelona.

operate.⁵⁸² This fact was one of the most significant complications in the internal routine, which the company was against, and affected not only their sales department but service, accounting and customs departments as well.⁵⁸³ Moreover, the company was also facing difficulties of another nature such as the period of electrical restriction. In 1947, for example, these restrictions lasted two months and half. In 1945 and 1946, restrictions were also observed. While this situation prevailed, the company was only permitted to make use of electrically operated machines during certain days of the week.⁵⁸⁴

Mainly on account of the acute scarcity of foreign currency, it was difficult for FMI, as an assembly plant, to obtain import permits for vehicles of USA origin. Certain regulations, however, allowed purchasers in Spain to apply to the authorities requesting a permit for the importation of units which they were in need of. Individual permit were granted as a result of these applications, most of them to foreigners residing in the country who provided their own means of payment.

⁵⁸² % Variation in employees, June 1936-1948

Department	Variation %
Accounting	-19
Sales	-54
Purchase	129
Customs	-33
Stock	-45
Credit	-14
Total	100

Source: own elaboration from *FMI Archives*, Barcelona

⁵⁸³ Sales and Purchasing activity in 1936 and 1947.

monthly average	1936	1947
no. of units sold	387	116
no. of items in local purchase	1,904	3,109
Value local purchase	752,920	1,455,886
Sales turnovers	456,714	1,450,575

Source: own elaboration from *FMI Archives*, Barcelona

⁵⁸⁴ Ubach to S J Elliot (London office), 2 April 1948, Box 7534, #Visit USA, *FMI Archives* Barcelona

Truck chassis' orders were particularly numerous in light of its many uses as a commercial vehicle, and this was essential for Ford, due to the slack times FMI's plant was facing at that time. Things were complicated by FMI's inability of billing the units thus dealt with as a purchase, since due to extant regulations their invoices should be issued in Pesetas. The purchasers, on the contrary, required an invoice covering the amount in foreign currency which they had paid, as it was necessary for them to fulfil all custom, fiscal and import formalities involved in the transaction.

Due to the currency restrictions, then, the Spanish authorities would have regarded FMI as favouring the 'evasion of capital' if the company had sent orders to the USA for units not covered by the proper import license, or units for which payment had been made from sources other than Spain. However, FMI could not refuse supplying prices and characteristics to its dealers, and it knew that they had clients who were using every means to have dollars sent to Dearborn in payment for the car wanted. Therefore, although the Spanish firm was in a position to pass orders for units not covered by import license, it could - upon cable request from Dearborn or the Foreign Operations Department - reply to consent to attribute any given unit to the Spanish quota. The cars were supposed to be sent to any of the three free depots of Spain, Barcelona, Bilbao or Cadiz, and once the cars were there, the individual interested would have to request the import permit from the Spanish Administration, who would grant the said permit under a penalty of 1,000 PTAs per each of the first 15 HP i.e. a maximum of PTAs 15,000. In other words, it was the practice to prevent importations, but when it was "an accomplished fact" that the cars were into the Spanish free zone, they were finally allowed into Spain by paying the above penalty. A great demand for Ford units existed, and while the company was not willing to do anything against the law, it did not see how it should oppose the public desire, if Dearborn was agreeable to supply units, under the above conditions, which would automatically go to Spanish residents.⁵⁸⁵

⁵⁸⁵ FMI to Dollfus. Box 7557, in # UK-US (22 January 1946) *FMI Archives*, Barcelona.

3. The National Institute of Industry and its plans for the motor industry

Politicians, policy makers and military sectors had agreed on the need to industrialise the country and the motor vehicle industry was seemed a principal aim. However, to a certain extent, the plans of the newly formed regime had already put forward by Primo de Rivera during the second half of the 1920s, and were simply the culmination of past initiatives.⁵⁸⁶ Indeed, they did not differ very much from those of Primo de Rivera's period that never were put in effect. Moreover, the partial nationalisation program might be seen as a continuation rather than an interruption in the path to full motorisation. First, there were projects that might suit the autarkic policy of the regime with regardless of their economic efficiency (that is, a closed economy). And, second, there also were those projects that could be undertaken in open competition with foreign concerns (open economy).⁵⁸⁷

Table 7-2. Activities to be undertaken according to market and production possibilities

	Protectionism. The pursuit of autarkic goals regardless of cost.	Without Protectionism could be undertaken in competition with foreign concerns
Small Cars	xx	No
Luxury Cars	x	Yes
Heavy Trucks	xxx	Doubtful
Buses	x	Yes

Source: INI Archives, Madrid

An important concern of the state leaders was the manufacturing of trucks because there was a great need for them since the end of the war. In this regard, two

⁵⁸⁶ "See previous chapter and also Catalan (1995) and Garcia Delgado (1985).

⁵⁸⁷ "Notas de W.P. Ricart sobre la industria del motor en España", Ministerio de Industria y Comercio, January 4, 1946, Expediente Planell/CETA, *INI Archives*, Madrid.

different options were under study. On the one hand, the establishment of a manufacturing enterprise from the remaining assets and facilities of the Hispano Suiza of Barcelona, by passing the actual board of management and directors. On the other hand, the establishment of a completely new concern. The former was the quickest and cheapest solution. By acquiring the old facilities (incomplete and old-fashioned) as an initial core that could be increased and completed with new facilities, the company could immediately undertake the production of trucks and buses. However, in order to carry out such a plan it was necessary first, to change the actual 'mentality' or 'corporate culture' that was running Hispano Suiza, that in the light of experience was totally divorced from the standpoint of a rigorous industrial policy, and second, that any other activity related with air engines, weapons, etc. had to be promptly discontinued, because it was already insufficient for the production of trucks and buses. Third, regarding financial needs, an initial investment of fifty to seventy million pesetas for the modernisation of the means of production was recognised. The whole program would be run by a team leader composed of fifteen to twenty collaborators of Ricart himself.⁵⁸⁸ This team, whose members were considered to have the highest technical and industrial skills, were already familiar with mass production at Alfa Romeo.⁵⁸⁹ As regards the second possibility, i.e. not taking into account the workshops of Hispano Suiza, the program in its general lines did not vary very much from the aforementioned. The initial capital was planned to be around 150 million pesetas. In both cases, yet more especially in the second, it would have been necessary to set up workshop-schools to train the workers in the use of modern machine tools.

⁵⁸⁸ Wifredo Ricart had a long tradition of involvement in the Spanish automobile industry (see chapter 2). He had moved to Italy where he worked for Alfa Romeo. Then, with the new industrial policy of the Francoist regime, he was called to lead the establishment of the domestic motor manufacturing industry. His position was as an adviser to INI. According to Suanzes, president of the public holding, Ricart had been "encomendado para la resolución total de los proyectos para la fabricación de camiones y motores en España, y llevar la responsabilidad de ejecución de los mismos" see letter Sirvent to Planell, Madrid August 3, 1946. Exped. Planell, *INI Archives*, Madrid.

⁵⁸⁹ "Notas de W.P. Ricart", Exped. Planell/CETA, *INI Archives*, Madrid.

The Spanish government, then, had sponsored a scheme - under which the INI was formed - for the purpose of assembling motor vehicles, with all of their components manufactured in Spain.⁵⁹⁰ The government, in principle, seemed willing to enlist the aid of the Ford organisation in this matter. And to the fulfilment of this aim, according to Ford London's home office⁵⁹¹ every possible assistance would be given, though the company was not prepared to inject capital into such a venture.⁵⁹² They were convinced, first, that the project outlined could not survive world competition and, second, that the problem was being approached from the wrong angle. The considerations which had brought them to this conclusion were that the future world pattern was exceedingly uncertain. In effect, from an international point of view, the US was anxious to abolish barriers to international trade and would strongly oppose any import duties designed to foster home manufacture. On the other hand, from a local business strategic perspective, the local manufacture of components was profitable only if the cost was less than the cost of import parts. Even allowing for CIF margins, Spain was not in a position to produce as cheaply as US and, therefore, the local manufacture of complete motor cars did not seem a sound proposition. The London's home office thought that the Spanish government, which was not experienced in the manufacture of motor vehicles, had to be advised accordingly. Moreover, the home office did not believe that the major competitors of Ford would have been prepared to support a scheme such as the government proposed. In the event, the Barcelona management proposal suggested that, as there were around the country a number of ordnance factories which, as they were inactive, were merely accumulating costly overheads. Therefore, in Ford's view, the best solution was that the Spanish state should turn these factories over to the production of those components which could be produced cheaper than they could be imported from the US. The existing

⁵⁹⁰ Minutes of Conference held at Dagenham on January 17, 1947 and Regent Street INI Project, Box 7534 # Dagenham 1947-1948, *FMI Archives*, Barcelona.

⁵⁹¹ Sir Stanford Cooper, the head office at London, was the President of the Board of Directors of Ford Motor Iberica.

⁵⁹² Minutes of Conference held at Dagenham on 17th January 1947 and Regent Street INI Project, Box 7534 # Dagenham 1947-1948, *FMI Archives*, Barcelona.

FMI plant could then be used to assemble vehicles from parts supplied partly by Spain and partly by the US. But it was unsound to expect FMI to purchase locally made parts at a higher price than that at which they could be imported. Only a reasonable proportion of the overheads incurred by the ordnance factories should, therefore, be loaded onto the price of locally manufactured parts. On the matter of the conversion of ordnance factories to the production of components, the home office was prepared to give every support even to the extent of sending a specially trained technical expert to adapt available machinery to its new tasks. Moreover, Ford offered to accompany INI engineers on a tour to those ordnance factories in order to advise it on the best use to which the existing machinery could be put in. Not only would blueprints, technical instructions, etc. be supplied, but manufacturers were also to be shown exactly how to produce.⁵⁹³

4. Commercial activity under scarcity

During the years of WW II, substantial numbers of automobiles both new from the USA and second-hand from France, were imported into Spain, consigned to individuals who obtained an import license authorising clearance through customs.⁵⁹⁴ About 1943, the authorities decreed the addition of a 'surcharge' of 1,000 pesetas per fiscal horsepower, maximum taxable figure being on 15 HP vehicles, which, for example, totalled 15,000 pesetas for the Ford V-8. This 'surcharge' was collected from importers over and above the current import duties. However, from time to time an 'amnesty' was decreed by the Customs Department

⁵⁹³ Barcelona's local management have agreed with this opinion. However, the Minister responsible for the proposal was exceedingly difficult to convince and because this particular Minister might have taken action which would not be in the best interests of FMI, the local company thought it might be advisable to let the Minister think that the assistance to be given was directed towards the accomplishment of the Minister's own original proposal. However, according to Cooper it would have been wrong to give unsound advice to the Spanish government. Therefore, it was arranged that some representatives from London visit Spain to interview the Minister concerned and to present the head office's point of view. See Minutes of Conference held at Dagenham on 17th January 1947 and Regent Street INI Project. Box 7534 # Dagenham 1947-1948, *FMI Archives*, Barcelona.

⁵⁹⁴ letter Ubach to Cooper, 31 January 1947, Imports from the USA, Box 7534 # Visit Dagenham, *FMI Archives*, Barcelona.

of the Exchange in respect to cars brought into the country under the provisions of an international 'triptych' which had lapsed. Such cars were allowed to become nationalised by means of payment of current duties plus the above mentioned 'surcharge' of PTAs 15,000. In this way the government was able to have more cars in circulation in Spain in order to relieve the transportation problem, without having to part with any foreign currency. Furthermore, the Spanish government obtained a cash payment on every unit imported. It is worth noting that trucks so imported did not bear the above mentioned 'surcharge'.⁵⁹⁵ Since the termination of the Second World War, substantial numbers of US passenger cars were introduced into Spain following the above routine, which had been encouraged through the decree of August 30, 1945. The units, in accordance with the routine followed after World War II when resumption of US shipments took effect were, as in the past, sold by Ford Dearborn through the medium of Ford Iberica, either FAS New York, or CIF Spanish Free Port. Those units were consigned to individuals or concerns domiciled in Spain, or with Barcelona. The individuals obtained their own import license without the intervention of Ford Iberica. However, the dealer organisation largely assisted the purchasers to fill in the applications for import licences, advising them as to the proper way of effecting remittances to the US. No order was accepted by Ford Dearborn from any other source than from Ford Iberica. The latter assigned the purchase an order number within the export quota allocated by US to Spain. There were over 100,000 Spaniards living in Mexico and other Central and South American States who provided the currency to pay for units shipped into Spain for their relatives or friends. A great number of foreigners also resided in Spain who drew on funds abroad. Moreover, a great number of Spanish concerns in Spain had representatives abroad who provided the necessary currency. A similar system was followed by both General Motors and the Chrysler Representatives in Spain.

⁵⁹⁵ The circulation of automobiles in Spain had decreased from 250,000 in 1936 to 120,000 in 1946; this figure includes over 6,000 motorcycles. Moreover, it is worth noting that 80% of the cars and trucks were ten years old or more.

The importation of automobile vehicles into Spain continued at a limited pace due to the severe restrictions imposed by the Government. The holder of a licence to import a car or a truck was free to make his choice from the various makes on offer and usually took full advantage of his privileged position. The price was important, but experience showed that the speed of delivery was the decisive factor. Nevertheless, FMI had not established a reputation for quick deliveries of units were effected to individual purchasers, whereas some of the main competitors had been able to effect much quicker deliveries from stocks held either in Portugal or any one of the Spanish free zones. The holder of an import permit was extremely sensitive to the possibility of his licence lapsing or becoming invalidated through subsequent official action or of having to deal with price increases at the point of origin which, often created serious difficulties. He wanted his unit delivered quickly even though he had to pay more for it. FMI had been underselling its main competitors, in spite of past sales averages and what a widespread service organisation seemed to entitle them. The cause was due considerably to the company's inability to effect prompt deliveries. The company was not making the profit that the competitive companies made. For example, General Motors were selling their products at a public dollar or sterling price and furthermore, they charged a certain amount of pesetas which was split between the company and the dealer involved. The distributors of Chrysler were following a similar policy except that the amount collected in Pesetas was dedicated exclusively to the payment of the dealer's commission. There did not appear to exist from the Ministry any specific ruling covering this type of transaction, nor any specific limitation to the commission which the vendor's agent was free to charge.

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FMI's dealers were in a disadvantage through the present method of quoting retail prices of units in dollars or sterling currency, and letting them get credit for their commission in either of these two currencies. The pesetas equivalent of these

⁵⁹⁶ letter Ubach to Claridge (office of Sir S. Cooper), 29 January 1948, Box 7534 # Two currencies *FMI Archives*, Barcelona.

credits when they finally turned into the Spanish Exchange Control ranged from 2,000 to 3,500 pesetas per unit whereas the SEIDA allowed 4,000 to 8,000 pesetas per unit and General Motors and other makers charged still higher amounts. It should be borne in mind that on account of the import restrictions above mentioned, sales were only made in a very limited number and required a great deal of work and attention before they were concluded. Moreover, the profit which dealers drew on sales of units to be imported directly by the buyer was insufficient to pay fees and/or commissions to third parties which were often involved in transactions of this kind. This situation caused many a deal to fall into the hands of competitive dealers whose remuneration was far more liberal. FMI thus desired to correct this situation; they wanted the dealers to again become conscious of the profit they could derive from active pursuit of prospective buyers and therefore wanted them to train salesmen for this work. Moreover, a need to give Ford products and services facilities more publicity was required.⁵⁹⁷

Another feature of the decade of the forties was that the growing scarcity of foreign currency which authorities had made available for the importation of automobile parts had caused the manufacture of "independently produced" spare parts to grow to considerable heights.⁵⁹⁸ Indeed, many parts imported were very often produced with complete disregard to quality as well as accuracy. This situation had prevailed since the end of the civil war in 1939 with varying degrees of intensity. Throughout the duration of World War II, the market for Ford's spare parts was understandably devoid of foreign spare parts. However, with the end of the war an era of growing scarcity of foreign exchange had commenced for FMI due to the reduction in Spanish exports. Altogether, the period 1939-1947 was particularly favourable for the development of local manufacture of automobile parts with one limiting factor, namely the scarcity of raw materials and

⁵⁹⁷ Ibid.

⁵⁹⁸ Ubach's report on the new company, 16 February 1948, Box 7534 # Main Issues, 1947-48, *FMI Archives*, Barcelona.

to a lesser extent the lack of precision machine tools.⁵⁹⁹ Therefore, it was necessary for FMI to adapt itself to the new situation by, on the one hand, doing all it could to obtain licenses with which to import much needed parts and on the other by making an effort to develop the procurement of local manufactured Ford parts to the maximum. There were up to 3,000 different items on the local procurement list, but for different reasons the situation had deteriorated to a point that almost half of them were at that moment on back order.⁶⁰⁰ The immediate result of this position was that Ford's dealers were falling into the habit of purchasing independently produced parts in order to give service. In so doing they actually paid less for independently produced products because they could take full advantage of the retail margin of profit officially authorised to dealers, whereas this margin had to be split between the dealers and FMI. Under these conditions, it was difficult to maintain the dealer's faith in Ford's ability to keep the parts business functioning properly. Considerable thought had been given by Ford in order to correct and improve this situation. The following factors had a direct bearing on this matter:⁶⁰¹ first, the legislation for the 'protection of national industry', which was put into effect in 1939/40; second, the existing control of the distribution of raw materials; and third, the supervision which the Ministry of Industry and its provincial delegations exercised, according to existing laws, on the installation of new machinery and on the development of new lines of activity other than those already permitted to existing manufacturers.

5. Firms and markets. The limits of the firm and the creation of a new firm

One of the most important variables that affects the boundaries of the firm (and between firms and markets) is, first of all, corporate strategy.⁶⁰² Strategic decisions

⁵⁹⁹ See Catalan (1995: 111-25)

⁶⁰⁰ On December 31st, 1943 FMI had 292 local parts back ordered, 494 on the same date in 1944 and 1,059 on the same date in 1945. In December 1946, the back order list included 1395 local items.

⁶⁰¹ Ubach's report on the new company, 16 February 1948, Box 7534 # Main Issues, 1947-48, *FMI Archives*, Barcelona.

⁶⁰² Ansoff, Declerk and Hayes (1976), Porter (1990), Kay (1993).

conform to several characteristics: first, they affect an entire firm or a significant portion of it; second, they are made by top managers; third, they are long-term in nature; and four, they are based on perceptions about the future rather than on hard knowledge. Second, firms that cope best with conditions of uncertainty will be in the best position to implement their strategies. Uncertainty has two separate meanings. First, there is a structural uncertainty, that arises when a firm has to base its decisions on judgements about future unknowable outcomes. And, second, parametric uncertainty, that arises from the possibility of a range of market imperfections including bounded rationality and opportunism.⁶⁰³

Moreover, the creation of new firm can be conceptualised as the outcome of two or more firms that join to create a new organisational entity. One firm identifies a new opportunity for generating revenues as the result of producing a new product, improving the production of an existing product, or creating a new structure to facilitate production. In addition, the creation of a new firm can be viewed as the outcome of a selection process in which firms select other firms based on the shared needs required to realise a new opportunity. The perceived desirability of a potential partner results from either the availability of capital or the desire to gain access to another firm's technology, products, or market.⁶⁰⁴

Considering the factors mentioned in the previous section as well as the tendency to protection of Spanish industrial legislation in those years, it was thought that with the creation of a separate manufacturing firm many of the obstacles which had prevented the progress of FMI parts business could be overcome. The fundamental idea was to provide the new firm with proper connections among the suppliers of raw materials so that they could rely upon them to assist with their own free quotas in case that for any reason official quotas would fail to materialise. Moreover, in this regard, it is worth noting the fact that it was becoming a common practice for big concerns that produce raw materials such as iron, steel, copper, etc., to become

⁶⁰³ Langlois and Robertson (1995:17-18).

⁶⁰⁴ Niman (1994: 374-375).

directly interested in the creation of new enterprises, the object of which was to manufacture and sell the products made with such raw materials. Such concerns were usually allowed to freely dispose of varying percentages of their productive capacity, which gave them the opportunity to enter both the manufacturing and the wholesale business. With the provision of the required machinery as well as the support enlisted of steel and metal industries which would become financially interested, the new firm could enjoy far more freedom of movement and thus stood with much better chances of being able to adapt itself to recent laws and regulations than if the task was to be pursued through the existing Spanish company. Optimistic conclusion were drawn because, on the one hand, FMI had a well established dealer organisation 'anxious', according to FMI's managers, to buy parts from Ford Iberica. And, on the other, there was a considerable market, owing to the fact that most of the vehicles in circulation were on the road far longer than at normal times. With Ford's actual methods of developing local procurement of parts they not only did not progress but were gradually falling behind. The back order picture mentioned above was a clear indication.

Moreover, Ford found many of its present suppliers working for the INI which had invaded Ford's field through the purchase of the old Hispano Suiza, where they continued production of 6 cylinder trucks. The INI, of course, with government support, enjoyed priority treatment in the allocation of raw materials. Thus Ford's orders for the same gradually felt behind. Therefore, by different and more effective methods, FMI wanted to correct this situation, otherwise it would have found itself increasingly pushed to hold its dealer organisation together and its parts business alive. Thus, it appeared that one way to increase its own local parts production, minimising the production of independently produced parts, and ensuring that raw materials of the right quality were not misused and wasted, as much as it was at that time, in the production of parts of unsatisfactory quality, might have been the formation of a separate firm for the manufacture of Ford spare parts. To this end the Ford company contacted several manufacturing enterprises and also established some sort of agreement with and among them. These firms

were: Echevarria SA of Bilbao (steel manufacturers) and Fundicion Bolueta SA of Bilbao (foundry) and Sucesora de Electrica S.A. of Barcelona (steel foundry). All had given their agreement in principle to get involved in FMI's proposed new firm. In addition, and although no direct contacts were made, S.E. Construcciones Electro Mecanicas of Cordoba, the most important non-ferrous metal mill, whose board consisted mostly of Bilbao industrialists, had been approached by the above companies on Ford's behalf. Their reply to Ford's proposition was that although not being at that time ready to invest funds in the intended enterprise, they were going to undertake to supply the new firm with all the copper that it might needed for manufacturing and at current fixed prices. A capital of five million pesetas was suggested for the new company, which was going to be underwritten by the companies mentioned above plus Ford Iberica and the part furnishing the foreign currency for the importation of machinery, which partly was already available.⁶⁰⁵

The formation of the new company went that, in order to avoid possible red lights from the Spanish authorities,⁶⁰⁶ which would have been expected if the INI had become aware that Ford was interested in such a set up, it was advisable that a small company of half a million pesetas was established and formed by individuals representing the Ford's supplier and Ford itself, plus the part supposed to supply foreign currency to pay for the machinery to be imported. Once the permit for the establishment of the Company was obtained, official authorisation had to be requested for the importation of machinery at a higher rate of exchange of dollars and sterling pounds. The industrial activity of the new company was intended primarily to fill the gap in FMI's service sales which was formed at that time by:⁶⁰⁷

⁶⁰⁵ It must be noted that according to existing laws, FMI could not underwrite more than 20 per cent of the capital of any company without requesting official authorisation. See Ubach's report on the new company. 16 February 1948. Box 7534 # Main Issues, 1947-48, *FMI Archives*, Barcelona.

⁶⁰⁶ Any new concern had to have the approval of the Spanish Administration. See also Lieberman (1995: 29-30).

⁶⁰⁷ Ubach's report on the new company. 16 February 1948. Box 7534 # Main Issues, 1947-48, *FMI Archives*, Barcelona.

a) Parts involving considerable risk and responsibility *vis-à-vis* Ford's clients, which were either not manufactured in Spain or were made without proper technical control as to quality, uniformity, etc. such as transmission and differential gears.

b) Parts of which FMI was unable to obtain sufficient supplies due, in some cases, to inadequate machine tools, in others to lack of raw materials, like such as: radiators, crown gear and pinion sets. The inadequacy of raw materials suppliers and machines, coupled with the continued import restrictions and shortages of foreign currency had contributed to inflate prices of parts of the types indicated to new heights. Besides, some manufacturers were tempted to organise their own retail outlets because of the high margins of profit which could be obtained in this field.

Furthermore, and important feature was that, with the exception of the differential gears, all the other parts just discussed were not eligible for import, because of existing local manufacturers. It was true, however, that import licensing authorities occasionally granted permits to import transmission gears and crown-and-pinion sets because they realised that local production was neither sufficient nor technically satisfactory to meet requirements, but as Spanish production of the same gained momentum and experience, FMI may have found itself totally shut off from the importation market on these parts. It may, of course, have been argued that one of the three or four existing manufacturers could have been approached and developed into a source of high quality gears. This was a fact, for which quality could only have been achieved with the importation of additional tools and machinery, with all the complication this would have implied. Ford's past experience in matters of that kind was anything but encouraging. With few exceptions, FMI had found prospective suppliers of that type of product ready to agree to their terms at the outset and pleased to get on their business, but actually hoping to benefit by Ford's blue prints and Ford's experience and prestige in order to build solid foundations to their business. After a time, FMI found them gradually breaking away and invading the highly profitable wholesale and even retail fields.

With the projected new firm Ford could have relied on proper and discrete use of technical and other information relative to manufacture of important parts and assemblies.⁶⁰⁸

The participants of the new separate company for the manufacture of certain parts would have to be among selected manufacturers who received allocations of raw materials, Ford dealers and Ford Iberica itself (a 25% interest).⁶⁰⁹ However, the danger of the scheme, according to London's home office, was that probably in five years' time the pattern of world trade would have changed and therefore it might be cheaper for Ford Barcelona to import the parts either from Ford Dagenham or from Ford Dearborn, in which case the main object of the company (in which Barcelona would have only a minority interest) would have largely ceased to exist.⁶¹⁰ Moreover, if Ford Barcelona was no longer prepared to absorb

⁶⁰⁸ There was no reliable statistical data indicating the number of types of Ford units circulating in Spain. FMI estimated the total at between twenty six to twenty eight thousand. More than 75 per cent of these corresponded to pre-1936 models. There was a considerable contingent of Model A and B units in circulation (estimated at 13,300), which it had not been possible to replace on account of post-civil war difficulties. About 60 per cent of the total Ford units of all models in active service at that time were trucks. Pre-civil war vehicles had given far more service than might have been expected, thanks to continuous parts replacement. Transmission and differential gears, in particular, which had been in very short supply for many years previously, were in many cases in a deplorable state and required quick replacement with genuine parts. Generally speaking, all lathes, milling machines, drill, punch and power presses required for the production of transmission gears and crown gear and pinions could be obtained in Spain. Their prices were high and delivery slow, but against this was the considerable advantage of payment in pesetas. Heat treating furnaces could also be obtained in the country; radiators was an item which definitely could not be imported from abroad as neither licenses nor funds for payment were granted. There were five manufacturers who were closely united to maintain prices and naturally monopolise radiator production. One of these companies had been supplying Ford in quantities far short of its requirements. However, attempts to correct this position by contracting other possible sources had not been successful. One further reason for this was the scarcity of copper and brass materials. Therefore, the new Company could undertake the partial manufacture and complete assembly of radiators. Moreover, it could import the machine specially engineered to form, straighten and cut radiators tubes, which would have contributed to a lowering of costs as these operations were done now with sufficiently less efficient methods. See Ubach's report on the new company. 16 February 1948. Box 7534 # Main Issues, 1947-48, *FMI Archives*, Barcelona.

⁶⁰⁹ 'Memorandum' of the Conference held at Dagenham, Box 7534 # Visit Dagenham, *Ford Archives*, Barcelona.

⁶¹⁰ First, one of the most important variables that affects the boundaries of the firm (and between firms and markets) is corporate strategy. Strategic decisions conform to several characteristics: they affect the entire firm or a significant portion of it, they are made by top managers, they are long-term in nature; and they are based on perceptions about the future rather than on hard

the products of the new company, then it might be found that the such company, in order to continue its business, would turn to manufacturers of independently produced parts, particularly as a substantial investment in machinery would undoubtedly have been made. Ford Barcelona, with its minority interest, would be powerless to stop the company.⁶¹¹

Furthermore, the home office also felt that the action Ford Barcelona might have taken in ceasing to buy the new company's products would lead to difficulties between Ford Barcelona and the other participants in the company. However, there was no large supplier who was sufficiently interested in the project to take the responsibility of forming the Company away from Ford Barcelona. Then, if there was such a large business in the manufacture of independently produced parts, the independent manufacturers would not make genuine parts for Ford Barcelona. Thus was because of the very high standard required by Ford Barcelona. Moreover, there was a considerable waste of valuable raw materials by the manufacturers of spurious parts. From the home office's standpoint, this project was one that might well have been undertaken by the INI itself which, it has already been suggested, could make Ford spare parts in various disused munitions factories.

To recapitulate, the formation of the "new company" as a supplier of the main components of the four-cylinder truck to be eventually produced in Spain was recommended as an interesting alternative because FMI's partnership in that company would have left the actual financial structure of Ford Iberica unaffected, thus evading the provision of the Law of 'Protection of the National Industry' of

knowledge. Secondly, firms that cope best with conditions of uncertainty will be in the best position to implement their strategies. Uncertainty has two separate meanings. First, there is structural uncertainty, that arises when a firm has to base its decisions on judgements about future unknowable outcomes. And, second, parametric uncertainty, arises from the possibility of a range of market imperfections including bounded rationality and opportunism. See Langlois and Robertson (1995:17-18).

⁶¹¹ It is important to note that dynamic processes in the economy are inherently uncertain with regard to outcome. This makes it very difficult for the firm to approach decision making with the intention of maximising its production function.

September 1939 which regulated the expansion of activities of existing enterprises by limiting their foreign participation to 25 per cent. Should FMI have participated in a new or existing company it would have been done so as a Spanish institution, and its own activities would have not been expanded, as it would have been a new company, a totally Spanish concern, which would have undertaken the creation of new activities, for which proper authority would have been obtained in accordance with provisions of the same Law. It appeared legally defensible that Ford Iberica could participate in the formation of the new company without losing its 60% financial stakes to the US parent company. Obviously the formation of the new company had to be passed by the Spanish administration, before the incorporation was effected. As part of the whole plan were the approval of royalties and their remittance abroad as well as a remittance of yearly dividends of FMI; the agreement of the administration to these two important points could have been easier due to the fact that no foreign participation appeared in the new company, suggesting that no dividends had to be remitted abroad.⁶¹²

As to the financial structure of the new outfit, the amount of new machinery required to make the total manufacture of the truck possible amounted to \$ 1,7 million and 25 million pesetas. The dollar total worth 65,8 million pesetas which added to the pesetas value of the machinery above, made a total of 90,9 million pesetas. To this amount should be added the eventual cost of the building to house the machinery, let us say an estimated share of 100 million pesetas in total. The advantages of possessing the control and administration of the company have to be emphasised which could be achieved through FMI absorbing the total dollar investment as above, or by syndicating FMI's shares and the shares eventually underwritten by Spaniards or foreigners repatriating capital into Spain; or through FMI subscribing enough shares to hold 51 per cent of the share capital. The PTAs portion would have been obtainable through share subscription from Banco

⁶¹² Ubach to Dalton (Regional Director for Europe, Ford International, New York, 8 November 1951. Spanish Truck. "New Company". Box 7534 # McKee-Dalton, 1950-51, *FMI Archives*, Barcelona.

Central's clients, the Bank itself and/or its supplier 'Material y Construcciones' of Barcelona, which was the concern on whose reiterated offers of co-operation FMI it felt could count on. About the possibilities of obtaining dollars for this purpose, the \$ 450 million approved by the US Government for aid to nations outside the Atlantic Pact, and the recent allocation of \$ 100 million by the US Senate Appropriation Committee for special aid to Spain might be mentioned.⁶¹³

To sum up, there were two important points of principle to be considered: first, that the formation of the new company would have implied an obligation to continue the business, thus it could not be discontinued when circumstances made it more convenient for Ford Barcelona to concentrate on other markets.⁶¹⁴ And, second, that no action could be taken that would prejudice the future of Ford Barcelona especially its long-term good relations with suppliers and dealers.⁶¹⁵ As pointed out by Richardson, "the purchasing company gives no formal assurance but its past behaviour provides suppliers with reason to expect that they can normally rely on getting further orders on acceptance terms."⁶¹⁶

⁶¹³ Ubach to Dalton Box 7534 # McKee-Dalton, 1950-51, *FMI Archives*, Barcelona.

⁶¹⁴ As regards the suggested manufacturing company: "While this subject was very fully discussed, you are aware that the Dearborn interests could not support the proposal. As you know, I have always felt doubtful about it although appreciating your difficulties to the full. My particular fear is that, while such a Company might serve a useful purpose for a period of time, there is likely to arise a time when Spain is able to import many of the components which at present cannot be imported many of the components which at present cannot be imported and the landing costs to any local manufacturing company might very well fell aggrieved, despite the fact that their present thought is that they are willing to take any such risk (...)" 28 July 1948, Box 7534, in # Main Issues 1947-48, *FMI Archives*, Barcelona.

⁶¹⁵ The capabilities view of the firm is a real-time account of production costs in which knowledge and organisation have an important role. One implication of the boundedness of capabilities is that it is most unlikely that many firms have the ancillary capabilities necessary for all activities in the chain of production. The result is that firms must link up with other firms. This often takes place through the simplest of market contracts. All firms must rely on the capabilities of others, especially to the extent that such capabilities are dissimilar with those the firm possesses. So, according to the capabilities view of the firm, the boundaries of the firm are (partly) determined by the relative costs of developing ancillary capabilities internally or purchasing them externally through contracts with other firms. See Langlois and Robertson (1995:31).

⁶¹⁶ Richardson (1972: 886).

Finally, in view of the all matter, the home office suggested that Ford Barcelona should contact manufacturers and urge them to cease making independent Ford parts and to devote their energies to manufacturing genuine Ford parts for Ford Barcelona. However, it was recognised that Ford Barcelona should not impose severe conditions because the Company was, to a great extent, in the hands of the suppliers.⁶¹⁷

6. Forward expansion: distribution and dealer organisation

The previous section has dealt with the issue of backward expansion and the formation of a new company in order to manufacture parts for Ford in Spain, as it has been argued the changing circumstances affecting the Spanish economic life had instigated the need to develop new forms of business that could be adapted to the new situation. However, as we have seen elsewhere, FMI being a foreign subsidiary - and therefore seen as a foreign company - it was very much constrained by the restrictive foreign capital Spanish legislation. And, as a subsidiary, its actions depended on the home office policy, which in spite of being informed of the adverse circumstances of Spain, did not see the situation like the local managers. Moreover, the plans of the INI were also interfering with Ford's activities in Spain.⁶¹⁸

Let us now turn to forward expansion and see how the distribution activity of the company, i.e. its dealer organisation, was being affected by the new environment. In this regard, it seemed desirable to Ford Motor Company to elaborate and put into practice a definitive and common policy regarding such organisation. This policy had to consider the strong arguments for having only one type of dealer, that is, a principal dealer, in that a small dealer was entitled to have the same

⁶¹⁷ 'Memorandum' of the Conference held at Dagenham, Box 7534 # Visit Dagenham, *Ford Archives*, Barcelona.

⁶¹⁸ Due to country-specific differences in factor endowments, consumer tastes, institutions, culture and government policies, foreign subsidiaries needs to be organised differently than their domestic counterparts in the host country and also than other subsidiaries from other foreign countries. See Dunning (1993: 10).

growth opportunities as a large one. In addition, it was more difficult and expensive in terms of cost per vehicle to operate a small dealership than a large one. Whilst it was not intended that sales to the trade should be abandoned, it was desirable to see that traders buying Ford products were prepared to respect Ford policy and Ford traditions in their commercial transactions.⁶¹⁹

FMI was operating only through direct dealer agreements. Since 1939, the end of the Spanish Civil War, all dealers had been allowed to sell all kinds of Ford products. This situation, which had proved to be satisfactory, established itself on account of the reduced volume of trade, due to the abnormal circumstances aforementioned such as lack of foreign currency and the system of import licenses in operation in Spain. The commercial relationship between the Ford company and its dealers was not regulated through the Standard Dealers' Agreement (put forward by Ford Motor Company of Detroit), but through an exchange of letters which referred to an established 'set of stipulations applying to the Sales of Ford products.' This deviation from the Ford procedure was deemed necessary in order to avoid the payment of a very heavy tax, which would have been applicable on the value of all sales if it was concluded under the Standard Ford Sales Agreement, which was classified by tax law as an "agreement to supply" and therefore subjected all transactions to a 2.5 % transmission tax. The actual 'set of stipulations' was legally accepted by Ford dealers by means of a yearly letter requesting the concession of the sale of Ford products accordingly. The 'set of stipulations' embodied all the standard conditions regulating a Ford franchise, such as exclusiveness, premises, sales and service organisation, stock of parts, prices and the variations, warranty, and all legal aspects involved in an eventual termination of the 'concession'. It also allowed the company to inspect the dealer's premises with regard to the prohibition of sales of independently produced parts. Commissions and discounts applicable during the contract period were

⁶¹⁹ Cooper to Ubach. 25 March 1948. Sales Organisation. Box 7534 # Audit Report and London Executives, *Ford Archives*, Barcelona. The following paragraphs are based on it.

communicated to the dealer after Ford accepted him as concessionaire for the sale of their products.

Following the main idea of avoiding the payment of the tax on transmission, the 'stipulations' avoided mentioning anything involving funds or amount of purchases, etc., so that in normal times dealers used to furnish Ford with their 'annual order' of cars and trucks where the types only were specified in order to provide them with required data for their own estimates. There were 142 of such exclusive dealers whose franchise terminated legally on September 30, 1948, and that were renewed at the company's discretion. However, given the current abnormal conditions, a situation which had prevailed since 1939, dealers were selling all Ford products, Lincoln and Mercury cars, as well as tractors. They were all equipped to give service to passenger and commercial vehicles, and those dealers located in agricultural regions were also servicing tractors. Besides the dealer's organisation as such, the Company had allowed, checked and approved the appointment, by the dealers, of so-called 'subconcesionario' (also called dealers), who eventually received a commission on the sale of units from the dealer, and who bought service parts from the same dealer, and sold them at appropriate establishments at their approved retail prices. Most of these sub-dealers operated their own repair shop, and could eventually become direct or exclusive dealers. They totalled eighty three in number, thus amounting to three hundred and thirty five establishments devoted exclusively to Ford across Spain. Supervision of the sub-dealers was carried out by FMI's road force. And, regarding operation, the company was in favour of continuing the present arrangement, permitting the sale by all dealers of all commercial and passenger vehicles, because when prior to July 1936, FMI was operating under the system of main dealers, subdealers and limited dealers, they realised that the system was not successful: all dealers who for years were accustomed to receive a full commission for their sales, were dissatisfied with the fact that their main dealer received a commission on their own sales, without any justification whatsoever in the vast majority of instances. From FMI's point of view, and despite the fact that the main dealer received a rappel on sales of units

made by other dealers in its territory, they were unable to translate this into an improvement in the sale of units or service parts. Spain was, a comparatively large country with a poor road system and in Ford's experience, the allocation of comparatively large territories to any one dealer had not been satisfactory. At that time and until normal trading was to be resume and a larger volume of units could be imported in the normal way, which might perhaps have necessitated a larger retail sales force, it was FMI's opinion that no changes should be made in their actual present exclusive and direct dealer structure, other than eventually extending their present subdealer scheme in order to pave the way for a future strengthening of the dealer force at certain key points.

Therefore, according to FMI, a separate organisation would not be advisable, handling the Lincoln and Mercury lines, as the number of automobiles which could be imported at that time under a very tight regime of restrictions remained at such a low figure in comparison with its prospects, that it did not warrant the expenses involved. Certainly the company expected to appoint special Lincoln-Mercury dealers at a future date when conditions permitted, in main cities as they had in the past, but at that time their dealers, in order to survive as such, had to be able to sell all Ford products in response to the requirements of the limited number of purchasers. On the other hand, with regard to tractors it was felt that it was not advisable to deprive existing dealers from the possibilities of selling and servicing tractors as Spain was mainly an agricultural country and only in a few areas could tractors not be operated. However, given the demand it was believed that if the volume of import tractors continued to grow they would appoint special tractor service dealers at important key points or develop the existing Ford dealers in order to have the appropriate sales and service organisation set up to look effectively after this line of business.⁶²⁰

To conclude, Ford's Spanish subsidiary, due to the abnormal circumstances imposed by the new regime was changing the routines, procedures and policies of

⁶²⁰ Ibid.

the home office, transforming and adapting them to the new environment. As a consequence, its dealer organisation was shifting into a commercial and industrial one, deviating, therefore, from Ford Detroit's standard procedure. It is important to emphasise this transformation as it brought further consequences affecting its organisation. We might indicate, as the following chapter will show, the agreement of Massey Ferguson to turn the organisation definitively into commercial and industrial, mainly agricultural, one (mainly agricultural). Moreover, when Nissan took over Motor Iberica, it found it, very difficult to turn the old FMI 'corporate culture' as well as the old FMI dealer network into a 'new Japanese organisation.'

7. FMI's strategy and the INI: towards an agricultural line of business

During the 1940s the Spanish state, through the intermediary of the INI, had made definitive attempts to develop a national automobile industry with the establishment of the ENASA for the manufacture of trucks, and the agreement with Fiat for the manufacture of light cars.⁶²¹ Consequently, FMI's future plans in their aim to maintain their organisation and to continue developing their normal activities were based on the possibility of arousing the interest of the Spanish government in the co-operation which they could offer in solving the difficult problem which Spanish agriculture was being confronted with for many years.⁶²² They felt that if they could sell the Spanish authorities on the fact that they could

⁶²¹ The INI soon decided to initiate motor vehicle manufacture. Its plans are gathered in the following documents: "Resumen de lo tratado en las sesiones del Consejo de Administración del INI sobre fabricación de vehículos automoviles en España." *INI Archives* INI 243, no. legajo 1 (1942): carpeta 1; "Tanteo para fijar los planes de fabricación de automoviles." *INI Archives* 355 (1942): Carpeta 5; "Ideas sobre la formación del personal obrero para la fabricación de automóviles." *INI Archives* 355 (1943): Carpeta 10; "La Nacionalización de la Industria del Automóvil en España por Antonio Robert." *INI Archives* 355 (1943): Carpeta 8. "Notas sobre la monografía 'la nacionalización de la industria del automóvil en España' de Antonio Robert y Conferencia sobre la industria Nacional y la motorización por Jaime Nadal." *INI Archives* 355 (1944): Carpeta 9. For the origins of the Fiat Project see, for example, "SIAT." *INI Archives* 355 (1942): Carpeta 6; "Constitución Empresa fabricación vehículos utilitarios en colaboración con intereses privados (FIAT y Bco. Urquijo)." *INI Archives* 355 (1947): Carpeta 11 "Convenio INI-SEAT." *INI Archives* 355 (1947): Carpeta 24; "FIAT." *INI Archives* 355 (1948): Carpeta 16. Finally, for the case of ENASA: "Emplazamiento fábrica de Camiones." *INI Archives* 316, no. 4 (1943): 2093. otros asuntos: Hispano Suiza, Fiat.

⁶²² On Spanish agriculture during the 1940s, see particularly Barciela (1986, 1996)

become a decisive factor in solving the deficiency of farm machinery, they would in compensation, receive in the automobile field preferential treatment. FMI felt it deserved a preferential treatment because, Ford had a long history in Spain, had taken the lead in developing Spanish automotive parts industries, their social policy, etc. Together with the fact that their prices for the 8 HP and 10 HP cars were the lowest, these facts would be taken into account in mobilising the government's good will towards Ford. Although the prospects of greater activity in FMI's plant were better owing to the trade agreement signed by Spain with England and France, which provided for the importation of substantial quantities of cars and trucks, they felt, however, that something had to be done to provide steady work for the plant in keeping with their past performance and long establishment in the country.

The policy of the Spanish authorities was to import only the big tractors from the US, which were then used on the large farms of the south of Spain. Spain, being an eminently agricultural country, required a great number of tractors and while again certain steps were being taken by the government to realise independence from imports in this line, it appeared that they were not yet so advanced as the state of affairs reached by the authorities in the manufacture of trucks at ENASA, the former Hispano Suiza works. Therefore, with the idea in mind to gain Ford's truck and car business a preferential treatment in line with the standing of their organisation in the country, they were in favour of proposing the production of their new tractor to the Spanish authorities. Such machinery could either be sold by Dagenham on credit at scrap or reduced value, or be paid for with the sterling arising from the eventual sale of their stock in Ford Lusitana.

An approach to the authorities with an offer to manufacture the Fordson Major in Spain by supplying appropriate machinery and equipment payable with FMI's own currency, therefore had a good chance of being favourably received. It must be borne in mind that FMI had entered negotiations with the Ministry of Industry and Commerce to join in with the INI in the manufacture of the truck, and after two years of discussions they had refused the proposal, for various reasons. First

because they did not think that the enterprise would be financially sound and second, because they did not want to accept being controlled by the INI.⁶²³ Therefore, they had to be prepared to face an attempt from the INI to interfere with the new proposal, because according to existing laws any enlargement of activities or establishment of new activities by any existing concern had to be authorised by the Ministry of Industry and Commerce. A very important reason why this was necessary besides complying with existing laws was because the Ministry was deciding on the allocation of raw materials, which was vital to any manufacturing enterprise. No production of any kind was possible without the full support of the authorities and the preferential allotment of all raw materials. The following ideas were therefore submitted to implement a program of future development in Spain: in two of the three basic groups of Ford's products -cars, trucks and tractors- the Spanish government was already partly committed with FIAT and Spanish investors to manufacture light cars and also possibly light vans, and with ENASA for the manufacture of a heavy type of truck. However, no

⁶²³ The scheme sponsored by the Spanish Government under which the INI had been formed for the purpose of assembling motor vehicles, all the components for which were to be manufactured in Spain. The Spanish Government wanted to enlist the aid of Ford in this matter and Cooper, President of the Board of Directors of FMI, had said that every possible assistance could be given but that the Ford organisation was not prepared to introduce capital into such a venture. He was convinced that the project outlined could not possibly survive world competition and he also was of the strong conviction that the problem was being approached from the wrong angle. The considerations which had brought him to this conclusion was that the future world pattern was exceedingly uncertain and the United States were anxious to abolish barriers to international trade and would strongly oppose any import duties designed to foster home manufacture. The local manufacture of components was profitable only if the cost was less than the landed cost of import parts. Even allowing for CIF margins, Spain was not in a position to produce as cheaply as America and, therefore, the local manufacture of complete motor cars was not a sound proposition. Cooper thought that the Spanish government, which was not experienced in the manufacture of motor vehicles, had to be advised accordingly. He did not believe that the major competitors of Ford would have been prepared to support a scheme such as the Government proposed. In this regard, Ubach said that throughout Spain there were a number of ordnance factories which, as they were not producing, were merely accumulating costly overheads. In Cooper's view, the obvious solution was that the Spanish Government should turn these factories over to the production of those components which could be produced more cheaply than they could be imported from America. The existing FMI plant could then be used to assemble vehicles from parts provided partly by Spain and partly by America. But it was unsound to expect FMI to purchase locally made parts at a higher price than that at which they could be imported. Only a reasonable proportion of the overheads incurred by ordnance factories should, therefore, be added to the price of locally manufactured parts.

definitive arrangements had been made to manufacture a medium truck in the two to four ton category nor for a medium sized passenger car. Furthermore, no definitive commitments had been made or disclosed to manufacture tractors.

Ford Iberica's plan therefore called for specific models in each of the three basic groups mentioned. Tractors and implements were taken to prepare the ground with authorities for the other two. The Spanish government was conscious of the necessity to mechanise agriculture. The era of low farm wages in Spain was gone and the need for increased output of foodstuffs was imperative. It wanted the figure of 1,200 working tractors, to reach 2,000 or more in the near future. As regards cars, with difficulties in obtaining and paying for petrol products, Spain had had to ration gasoline and lubricants for automotive and industrial use. As a result of this and of the system of taxation based on horse power rating, cars of low horse power were being given preference by government and by private users. That Dagenham made passenger vehicles which were classed at 8 and 9 HP units respectively, appeared much more promising. These cars cost less to buy and to operate and had the advantage of being purchasable in pounds sterling, which although scarce, were not quite so difficult to get as dollars.

Therefore, assuming FMI's relations with the Spanish government were re-established on a more favourable basis as a result of an agreement over tractors initially, and on truck development on a longer term basis, they should aim to get as part of the overall arrangement a larger share of imports of British cars which, if obtained in sufficient quantities, would have placed FMI in a position to resume local assembly of the chassis only, for which they were already prepared, and for bodies to be brought in white to be trimmed and painted there in Barcelona. Local body assembly could be taken up latterly. A general understanding with the government about Ford's future activities in Spain was on indispensable condition of its development in the light car field. Parallel to the local passenger car assembly would have been the creation of sources of supply of local parts to integrate these units. Such items as batteries, wheels, tires, radiators, chassis and seat springs, front axle, hubs, mufflers, trim, glass, paint, etc. could then be purchased in Spain,

as they were in pre-Civil War days. In the more distant future lied the possibility of making an engine which could be used to fit into a medium priced car in the 14-16 HP range for which there was a good market in Spain and would not have competed with the 9 HP passenger vehicle which INI and FIAT had agreed to build co-operatively in the country.

The head office did not give, however, support the proposals of the subsidiary. It argued that the prospective volume was not sufficient to make them a sound long-term economic proposition. Secondly, in their opinion Spain's foreign trade especially with the UK, was likely to improve and it would probably be able, before long, to import automotive products from the UK, at a price much below the local manufacturing cost which could be attained from Spain's limited volume potential. Third, Ford was not inclined to engage in a joint venture for local manufacture; to do so would 'morally' commit Ford to continue financial assistance if and when the locally manufactured products could not compete with imported products. In conclusion, the home office recommended the Barcelona firm to develop the company's established policy of maximum local purchase, so long as this was profitable.⁶²⁴

8. Planning and forecasting under uncertainty

The prevailing world uncertainties were making planning a reliable forecast a very difficult task, and the job became even more complicated in Spain because of the government control on imports, on currency allocations and on exchange rates. Moreover, a disturbing fact which consequent to the practice followed by the Spanish authorities during 1949 to comply with the provisions of trade agreements with automobile producing countries, had added to the difficulties of planning: no foreign currency was being allocated for imports of automobiles, trucks, tractors, and spares parts. Thus, accounts were largely cleared by the value of imports paid

⁶²⁴ 'Conference at London Cooper, Claridge Elliot and. Ubach). "Manufacturing Proposals." 12 November 1948, Box 7534, in # Visit Dagenham 1947-48, *FMI Archives*, Barcelona .

for with those percentages of free currency allowed exporters of Spanish products to those countries. Furthermore, access to those foreign currencies were not limited to Ford's trade, but indeed traders and merchants in general were eligible. This displaced imports of automobile products, which apart from the disruption to the automobile market, rendered the estimation of imports on which the firm's profit forecast had to be based very difficult.⁶²⁵

The peculiarities of the foreign concerns' operation in Spain, - quotas, import licenses, currency allocations, etc. - continued to prevail in Spain and to a somewhat lesser extent in the outlying Spanish territories as has been previously stated. The immediate effect of these complication, was that companies' initiative and advanced planning were robbed of a great deal of their significance.⁶²⁶ 1952

⁶²⁵ For example, let's take the forecast for the year 1951: the estimated net profit for that year was of a higher value than had been the case for the two preceding years, since the values of imported merchandise were going, during 1951, to be converted at higher exchange rates than those that had prevailed for most of 1950, i.e. had risen from 25 to 39.86 pesetas/\$ and from 79 to 110 pesetas/pound sterling roughly. Obviously the percentage of profit to be accrued would benefit from such increases in the rate of exchange applicable. Such increase of profit were equally based on a larger number of sales of cars, commercial vehicles and tractors than had been the case in 1950, because they were based largely on orders already at hand. While the above covered FMI's interpretation of net profit before taxes, after deduction of income and other taxes, the total was still higher than in previous years, due to the fact that no further official devaluation of Spanish monetary sign was considered foreseeable, whereas the figures for 1949 and 1950 were definitely lower because they incorporated either an adjustment or a reserve for exchange adjustment to reflect the new lower peseta rate of exchange enforced in January 1949 and a August 1, 1950. Consequently, the improved percentage of profit on assets and operating percentage of sales were a reflection of both increased sales and increased profits expected for 1951. With regard to sales, which was the main objective of the company, some explanation was required to justify apparent discrepancies between the expected increased sales and the rate of market penetration: as the above stated sales forecast was mainly based on orders on hand, plus those orders to be received from those dealers and clients from whom Ford had been able to purchase foreign currency freely, and also those orders to be received from dealers located outside Spain. Together, these sources of sale would have placed the rate of market penetration substantially higher had it not been for the restriction imposed by Dagenham's inability to make the deliveries foreseen the estimated requirements owing to shortage of steel. Therefore while sales of Dagenham products were expected to follow the satisfactory trend initiated during 1950 with an increase still foreseeable, the rate of market penetration would not reflect this ascendance unless other importers of British cars would have suffered the same drawback. See Ubach to A.J.Wieland (Ford International). 31 December 1950, Box 7534, # Profit Plan, 1951, *FMI Archives*, Barcelona.

⁶²⁶ In Spain (including Canary Islands and Spanish Morocco) Ford Motor Iberica sold, from all manufacturing sources, 1,706 units of which 42 were imported from USA in 1952; 1,120, of which 143 came from USA in 1951; 603, of which 69 came from USA in 1950.

was a year of severe restrictions on imports from the dollar area because of the scarcity of US currency. FMI was hoping that when the long drawn out negotiations between Washington and Madrid had come to a conclusion, the opportunities for imports of automotive products from USA would become immediately brighter.⁶²⁷ There was a tendency, initiated in 1952, for government policy to favour imports by or through the recognised representatives of the various automobile producers, where before the field was open to all sort of instructions. Dealer organisation had been kept a well trained, homogenous force covering the whole of Spain. It was generally well housed and well financed. It lacked, however, modern shop equipment (except fourteen or fifteen dealers who managed to bring in modern tools and 'diagnostic' equipment with their own dollar commissions from the sale of units) but this should be blamed on the shortcomings of the import situation.

Owing to the intricacies of the import situation, the company was unable to bring in and pay for units in foreign currency, to be sold to the public through their dealer network in standard fashion.⁶²⁸ They could, however, sell units payable in foreign currency to holders of import licences who had their own means of payment and who had authority from the Spanish exchange control to utilise such means. These fell into two broad categories: parties who had funds in foreign countries and were able to obtain permission to use them; and, parties or firms dealing in the export trade who received authority from the exchange control to utilise freely a varying portion of the foreign exchange accrued as a result of their own export activity. The latter were by far the more numerous. Moreover, a third group could be added made up of diplomats and maybe a limited number of foreign residents.⁶²⁹

⁶²⁷ For Spain foreign economic policy during this period, see Guirao (1993).

⁶²⁸ See Guirao (1993) specially chapter 5.

⁶²⁹ Ubach to Bogdan (Ford International). May 1950. Two currencies. Box 7534 # Ford International, *FMI Archives*, Barcelona.

It is important to note the fact that, so far in the post-war era, the volume of the company's sales had been very small, and the cost of effecting a limited number of sales was very high in telegrams, correspondence and assistance of all kinds to prospective purchasers who were known to be eligible for an import permit, and that the Spanish government had been unable to provide, during the last few years, any foreign currency which would have made it possible for FMI to import urgently needed essential service parts.⁶³⁰ In addition, local conditions of government control on both imports and exchange practically nullified all dealers' sales activities. Imports, therefore, depended as much on FMI's own efforts as on the quality of the product, and more than on price itself.⁶³¹

9. Conclusion

During the period 1945-54, Ford Motor Company was facing nationalistic pressure in several countries such as Spain, India, Egypt and Brazil.⁶³² In Spain, the

⁶³⁰ To all these prospective users of Ford products, the company had quoted the regularly established full retail price in New York and London in dollars and pounds respectively for US and British built units. Thus, a "two currency" element featured in the commission the intervening dealer received on these transactions; in other words, the company price for US made units was made up of established retail F.A.S. New York prices plus ocean freight and insurance, both payable in dollars plus a specified amount of pesetas representing the profit of the dealer calculated at 25% of the CIF cost of the unit involved converted into pesetas at the official rate of exchange of 11.22 pesetas per dollar. A similar procedure was in effect with regard to Dagenham and Poissy products. The differential between the Inter-company and retail price in dollars or pounds paid by the individual buyers was normally credited to FMI's account. At first sight, this might have appeared an abnormally high profit to the company. See Ubach to Bogdan (Ford International). May 1950. Two currencies. Box 7534 # Ford International, *FMI Archives*, Barcelona.

⁶³¹ In this respect, the introduction of the Consul and Zephyr in England, that of the new Fordson Makor, the acceptance of the Taunus, and the new Vedette, "had done wonders to conquer the admiration of the users." Examination of Sales Records reveals: 620 cars & trucks and 235 tractors sold with a net profit of 1,8 million ptas in 1950; 1,108 cars & trucks, 488 tractors and a net profit of 3,8 million in 1950; and, 1615 cars truck 652 tractors and a net profit of 7,1 million pesetas in 1952. Ubach to Dalton, 5 February 1953. Box 7534 # Dalton, *FMI Archives*, Barcelona.

⁶³² On Ford Egypt, see Tignor (1990). On Brazil, see Shapiro (1991 and 1994). For example, in Egypt, from 1945 on, Ford found itself in an increasingly restricted political and financial environment, which its executives were not able to dominate. Ford's investment decisions had to take account of nationalist sensitivities and could not be based on purely economic and financial realities. The decade and a half from 1945 to 1960, thus serve as a test of how well Ford fared in its relations with an increasingly nationalist and watchful Egyptian government. The emphasis on Egyptianisation was made palpable by the enactment of a 1947 law that

consequence was that finally, in May 1954, Ford Dearborn sold its participation in the Spanish company to local interests. Ford US had argued that the size of the market and various other factors made it impossible to continue in Spain. However, the reality seemed to contradict this opinion. In effect, the year 1954 constituted a turning point. When Ford left Spain, SEAT was constituted and from then on the Spanish motor industry saw a remarkable increase. Other foreign companies such as Renault and Citroen set up concerns in the country. What seems to be one of the main reason for Ford's departure were the limited opportunities left in the business field to Ford: the tractor and light truck were unattractive to Ford Motor Company. On the other hand, another important consideration preventing Ford from engaging in local production, as pointed out by Wilkins and Hill, was the insistence of the government that a controlling interest in any joint venture should rest in Spanish hands. This stipulation was disliked by the Ford management in Dearborn, which felt that even a majority interest in its foreign companies was unsatisfactory and wanted a hundred per cent ownership in all of them.⁶³³ Finally, though Ford Motor Company sold its subsidiary entirely to local capital, it nevertheless established commercial and technical agreements with the new 'national' company, Motor Iberica. Thus, the latter developed its products,

imposed a number of requirements on firms operating in Egypt, including, of course, the Ford Motor Company, which in spite of being completely owned by Ford Investment Company, was juridically an Egyptian limited liability company. For new firms, the law stipulated that at least 51 per cent of a company's equity capital had to be offered to Egyptian nationals and 40 per cent of the places on their Board of Directors be Egyptians as well. In spite of this, Ford remained optimistic about its future in Egypt. In 1950, it established a new and larger plant in Alexandria. This move came about because General Motors and Chrysler were also planning to established themselves in Egypt. Until the 1952 coup, Ford Egypt had fared well in an environment of strong nationalist sensitivity. It had used its affiliates and business connections around the world to overcome currency restrictions, and though its divided and currency negotiations with Egyptian bureaucrats had not been easy, they had been satisfactory. However, after 1956, the pressure on all private businesses increased greatly. Nor did Ford have its way on its two most important business decisions of the late 1950s. In 1957, it contemplated liquidating its Egyptian business, but was forced to conclude that the financial penalties likely to be imposed by the Egyptian government would be too punitive to make this outcome possible. Later in 1959-1960, it made an offer to create an automotive manufacturing plant in the country. It did so because the company was on the defensive *vis-à-vis* an increasingly regulatory and intrusive Egyptian government and wanted to show a willingness to participate in the local push to industrialisation. See Tignor (1990: 387-8).

⁶³³ Wilkins and Hill (1964: 402).

trucks and tractors, with Ford's technical aid. Moreover, Ford preserved its Spanish commercial network that allowed the American company to sell its products through a well established sales network.⁶³⁴ Ultimately, the decision to leave Spain still remained profitable for Ford because it assured them at least ten years (according to the terms of the contract) of business in the country.

To conclude, it stands clear that our case study fits in with recent studies that stress the negative consequences that state decisions of this period produced in the long run. In effect, the intentions of Ford clashed with those of the Spanish government, for the economic nationalism of Franco presented government's interventionism in car manufacture as the only possible alternative for the production of automobiles in Spain. As San Roman has pointed out recently, SEAT was for a long time considered the prototype of the paradigmatic company of Franco's regime.⁶³⁵ The incapacity of private enterprise was the main argument used to entrust the car industry to the National Institute of Industry (INI). The INI used its power to block any private initiative and assume the creation of the first national mass production motor vehicle company as its own. Within the car industry, the INI did not protect national companies but, on the contrary, defended its own projects. Although Spanish national attempts during autarky were scarce and small, both General Motors and Ford presented their projects for the building up of a national industry. The reaction against foreign capital and the defence of "national", "sectarian" and "patriotic" interests prevented Spain from developing a modern industry earlier. As a contemporary observer pointed out, "an apparent government policy which upon control by INI of all new automobile developments in Spain, has been the stumbling bloc which has been preventing big concerns like Ford and General Motors from operating on a major scale in Spain. In effect, INI

⁶³⁴ The definitive separation came in 1967 when the Spanish company established an agreement with Massey Ferguson by means of which the latter acquired a 36% participation of the former.

⁶³⁵ San Roman (1995: 141).

prevented the establishment in Spain of any major motor vehicle industry it did not control."⁶³⁶

⁶³⁶ Knoblaugh (1949: 25).

Appendix

Table 7-3. Breakdown of total net sales, Ford Ibérica

Total	1948 US\$ ('000)	1949 US\$ ('000)	1950 US\$ ('000)	1950 Ptas.('000)	1951 Ptas.('000)
Sales, no. of units	1722	1136	848	884	1596
Net sales	5994	4537	2435	75758	146165
Cost of sales	4924	3836	2091		
Gross Profit %	17.8	15.4	14.1		9.4
Commercial Expense %	10.7	12.4	12		6.6
Operating Profit	427	123	41		2689
Operating Profit %	7.1	3	1.8		1.8
Other Income	61	60	22		
Net Profit -After Taxes	308	114	41	2601	3811
% Return on Assets Employed	8.8	6.1	4		2.9
CARS					
Unit Sales-Direct, no. of vehicles	76	18	4		
Net Sales-Direct	139	89	7	4640	27423
% Total Operations Net Sales	3	1.9	0.3		
Gross Profit % Car Net Sales	12	17.4	18.3		
Gross Profit % of total Gross Profit	1.6	2.2	0.4		
TRUCKS					
Unit Sales-Direct, no. of vehicles	89	18	6		
Net Sales-Direct	426	56	12	26417	47394
% Total Operations Net Sales	7.1	1.2	0.5		
Gross Profit % Truck Net Sales	6.4	11.2	14.5		
Gross Profit % of total Gross Profit	2.6	0.9	0.5		
TRACTORS					
Unit Sales-Direct, no. of vehicles	712	326	87		
Net Sales-Direct	1258	673	166	12733	35718
% Total Operations Net Sales	21	14.8	6.8		
Gross Profit % Tractors Net Sales	20.7	15	9.5		
Gross Profit % of total Gross Profit	24.3	14.5	4.6		
PARTS AND ACCESSORIES					
Net Sales-Direct	2580	1954	953	31155	35077
% Total Operations Net Sales	43	43.1	39.1		
Gross Profit % P & A Net Sales	28	20.5	19.8		
Gross Profit % of total Gross Profit	67.7	57.1	54.8		
Units Produced				24	107
Direct Labour Efficiency - Hours				102.5	100.9
Direct Labour Efficiency - Cost				102.5	100.9
No. of Salaried Personnel				113	115
No. of Hourly Personnel				156	150
Total no. of Personnel				269	265
Total Payroll				7077	7505

Source: Ford International, Box 7534, FMI Archives, Barcelona

Jan/Sept. US cents 8.913 to PTAs 1; Oct/Dec. US cents 4 to PTAs 1; Jan/Aug. 1950 US cents 4 to PTAs 1 Sept. 1950 US cents 2.884 to PTAs 1; Oct/Dec. 1950 US cents 2.50 to PTAs 1

Table 7-4. Comparative financial ratios: assembly and sales locations

	Total unit sales				total turnover (\$000)			
	1951	1952	1953	1954*	1951	1952	1953	1954
Overseas		41270	45754	20928	n.a.	7951	8006	4288
Branches								
Buenos Aires	423	796	1363	528	2214	1837	2206	724
Mexico City	10189	14817	13004	4800	4218	4481	4528	1751
Montevideo	3501	3021	1207	797	606	682	729	486
Santiago	2613	1705	1332	787	681	1222	1643	594
Sao Paulo	22097	23355	6564	1823	8096	10631	7120	3865
Alexandria	11797	9257	8224	2702	3201	3585	2649	938
Amstern	5917	5423	8624	6038	1812	2403	2665	1147
Antwerp	16454	21891	20709	12652	5433	5673	5046	2030
Barcelona	1596	2267	2863	1303	605	812	886	344
Bologna	587	805	1979	680	101	156	290	84
Copenhagen	4680	8243	9505	6331	1489	2307	2367	
Cork	10506	6792	6720		1327	1800	2058	948
Helsinki	2976	7755	1836	743	2315	2107	1918	1053
Lisbon	1229	1529	1374	948	307	469	413	189
Stockholm	9704	11080	12066	7625	1790	2713	2997	1261

Source: Ford International, Box 7534, FMI Archives, Barcelona * Jan./May

Table 7-5. Comparative financial ratios: assembly and sales locations

	unit gross profit to sales				turnover/profit to sales %		
	1951	1952	1953	1954	1952	1953	1954
Overseas	n.a.	5.0	4.6	4.5	11.5	11.4	11.0
Branches							
Buenos Aires	26.3	32.8	29.8	20.9	36.4	35.1	35.7
Mexico City	17.2	15.5	13.4	14.9	12.6	14.7	13.5
Montevideo	26.8	224.5	28.8	35.3	31.7	32.7	37.2
Santiago	16.1	14.1	19.0	17.4	39.1	43.1	40.2
Sao Paulo	24.9	19.2	25.9	24.2	31.6	36.4	41.4
Alexandria	7.2	8.9	9.1	6.6	33.7	31.6	26.9
Amstern	14.6	8.0	8.2	9.7	27	26.6	30
Antwerp	13.7	13.1	10.3	9.6	39.1	36.1	34.9
Barcelona	9.4	11.9	8.4	8.9	23.6	20.9	21.5
Bologna	18.1	18.0	17.0	15.5	28.7	21.5	22.7
Copenhagen	13.9	9.7	8.2		31.3	28.7	
Cork	13.0	9.9	10.3	9.9	30	28.7	30.4
Helsinki	11.5	7.0	7.5	7.5	27.3	28.1	20.4
Lisbon	18.8	11.2	10.9	11.2	32.3	32.7	34.5
Stockholm	12.6	11.2	11.6	10.0	27.6	26.1	29.7

Source: Ford International, Box 7534, FMI Archives, Barcelona

Table 7-6. Comparative financial ratios: assembly and sales locations

	commercial expenses/sales				% gross profit to sales			
	1951	1952	1953	1954	1951	1952	1953	1954
Overseas	n.a	2.8	2.5	2.3	n.a	3.2	2.8	4.5
Branches								
Buenos Aires	15.2	18.5	31.9	18.9	18.8	10.8	1.0	20.9
Mexico City	3.6	3.6	4.2	3.9	14.8	11.9	9.6	14.9
Montevideo	5.4	7.6	13.9	10.2	21.5	13.6	9.2	35.2
Santiago	3.2	5.4	8.3	6.5	12.4	13.2	16.3	17.4
Sao Paulo	2.9	3.6	9.2	8.2	21.5	12.1	15.3	24.2
Alexandria	3.3	9.7	15.1	5.3	3	2.4	0.2	6.6
Amstern	7.1	7.7	5.5	3.9	7.5	4.6	5.5	9.7
Antwerp	5.9	5.2	5.9	4.5	7.2	8.4	5.4	9.6
Barcelona	6.8	9.6	6.9	4.8	4.8	5.8	6.5	8.9
Bologna	13.2	3.6	3.2	3.8	12.1	13.7	12.8	15.5
Copenhagen	7.6	6.1	7.1		5.9	7.5	5.5	
Cork	4.3	7.4	6.4	5.1	7.8	5.9	7.7	9.9
Helsinki	4.9	3.1	8.1	8	7.1	6.2	6.7	7.5
Lisbon	9.4	10.2	9.9	7.8	9.3	5.8	4.9	11.2
Stockholm	6.5	5.6	6.2	4.9	5.7	8.0	4.1	10.0

Source: Ford International, Box 7534, FMI Archives, Barcelona

Table 7-7. Comparative financial ratios: assembly and sales locations

	% return on assets				% net profit to sales			
	1954	1951	1952	1953	1954	1951	1952	1953
Overseas	4.5	n.a	21.7	17.3	15.6	n.a	1.5	1.4
Branches								
Buenos Aires	20.9	23.6	12.6	1.0	-2.6	11.7	7.7	1.9
Mexico City	14.9	48.8	35.1	29.3	32.3	7.1	6.2	4.8
Montevideo	35.2	94.7	48.2	21.0	86.4	9.7	8.3	4.9
Santiago	17.4	33.9	31.6	30.6	39.9	7.5	9.1	9.7
Sao Paulo	24.2	48.5	17.2	9.7	18.6	16.0	8.6	13.5
Alexandria	6.6	13.9	10.6	0.9	-0.5	2.6	2.0	0.7
Amstern	9.7	12.7	8.0	13.7	24.9	3.8	2.5	3.1
Antwerp	9.6	26.4	30.1	17.4	29.0	5.4	6.1	5.0
Barcelona	8.9	14.6	18.3	16.7	12.4	2.6	3.6	3.9
Bologna	15.5	26.7	44.4	61.6	35.4	8.8	9.8	9.2
Copenhagen		10.3	17.9	13.9		3.7	2.9	3.2
Cork	9.9	13.8	7.7	10.6	20.3	4.1	2.7	3.9
Helsinki	7.5	45.4	33.2	14.8	17.6	2.7	3.1	5.3
Lisbon	11.2	6.6	4.7	3.8	7.0	8.2	4.9	3.9
Stockholm	10.0	13.4	20.3	17.3	23.1	3.1	4.2	2.2

Source: Ford International, Box 7534, FMI Archives, Barcelona

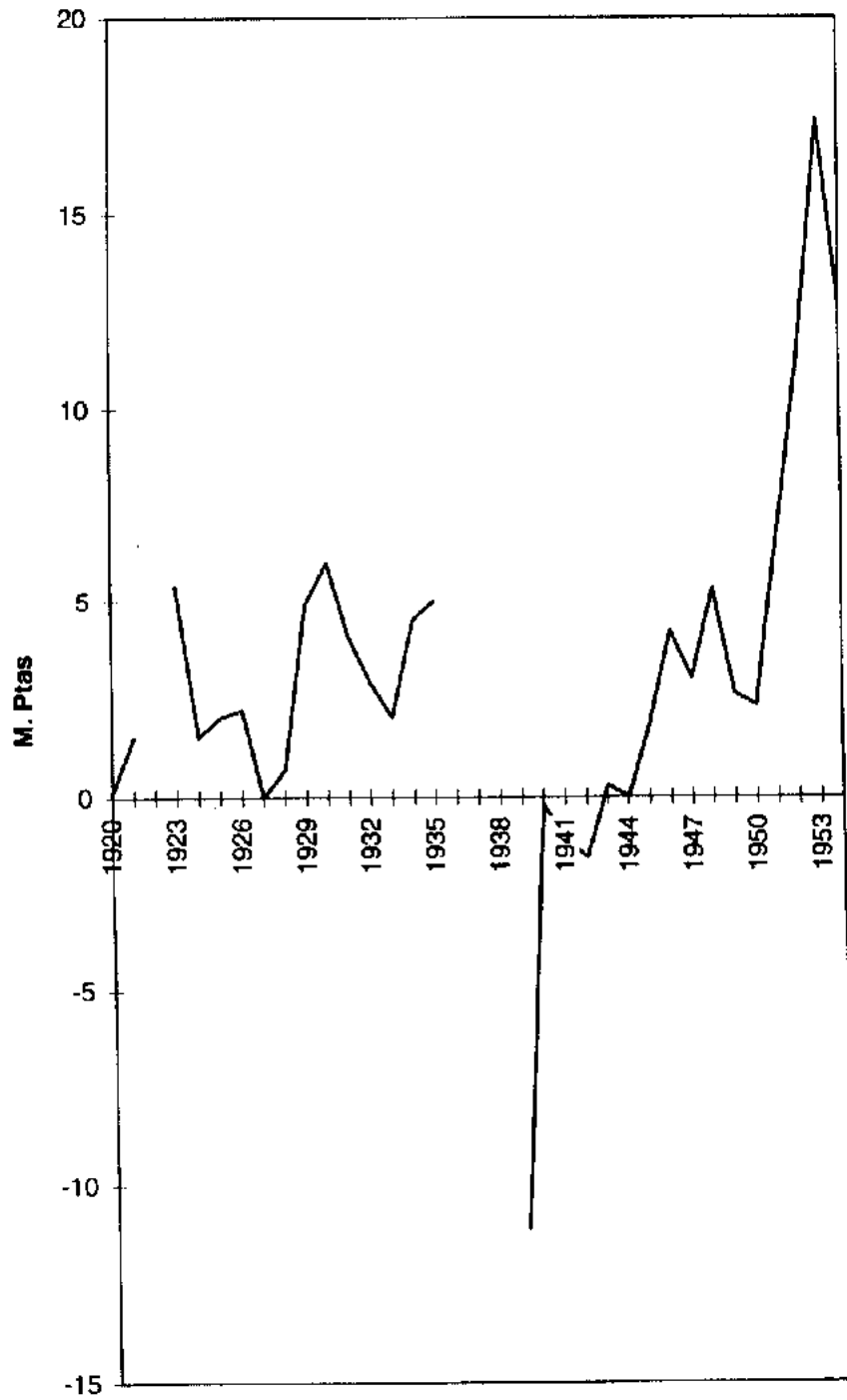
Table 7-8. Comparative financial ratios: assembly and sales locations

inventory turnover (no. months supply) total personnel

	1951	1952	1953	1954	1952	1953	1954
Overseas	n.a	30.2	2.7	0.5	114	115	125
Branches							
Buenos Aires	1.9	1.2	1.9	n.a	271	281	269
Mexico City	3.1	2.9	2.6	5.1	1057	949	1008
Montevideo	3.7	2.3	21.4	1.0	131	110	114
Santiago	3.2	1.9	1.8	4.0	196	224	202
Sao Paulo	3.9	2.9	3.2	3.9	1389	731	943
Alexandria	2.1	1.9	1.4	5.3	408	398	406
Amstern	2.2	2.2	4.1	2.0	661	884	979
Antwerp	4.1	4.4	4.6	1.0	1323	1187	1536
Barcelona	1.2	1.9	1.7	2.7	264	258	262
Bologna	1.7	5.4	9.0	0.6	35	37	37
Copenhagen	3.4	4.0	4.7		455	508	
Cork	6.2	3.1	5.2	1.0	602	767	655
Helsinki	14.9	9.5	5.1	0.4	204	181	188
Lisbon	3.0	2.9	3.0	2.4	149	150	161
Stockholm	5.5	5.3	4.3	0.9	531	527	677

Source: Ford International, Box 7534, FMI Archives, Barcelona

Figure 7-1. Profit and Loss, Ford Motor Iberica



Part IV. Latter Developments and Conclusions.

Chapter Eight. The Political Economy of the Spanish Motor Vehicle Industry in the Post-War Economy

1. Introduction

The representation of the firm appears as a result of the selection of those traits best adapted to the peculiarities of the environment.⁶³⁷ As a consequence, such adaptation brings changes in the firm's routines and strategy. The present chapter therefore is concerned with the outcomes of such an adaptive process. However, it will begin by pointing out the process of the emergence of the modern Spanish motor vehicle industry carried out through state intervention and multinational investments. Then it will turn to the case study. The argument will proceed as follows. First, it will refer to the 'nationalisation' of the firm in the sense that it was taken over by local capital. And, second, it will address questions of firm strategy and structure.

The role of the government and its involvement in industrial matters is an important feature of post-war economy. In effect, during this period the government has influenced directly industrial behaviour; it has become a much more important actor by way of its explicit policy measures influencing industrial performance. Moreover, it might be suggested that this governmental policy towards industry should be regarded as a major factor explaining the ways different national systems works. Likewise, the growing importance of the role of government should be viewed as a consequence of the internationalisation of markets and the growth of firms. Both developments have led governments to the understanding of the importance of major enterprises in national economies.⁶³⁸

⁶³⁷ Nima (1994: 371).

⁶³⁸ Dunning (1993).

In the post-war year Spanish industrial expansion was hindered by insufficient production of electricity, shortages of steel and cement, lack of skilled labour and management, inadequate private investment, a level of foreign exchange earnings too low to cover imports of capital goods, and the autarkic bias of the country's rulers.⁶³⁹ However, at the beginning of the 1960s, these weaknesses were overcome, and Spain's industrial pattern was transformed from one dominated by textiles into one in which the metallurgical, chemical and building industries, and power production were predominant. One of the main features regarding this process was when the year 1957 brought into government the team of technocrats who were to introduce a new economic policy to reconcile rapid industrial growth and its consequences. Moreover, foreign investment was encouraged by allowing the repatriation of profits, and the importation of advanced technology by permitting royalty payments.⁶⁴⁰ The goal was to shift the economy away from an inward looking country towards an outward looking one, where manufacturing sectors would play a major role. In this sense, Spain could take advantage of being a Gerschenkronian 'latecomer' and move quickly into capital-intensive, high technology sectors like motor vehicles. The automobile industry was called to play a major role in the economic boom of the 1960s.

The spectacular growth of the 1960s had been attributed to three main developments.⁶⁴¹ First, the trade liberalisation measures initiated in 1959 that encouraged the import of capital goods,⁶⁴² which in turn contributed to a renovation of much of Spain's outdated capital equipment.⁶⁴³ Second, the launch of a plan of action to promote the export of manufactured goods initiated in 1959 with the devaluation of the peseta. Moreover, among the main aspects of the new

⁶³⁹ Catalan (1995).

⁶⁴⁰ Carr and Fusi (1981: 49-78).

⁶⁴¹ Donges (1971).

⁶⁴² Fuentes Quintana (1984).

⁶⁴³ In effect, weak and outdated means of production had been one of the major shortcomings for the early development of modern mass manufacturing enterprises. See Section 2 of the present chapter.

policy were the provision of export subsidies to producers, exempting them from paying indirect taxes on foreign sales, rebates of import duties paid on raw materials, spare parts and capital equipment used towards the production of exports, and financial assistance to exporters. Third, as highlighted by Donges, the external financing of Spanish industry reflected a profound change in official attitudes towards foreign private capital. However, later interpretations of Spain's industrial boom years argue that Spain's industrialisation policy in the 1960s was still resolutely projectionist. Foreign investment was of crucial importance to the industrialisation process, not least because of Spanish industry's unwillingness to undertake research and development.⁶⁴⁴ However, in the motor vehicle industry it was expected that the technological basis established in the industry would bring positive effects in other sectors. The technological requirements for automobiles would force technological improvements in related supply industries. Therefore, the automobile industry would raise labour productivity by carrying in its train a technologically trained workforce. In an attempt to tackle the long-standing weaknesses of the reduced dimension of enterprises, shortage of capital, technological backwardness and low productivity, Spain's policy makers pursued a strategy of industrial concentration.⁶⁴⁵

On the other hand, one of the main shortcomings that the Spanish industry had to overcome was the shortage of skilled labour, aggravated by two factors: first, the inadequate educational facilities⁶⁴⁶ and second, the high rate of emigration. The educational system was orientated toward ecclesiastical, legal, administrative and other white collar employment rather than technical training.⁶⁴⁷ In addition, more

⁶⁴⁴ Martinez (1979); Braña, Buesa, Molero (1984); Myro (1988).

⁶⁴⁵ Even so, it was found that between 1964 and 1968, growth rates were marginally higher in medium-sized enterprises than in large firms. For the period 1968-73, he discovered that the largest firms were also those which achieved the highest rates of growth, probably due to their capacity to obtain finance on the most favourable terms. Harrison (1993:46).

⁶⁴⁶ On the problem of education as interpreted at the time see for example, Estapé (1963). For an historical interpretation of education and Spanish economic development of that period, see Nuñez (1992).

⁶⁴⁷ It is important to emphasise the fundamental role of education for industrial and economic expansion. In this sense, it has been stated how applied science and engineering, not pure

than a million Spanish children of school age received no formal education, and even officials put the illiteracy rate at about 11 per cent. France, Belgium and Holland had nine times as many technical students per million inhabitants as Spain, and West Germany had fourteen times as many.⁶⁴⁸ The better educated went into non manual employment, so there was a surplus of poorly paid white-collar workers.⁶⁴⁹

Finally, a concern on the role of the INI needs to be examined. As has been argued in the previous chapters, the aim of the INI was to create the infrastructure for industrial development. In so doing, it invested public funds in those areas where, according to the public holding, private capital was unwilling to risk a low return or in enterprises which needed state aid to get off the ground. The automobile industry was an example of the latter: in the late 1940s, the INI set about establishing a broader-based automotive industry. For instance, during the forties the INI bought up the old Hispano-Suiza: the new concern, ENASA, first embarked on the production of an expensive sport car, superbly engineered and presumably meant to 'fit' a domestic market dominated by a small number of the very rich. That this car was a commercial failure was less important than the fact that Pegaso became a mass producer of commercial vehicles. A spectacular growth subsequently took place in new industries, and as in all modern economies, the car industry provides a test case. When the SEAT factory was set up in Barcelona in 1952, its managers were concerned that the market might not absorb a hundred cars a month; by 1975 Ford, Chrysler, Citroen, Renault and Seat were producing three quarters of a million vehicles a year. However, these dramatic figures are in

science, was the British strength in the nineteenth century. See, for instance, Mokyr (1993). See also Chapter Two of this thesis.

⁶⁴⁸ *The Economist* (1962: 160-4).

⁶⁴⁹ As Langlois and Robertson (1995: 103) have pointed out, systems of schooling (regarded as semi-endogenous institutions) can turn out potential workers with an assortment of skills of various grades. Employers must then provide further training and education to meet firm-specific needs. When the system of public education is appropriate to the technological and other needs of employers, little further training is needed. If, however, there is no public education or it is directed to other ends or is otherwise inadequate, a far greater burden falls on the employers.

part a mere reflection of the abysmal point of departure in 1940 and the restrictive policies of the years that followed.⁶⁵⁰

The remainder of the chapter proceeds as follows. Section 2 is concerned with state intervention and multinational investments in the emergence of the modern Spanish motor vehicle industry. Section 3 turns to the case study: the 'nationalisation' of Ford in Spain during the period 1954-66. Section 4 recounts the process of concentration, integration and the formation of the Motor Iberica Group under the influence of Massey Ferguson (1967-1979).

2. State Intervention and Multinational Enterprises

2.1. State intervention: towards a domestic mass manufacturing industry

Spain was in urgent need to improve its established factory based industry. However, plant enlargement and modernisation was put off by heavy and detailed controls as previous chapters have already emphasised. Moreover, at the beginning of the 1960s, a report of the World Bank (1962) had also stressed the need for

⁶⁵⁰ ENASA was brought into being to manufacture heavy trucks and buses in Barcelona and Madrid, and SEAT to produce Fiat cars under licence in Barcelona. Moreover, Leyland had since acquired shares in ENASA -which at that time was producing Leyland models- and Fiat in SEAT. The conclusion of the US-Spanish pact signed in Madrid in 1953 encouraged private investors. The economic reforms and the growth of tourism following the 1959 devaluation provoked a further spate of initiatives. BMC, in collaboration with Nueva Montaña Quijano, had acquired a 20 hectare located near Pamplona for the production of up to 80,000 Minis, and possibly 1100s, a year. Renault had increased its share in Fasa, an associated company, from 15 to 50% and bought control of FAMESA, an important component manufacturer. Ford which held first place among importers (a close second, interestingly, was Czechoslovakia's Skoda), had during 1964 been discussing with Motor Iberica the possibility of producing its German-designed Taunus 12M. IMOSA was to make industrial vehicles in alliance with VW. It could be argued that the Spanish motor industry already sustained too many firms for its good health, and that concentration was needed to increase production runs, improve quality and bring prices down. Three firms clearly had little to fear: SEAT (whose 600 and 1500 cc models held 62% of the market), Fasa Renault (28%) and Enasa (10% of the market for commercial vehicles) had political as well as economic reasons to be confident. In the private sector, Citroën (25% of the commercial market), Motor Iberica (12%) and Barreiros (9%) seemed firmly established; but one could not say the same of many of their smaller competitors. Chrysler's recent agreement with Barreiros to make Dodge Darts looked more like a claim-staking exercise than a serious invasion. Simca have had just scraped by. See *The Economist*, 15 May (1965: 794).

freedom of private commercial and industrial investments.⁶⁵¹ Controls and forms of direct state intervention devised in more difficult times were to go. The state industrial holding, INI, which at one time soaked up so much new capital that little was left for the expansion of unprivileged commerce, was invited for the future to limit itself to a "pioneering" role. The government was urged not to try to see to everything itself, but to set economic goals and pursue policies that would assist the economy to reach them.⁶⁵²

It has been argued that the Spanish state had for a long time gone in pursuit of a domestic industry capable of manufacturing a 'popular' car on a large scale basis. To this end, there was at the beginning of the 1950s a certain optimism, across Spain, regarding the possibility of producing automobiles. Several firms such as Eucort and Fasa had already undertaken the production of automobiles.⁶⁵³ This production, however, was carried out by the assemblage of parts supplied by a multitude of small local workshops. It is worth noting that the major part of these workshops did not possess modern means of mass production, rather, it was the case that all of them lacked the means and skills for such a kind of production. Conversely, according to Ricart, the chances of developing an industry locally that could be technically advanced and economically efficient depended on a different strategy.⁶⁵⁴ In effect, according to him it was first necessary to develop a supporting network of ancillary industry. This would absorb much of the work that would otherwise have gone to only one factory; in this sense, ENASA was considered an example to follow. Second, apart from a few cases, notable but exceptional, the Spanish ancillary industry was not ready to supply a modern large

⁶⁵¹ *The Economic Development of Spain*, International Bank of Reconstruction and Development (1963) see also Anderson (1970).

⁶⁵² *The Economist* (1962:720).

⁶⁵³ "Solicitud de industria de interes nacional por Eusebio Cortés de Automoviles Eucort" Seccion 242, Legajo 4 (1946), *INI Archives*, Madrid; "expediente Renault" Seccion 242, no.0 (1947), *INI Archives*, Madrid; "Expediente Manuel Gomez Alfaro (Fasa)" Seccion 355, (1950/51), *INI Archives*, Madrid. On Eucort see also San Román (1995: 156-8).

⁶⁵⁴ Comunicacion CETA a Gerencia del INI. Asunto: Fabricación de Automóviles, S.A. de Valladolid, Expediente Manuel Gimenez Alfaro, 1951, Seat 355 1950/52. *INI Archives*, Madrid.

scale manufacturing industry mainly because of the quality deficiency of its products (capabilities, dimensions, technological treatment of production); and secondly, the weak and outdated capital equipment, technically backward and with prices incompatible with those required by a modern motor industry. In effect, during the years of scarcity and isolation, the workshops that produced spare parts were used to do so selling low quality products at high prices.

Italy, for example, a country to a certain extent comparable to Spain, had developed a truly modern motor vehicle industry. In effect, 99% of its production was carried out by Fiat, Bianchi, Masseratti, Ferrari, Alfa Romeo, Lancia, and O.M. All of them possessed complete manufacturing workshops.⁶⁵⁵ In Sweden, for example, the state had given all kinds of advantages to Scania-Vabis and Volvo; both of them were producing all sort of motor parts in their workshops and importing just the 'proprietary units' (generally from the US) that they still were unable to produce by themselves.⁶⁵⁶ In Spain, ENASA had managed to increase the quality of the automobile electric equipment that had since been produced in low quality but production was not on a large scale basis. Its efforts were towards the consolidation of some specialised mass production industries in clutches and shock absorbers. Moreover, both the CETA and ENASA had attempted to develop ancillary industry and produce gear boxes and brake systems locally, however, without any success whatsoever. These negative outcomes had confirmed both the difficulty itself and the infant stage of the domestic mechanical industry. It was thought, therefore, that in order to be able to produce a 'popular' car on a large scale it was necessary to have rationalised workshops with modern purpose machine tools and with an enormous capital investment. In this sense, Fiat had established for SEAT a program based on the establishment of modern workshops.

To sum up, the manufacturing of a low price vehicle was only possible with the modernisation of the capital equipment and enabling high level of production.

⁶⁵⁵ On Italian auto industry, see for example, Fauri (1996).

⁶⁵⁶ On Swedish auto industry, see Glimstedt (1995).

Second, in the limited Spanish market, with low levels of income (and therefore low purchasing power) and a low population, it was not logical to produce just for the domestic market. Production therefore had to aim at export markets equally. Finally, in a country with a low income per capita ratio, it was only possible to manufacture quality items with a high proportion of the workforce. It was their belief that Spain could undertake the production of specialised motor vehicles with a high ratio of workforce and then export them.⁶⁵⁷

2.2. State intervention: the legal framework and foreign investment

After the period of big recession of the 1940s and, in part, the 1950s, a new state strategy more open to foreign capital, facilitated the creation of the modern Spanish automobile industry.⁶⁵⁸ It will be necessary, therefore, to introduce a bargaining framework of analysis that considers both state intervention and multinational enterprises in order to understand the development of this industry.⁶⁵⁹ Several decades later, at the end of the 1970s, the industry had become dominated by multinational enterprises.⁶⁶⁰

⁶⁵⁷ On the Pegaso sport car see "The Iberian Flyer", *The Autocar*, 26 Sept. (1952:1189-91).

⁶⁵⁸ For a review of the role of the state in promoting industrial growth in developing economies see, for example, Shapiro and Taylor (1990) where application of industrial strategies incorporating institutional change is emphasised, and boundary conditions and lessons from experience which delimit sensible choices are pointed out as well.

⁶⁵⁹ It is of special interest to see what happened to the Latin American motor industry as regards state intervention. For instance, in Mericle and Koonish ed. (1984), the cases of Argentina, Brazil and Mexico are examined. These countries were the first countries in Latin America and among the first in the Third World to progress beyond simple vehicle assembly and to install production operations. An important analytical theme of this book is the relationship between the MNEs and host country governments. They all agree in the centrality of the relationship. However, there is some disagreement in the nature of it: some emphasise the conflictive aspects whereas others conceive of such a relationship in terms of co-operation and support. The Brazilian industry was the principal beneficiary of the regressive and authoritarian social policies of post-1964 military governments in Brazil. Argentine industry, in contrast with the Brazilian one, has never escaped its stagnationist tendencies. The failure of government efforts has been attributed to the relative strength of the working class and Argentina's dependent position within the world economy. The negotiations that took place between the Mexican government and the MNEs at the time of the creation of the Mexican automobile industry (1960-1964) are also examined. Finally, to conclude, Koonish and Mericle find that all three countries have been prone to stagnation and have thus required extensive government support.

⁶⁶⁰ For other cases, especially in Latin America, see Jenkins (1977, 1984), Bennett and Sharpe (1985), Kronish and Mericle (1984), Shapiro (1994).

After the establishment of the industrial legislation frame between 1939 and 1941, two decisions were taken in order to develop in the medium long run a national motor vehicle industry. First was the creation of the "Empresa Nacional de Autocamiones, S.A." (ENASA) in 1946. This firm was created from the remaining assets and the human and technological capital of Hispano Suiza. The second decision was the creation of the "Sociedad Española de Automóviles de Turismo" (SEAT) in 1949. The INI capital participation in Seat was one third, the rest was divided in two, in which Fiat held one third and private Spanish capital held the other. Fiat provided the technological assistance. These two firms replaced the American multinationals with the declared objective of substituting imported cars. The establishment of SEAT was immediately followed by Fasa (1951), a branch of Renault. A market so extremely protected and short of goods as the Spanish, attracted foreign manufacturers. Thus, in little more than a decade three more companies were created - producers of private cars and by-products Citroën Hispania (1957), Chrysler Barreiros⁶⁶¹ (afterwards the Peugeot Talbot España, 1963) and AUTHI (1967), all of them subsidiary firms of multinationals Citroën, Chrysler (sold to Peugeot) and the British Motor Corporation. Finally, the map of the Spanish automobile industry was completed with the establishment of Ford Motor Company (1972) and General Motors (1979),⁶⁶² both of them coming to Spain for the second time.⁶⁶³

Spain, like countries such as Australia and Brazil, developed and expanded automobile production during the 1960s and 1970s from a based-owned firms and

⁶⁶¹ On Barreiros, see Gimeno and Roca (1997).

⁶⁶² Carreras and Tafunell (1994:42)

⁶⁶³ Both Ford and GM had operated in the 1920s (see Chapter 2) For Ford's activities see chapters 2, 3 and 4. The new Ford and GM firm of the 1970s and 1980s were completely different concerns from those of the 1920s, that is, there is no line of continuity between them. When Ford came to Spain, all the other firms already established were producing at high costs because series were not long enough and the productivity of the plants was too low. On the contrary, the new Ford factory was conceived to respond to the maximum internalisation of its products. The plant was designed to produce a single type of vehicle, the 'Fiesta', which was sold throughout Europe; GM did the same few years later with the Opel Corsa.

imported technology.⁶⁶⁴ The Spanish industry grew with extraordinary speed, from 50,000 passenger cars in 1961 to more than 700,000 in 1973, an annual increase of nearly 25% (see table 8-3, in the appendix). This was the result of a young industry that was dominated by foreign manufacturers. Seat-Fiat and Fasa Renault were by far the largest companies in the period before 1973. Then, with its establishment in 1972, Ford called for Spain to play a major role in its European operations.⁶⁶⁵ Nevertheless, it should be remembered that, although the modern industry has taken off in the second half of this century, it did not start up from nothing.⁶⁶⁶

⁶⁶⁴ In 1956, Brazil instituted a growth breaking program to install an automotive industry. The plan restricted imports and forced multinational automotive companies to choose between abandoning the lucrative Brazilian market and, with the help of financial incentives, producing vehicles with 90-95 per cent Brazilian-made content within only five years. Although cars and trucks had been assembled in Brazil since 1919 -when Ford was the first to set up an assembly plant, followed by General Motors in 1925- the industry remained completely dependent on imported kits, primarily from Detroit. Ford had no intention to produce motor vehicles in the country. Before the Second World War, the company dominated Brazilian passenger car sales; between 1935 and 1940, annual exports from Ford US and Canada averaged 42 percent of wholesale deliveries into Brazil. Because of Ford's historic contribution to the automotive sector and its market dominance, the Brazilians went out of their way to elicit the company's co-operation. Ford's local management had also tried to impress on Dearborn the seriousness of Brazilian intentions. The government asked Ford-Brazil for a report on how Brazil might develop a local industry, and the Brazilian assistant manager, complied. Ford Dearborn adopted an intransigent position from which it scarcely deviated in the following years. In February 1953, for example, the director of President Vargas's sub-commission on motor vehicles, led a Brazilian delegation to Ford's facilities in Dearborn. On its arrival, Ford did everything possible to convince them that producing trucks in Brazil made no sense because of the country's small market and lack of infrastructure. Being the first motor company to establish itself in Brazil and dominating the market, why did Ford not try to make more of it? Subsequent interviews with Ford managers of the period indicate that some viewed Ford's late entry as a mistake. In retrospect, they offer various explanations for Ford's absence from this market segment. Some attribute it to Dearborn's lack of knowledge or interest in international affairs. Ford International, located in New York until 1956, was still somewhat of a stepchild in the organisation. Ford was not manufacturing in any less developed country at that time, and had recently sold its interest in Spain and liquidated in India rather than comply with the local capital requirements of those countries' automotive programs. Ford Brazil, though profitable, had been relatively marginal to Ford's overall operations. Ford had brought virtually no new capital into the country since it had begun assembling there thirty-seven years earlier. See Shapiro (1991: 876-7).

⁶⁶⁵ Laux *et al.* (1982: 185).

⁶⁶⁶ All the developments from the very beginning of the century have timidly to be considered. The nationalistic policy after the Civil War caused distortions that particularly affected those firms already involved in the automobile business. For example, Ford and General Motors, two remarkable cases of the late development of the industry with their establishment in the 1970s and 1980s, respectively, had already established themselves in the inter-war period. Moreover, Ford, which, just before the civil war, had the best results of any affiliated company in Europe,

The first references of governmental regulation of the Spanish motor vehicle industry appeared together with the first attempts to reorganise the Spanish economy after the Civil War. Nevertheless, as we have outlined above, there had already existed a brilliant but small manufacturing activity in the previous decades. Thus, the achievements of that period were not at all wasted. Rather, they were the seed of the productive and technological infrastructure that facilitated to some extent expansion during the second half of the century. From a wider historical perspective, Spain was able to enter in the 1980s as the fourth European car manufacturing country with a production fully multinationalised as well as with a complex infrastructure of services and suppliers for the industry. This occurred despite the absence of its own technology.⁶⁶⁷

Nevertheless, a different pattern was followed by the manufacturers of industrial vehicles due to the existence of a well developed technological sector. As a consequence, it provided the development of a supply and service industry. It is possible to distinguish several phases of government regulation regarding the motor vehicle industry. First, with regard to industrial activity until 1936, the Civil War meant a disruption of the activities and development achieved during the first decades of this century.⁶⁶⁸ Moreover, the new trends in mass production and mass consumption associated with the industry made it impossible for the small and artisan based Spanish producers to keep up. Spain had no firms at all of sufficient size. Moreover, its enterprises were not using modern methods of production to face the foreign challenge. The political economy of the industry was run within a protectionist framework.⁶⁶⁹

Secondly, within the frame of the 'Industrial Law Regulation' between 1939 and 1941, an industrially normative system was established with two objectives: a long

apart from Dagenham, was planning to erect a large manufacturing plant in Barcelona before the Civil War broke out.

⁶⁶⁷ Farre (1986: 27).

⁶⁶⁸ See previous chapter.

⁶⁶⁹ Royal Decree of December 3, 1926 that established the concept of national manufacturer and to be awarded a certificate.

term interventionism planning, and second, import substitution or autarky. Both objectives according to Farre were coherent with Spain's international political isolation, the destruction of its internal productive system and its economic distancing from Europe right at the beginning of the Second World War.⁶⁷⁰ However as has already mentioned in the previous chapter, this picture is not completely accurate.⁶⁷¹ The law of 'Industries of National Interest' of October 24, 1939, established the incentives to the investments of those activities considered as strategic for the national economy with the use of classical instruments such as tax benefits, grants and market quotas. The other important law, as seen elsewhere, was the one that created the National Institute of Industry.

A subsequent period might be traced between 1945 and 1963 with the establishment of ENASA in 1946 and the creation of SEAT in 1949. Around 1950, a service and supply industry triggered by ENASA and SEAT began to develop. This first development after two decades fixed the basis for the further development of the industry in the 1970s and 1980s. Apart from the most relevant cases mentioned above, others attempts have to be considered such as that of Barreiros in the manufacturing of tractors, trucks, and buses. On the components side, it is worth mentioning the cases of Femsa (electrical equipment), Fraymon and Bendibérica (brakes system) and Perkins Hispania (diesel engines).⁶⁷² This period also saw the appearance of several attempts at the manufacture vehicles from artisan methods, such as *Eucort*⁶⁷³ and *Biscuter*, as well as more serious cases of the first foreign multinational enterprises entering the Spanish market through the establishment of joint ventures with Spanish firms, such as Renault with Fasa

⁶⁷⁰ Farre (1986: 29).

⁶⁷¹ See Catalan (1995).

⁶⁷² Learning has often began via agreements with international suppliers of equipment. In the "healthy" scenario - which is not the rule - the international technology transfer agreement became more sophisticated, involving adaptation of plants and technologies to local circumstances, while the emphasis was kept on personnel training and learning by using. Finally, autonomous capabilities of plant upgrading and process engineering were sometimes developed. Cimoli and Dosi (1995: 260).

⁶⁷³ San Roman (1995: 156-158).

(Fasa Renault), Massey Ferguson with Motor Ibérica, Citroen Hispania and Land Rover Santana.⁶⁷⁴

After Seat-Fiat, Fasa-Renault was the other major case in the development of the modern Spanish automobile industry. The government gave authorisation to Renault to set up a concern in order to produce the 4 HP car. The type of car selected, the Renault 4 HP, was considered by the authorities a suitable one because it did compete directly with the Fiat 1400 that the new formed company, Seat, was about to produce. The establishment of the production program meant that Renault had to fulfil the following conditions. First, on initiating the assembly of vehicles in series it had to be guaranteed that the value of all materials and parts of Spanish origin or manufacture would represent at least twenty five per cent of the total cost price of vehicles. Once the manufacture was started assembly operation in series would not begin until an output of at least 200 cars per month could be assured, and sale of cars to the public would not be started until proof was given that 55% of the sales prices once finished with the plant corresponded to disbursements in Spain. Secondly, one year after the start of assembly, this 50% threshold was to be raised to 70%. Thirdly, three years after the assembly process had begun, and at the most, five years after the date of publication of the this authorisation, such a percentage was to be raised to 90% and engine, clutch and gearbox were to be comprised therein. Fourth, six years after the publication of the authorisation, production was to be made entirely in Spanish workshops. Finally, the supply of raw materials was subject to the local production programs of parts previously approved by the administration, taking into account the results reached in the local production of various parts, as well as the availability of raw materials in the country.⁶⁷⁵

⁶⁷⁴ By 1963 foreign capital and know-how were pouring onto the country. For example, this year saw the acquisition for \$17 million - Chrysler biggest foreign investment - of the shares of the truck manufacturer Barreiros. And Rootes went into partnership with Metalurgico de Santa Ana to make engines and commercial vans.

⁶⁷⁵ Direction General of Industry, Minister of Industry, 19 October 1951, *Madrid Gazette* no. 292, p.4723.

The next period covers the years 1963-1964. In the context of the First Development Plan (Primer Plan de Desarrollo), a new decree was proclaimed that established a regime of free installation, enlargement and transfer of determinant industries in Spain. For the first time, the law established economic, technical and size conditions for the settlement of industries in different sectors. In the case of motor vehicles, the production plant capacity was to be cars (75,000 units/year); trucks and buses (8,000 units/year); tractors (10,000 units/years) and motorcycles (25,000 units/year). All the vehicles produced within the first two years of manufacture were to constituted of a minimum of 70% of national component over the manufactured value of the vehicle. After the two first years, it should increase to 90%. It states clearly that by that time there should exist the notion of an emerging industry with a high degree of national integration that had to go beyond the simple assembly industry as was the case with other emerging economies, mainly in Latin America.⁶⁷⁶

In the midst of Spain's economic boom, several weaknesses were apparent. In effect, as a contemporary observer pointed out "Spanish private enterprise, reared in an autarkic hothouse, was not yet enterprise enough. The state owned sector was ill co-ordinated, had neither the weight nor the prestige of the great nationalised and semi-public industries which had contributed so robustly to economic progress in France. Excessive investment in real estate at the expense of manufacturing was one of the big pressure points in the economy. Another was the too rapid rise in government expenditure."⁶⁷⁷ Some new industries had been set up with so much protection and government-backed capital that they could scarcely have failed commercially, but the real weakness lay in the unwieldy bulk of Spanish private industry built up before 1958. In a protected market where prices were controlled, there was little incentive to expand (except for favoured state enterprises); most profits before 1958 were therefore distributed and private

⁶⁷⁵ *Madrid Gazette* no. 292, page 4723.

⁶⁷⁶ Bennett and Sharpe (1985); Jenkins (1977); Shapiro (1991).

⁶⁷⁷ *The Economist* (1966: 1275).

industry became massively descapitalised. When industry did want to grow, there was not the accumulated capital investment to provide the wherewithal - so prices had rocketed and with them the import bill. In those years before 1958, the Spanish commercial banks, and in particular the biggest eight, gained a stranglehold on financing industry. Statistics may suggest the stranglehold was being broken, but in reality all that the figures really show was that the major part of private industry was controlled by the banks who did not publish meaningful financial returns. Industry was still closely tied to over-gearred bank capital.⁶⁷⁸

During the period 1964-1972, a new minimum size of capacity was established for the automobile industry. This stood at 125,000 units/year for cars and, 12,000 units/year for trucks and/or buses. During the first years of the 1960s with a period of general economic development, the Spanish market was beginning to be taken in to account by the European manufacturers who had finished with post-war reconstruction and had, therefore, an excess of capacity impossible to be introduced on to the Spanish market due to the protectionist legislation. Thus, several firms started to approach to the Spanish market: British Leyland, Chrysler and Volkswagen. This activities were still subjected to the conditions for national components, 70 per cent of manufactured value in the first year to be increased to 90 per cent in the third. The period came to its end with the signature of the 'Spanish preferential treatment' with the European Economic Community.

To recapitulate. By the mid-sixties, Spain had become one of the fastest-growing market for cars and commercial vehicles in the world: from only three cars per thousand inhabitants in 1950, the density had grown to twenty-one per thousand, or a total of around 700,000. Moreover, while imported vehicles, paying customs duties of over 60 per cent, accounted for only eight or nine per cent of current sales, domestic production, almost entirely in joint ventures with foreign

⁶⁷⁸ *The Economist*, 5 August (1967: 511).

multinational manufacturers, was being expanded rapidly.⁶⁷⁹ Only 2% of the 313,000 Spanish-made cars were exported in 1968. Of this annual output of 600,000, 16% was exported. SEAT had had great success in exporting Fiat models, no longer made in Turin, which sold well in more distant countries. Renault was expected to continue making its R4 and R8 there, after they had been phased out in France. Citroen made its GS in Spain for export to non-European markets. SEAT (55% of the market) planned to raise production to 500,000 cars a year by 1976. Renault (24% of the market) reckoned on 200,000 within three years. Chrysler (7%) had aimed for 300,000. Exports for all of them, would provide the bulk of the growth. British Leyland (7%) was vaguer. Its Minis and 1100s missed the boom because of uneconomic production methods and inadequate promotion.

In conclusion, as regarded the first specific regulating activity for the automobile industry, the main characteristics of the motor vehicle industry in Spain at the beginning of the 1970s were as follow: first, production mainly destined to the domestic market under severe protection against imports; Second, a high degree of nationalisation as a consequence of both the strong integration of the manufacturers and the existence of an important auxiliary industry; Third, complete external technological dependence.

This situation appeared unbearable in the long run, particularly after the signature of the agreement with the European Community. The opportunity to make changes in industrial policy offered itself when Ford Motor Company came to the Spanish government in order to establish itself in Spain. The former legislation appeared inadequate for Ford's attempts to establish facilities in Spain under completely multinational terms, because this legislation had been developed with different

⁶⁷⁹ The Spanish government had announced new and easier rules for foreign car firms: only 50 per cent of the components needed to be Spanish-made in place of the previous 70 per cent minimum. Ford had recently been diversifying some component orders to Spain that used to be placed in Britain. Chrysler, Fiat and even British Leyland had been buying more Spanish components.

criteria. The decree of November 30, 1972 opened the possibility for production with a low proportion of national components (50 per cent); whether for the old producers as for the new ones, such as Ford Spain. This company had no links at all with the old Spanish Ford subsidiary that had set up an assembly plant in 1920. Ford's new investment in Spain was carried out on completely new terms. Thus, Ford built a new plant from scratch in Valencia, 300 km south of the former Ford's subsidiary. For recently arrived automobile producers there were special minimum investment conditions (10,000 million pesetas in fixed assets), domestic market quotas (10 per cent), and export quotas (2/3 of the production). Another decree established special conditions to encourage investments, such as fiscal and tariff benefits. With the beginning of Ford's production in 1976 and the rest of manufacturers, Spanish automobile industry reached 1,000,000 units in the next year. Nevertheless, with the oil crisis, the readjustment of production strategies in Europe forced an accelerated development of Spanish industry towards multinationalisation frame. This was the period that saw the coming of General Motors, following what Ford did years before.⁶⁸⁰

3.- The 'nationalisation' of Ford in Spain: Motor Iberica (1954-1966)

In 1954, Ford sold its financial participation to local interests and a new company was formed: Motor Ibérica (MISA), wholly-owned by Spanish capital. MISA, however, had maintained commercial and technical agreements with Ford Motor Company. Ford Motor Iberica became 'nationalised' in the sense that it was fully-owned by Spanish capital, but no public funds were invested in it.⁶⁸¹ An important

⁶⁸⁰ In 1979, a new decree established the administrative conditions for the manufacturers. First, manufacturers before 1972 (Seat, Fasa Renault, Citroen Hispania, Automóviles Talbot), degree of nationalisation of 60 per cent. Min. exports=1.20 imports; Second, manufacturers established between 1972 and 1978 (Ford España). Min. nationalisation 50 per cent; min. exports=1.50 imports; Third, manufacturers from 1979. minimum capacity of 600 units per day; minimum global nationalisation of 60 per cent; and minimum exports=1.25 imports.

⁶⁸¹ As regards the nationalisation tendencies of the Spanish government during the dictatorship, it has to be pointed out that the term 'nationalisation' did not connote exactly what it does in English. It did not necessarily mean taking over by the state in every case. What it did mean was that all foreign companies should be owned, controlled and operated by Spanish subjects. See, for example, Gomez Mendoza (1994).

consequence of the so called 'nationalisation' was, therefore, that Americans and British representatives were removed from the Board of Directors and new members, including some army officials, were appointed.⁶⁸² The reorganised FMI company had been authorised by the Spanish Government in order to manufacture tractors and trucks. The tractor decree required MISA to comply with the provisions of the Spanish law as proposed, to divest itself entirely of its shares in FMI. MISA's main objective was to exercise maximum effort in reviving manufacturing and commercial activities, so heavily depressed since 1936. In this sense, an adequate atmosphere for the company's participation in the call for tenders opened by the Government had to be created in official circles, in connection with the manufacture of tractors in Spain. In this respect, the company's directors had expressed the opinion that the lack of a previously formed financial group, capable of supporting economically the future development of the broadly conceived plans of expansion of MISA business, reduced FMI's chances of success for in the contest.⁶⁸³ However, at that moment, assuming the securing of the concession for the manufacture of tractors, the directors had expected, that, inasmuch as such a concession would not have been granted on the basis of exclusive rights, it was necessary to obtain a concession for the manufacture of trucks simultaneously, as a means to secure, through this twofold activity, a greater profitability in the business.⁶⁸⁴

⁶⁸² The civil war had already provoked big changes in the management of firms, especially large enterprises. For instance, the managers loyal to the Republican regime lost their positions after the war. A new managerial class rose with good political connections as their main asset. Many of the new managers came from the military and contributed their own professional culture in the managerial field. See Catalan (1995: 57-58).

⁶⁸³ Minutes of Directors. April, 8 1953, Acc. 608/ Box 3 in # Spain (3) FMI 1950-53, *Ford Archives*, Dearborn.

⁶⁸⁴ As regards the terms of agreement among the several parts, being representatives of FMI, and Ford Lusitana, for the purpose of arriving at a reorganisation of FMI, and an adjustment of its relations with the other Ford companies. The reorganised company had been authorised by the Spanish government to manufacture tractors and trucks. The tractor decree required the reorganised company to comply with the provisions of Spanish law as proposed, and to divest itself entirely of its shareholdings in FMI. In order to effect the reorganisation program, the following was required: first, the acquisition by FMI of the 18,310 shares of FMI owned by Ford US, for the sole purpose of amortising the same, which would have been effected by the exchange of the said shares for the 10,000 shares of Ford Lusitana owned by FMI. The value of

As regards other businesses, on a revised proposal to the Ministry of Industry on manufacturing, the Directors had examined a new draft submission revising the plans and figures contained in the previous one submitted under the authority of the Board of Meeting of September 12, 1952, which was modified as a consequence of the grant made by the government by decree dated January 9, 1953, of a tractor manufacturing concession to another firm, under the changed circumstances, the new proposal regarding the manufacture in Spain of 3,000 tractors with diesel engines and 3,000 light trucks p.a., would permit bringing the price of the tractors down to PTAs. 125,000 for the Spanish farmer, according to a price study which was submitted and that the Directors examined.

According to one of the Directors, the Count of Ruisenada, maximum efforts had to be exercised to revive the activities of the company, so largely depressed since

the shares owned by Ford US in FMI exceeded the value of the shares of Ford Lusitana owned by FMI by 2,661,320 PTAs. Ford US had, however, advised FMI that it was willing to make the exchange of shares without payment of this difference in value. To this end, the shares of FMI owned by Ford US would have been exchanged for all the shares of Ford Lusitana; subsequently the exchange would have been effected through a Stock Exchange Agent, who would issue the document or documents necessary to carry out the transfer. Secondly, FMI would sell to Ford Lusitana at a price of 28,233,000 escudos, the value of premises and trademark and patent rights. At the same time Ford Lusitana would pay FMI the debt it was owing the latter, of approximately 2,967,000 Escudos. As a result the total sum FMI received from Ford Lusitana would have been approximately 31,200,000 Escudos. Thirdly, FMI changed its present name, eliminating all reference to the word "Ford" and adopting for the future the name "Motor Iberica, S.A." Fourth, technical assistance agreements and a supplemental agreement with FMC Ltd were signed between Motor Iberica, on the one hand, and Ford US and Ford England, on the other. In virtue of these agreements and the payment of the corresponding fees, the English and American companies provided the Spanish company, for a period of ten years, technical assistance in connection with the manufacture of certain tractors and trucks which the Spanish company proposed to undertake in accordance with the processes and patents of these companies. Fifth, there was signed between Motor Ibérica on the one hand and Ford US, England, Germany and France, on the other, sales agreements appointing Motor Iberica as distributor of their respective products in Spain. Six, the relationship agreements concluded on January 27, 1950 between FMI, on the one hand, and the Ford companies of the US, England, Canada, Belgium, Holland, Egypt, Italy, Sweden, Finland, Denmark, France, and Germany and Portugal on the other, were cancelled. Seven, FMI had under considered for some years the adoption of a pension plan for salaried employees of the Company to supplement the official pension plan of the metallurgical industry Ford US had addressed a letter to FMI agreeing, subject to certain conditions specified therein, to contribute 61 per cent of the cost of one million pesetas. And, finally, the last point, as soon as the exchange of stock was completed, Ford US and Motor Iberica SA exchanged general releases. See Memorandum entitled "Reorganisation of Ford Motor Iberica", June 12, 1954, Acc. 608/Box 3 in # Spain (4), *Ford Archives*, Dearborn.

1936. He mentioned the representations he had made in order to create in official circles an adequate atmosphere for the company's participation in the call for tenders opened by the government, in connection with the manufacture of tractors in Spain. And, in this respect, he expressed his opinion that the lack of a previously formed financial group, capable of supporting economically the future development of the wide plans of expansion of business, had reduced the chances of success for Ford Iberica in the contest. Now, assuming that it was still possible to obtain a concession for the manufacture of tractors, he believed that, inasmuch as such a concession would not have been granted on the basis of exclusive rights, it was necessary to obtain simultaneously a concession for the manufacture of trucks, as a means to secure, through this twofold activity, a greater profitability for the business. The Count of Ruisenada further felt that it was in the interest of the present minority shareholders who were going to be called to participate extensively in the future development of the Company, that the formation of a financial group be facilitated at the right moment, which might co-operate and advise as to the Company's future action in developing the plans of expansion entertained by the Board.⁶⁸⁵

Moreover, according to the Marquis de Hoyos it had not to be forgotten that the whole problem, that is actions followed with financial groups, was dependent upon the decision of the American Ford Company. In this respect, the American shareholders (FMC) had decided to continue holding an interest in the new company (MISA) for that year, as he felt that in spite of this being a comparatively short period it would have rendered the terms of the operation more favourable. Nevertheless, in order to make it possible for the American or English companies to keep those shares during the said period, it was imperative to have the guarantee that they would be acquired by Spaniards at its expire date. This may even have helped the development of the operation. The Marquiset forth that one vital element was to know for certain whether the American company and the Minister

⁶⁸⁵ Minutes of Directors, 8 April 1953, Acc. 608/ Box 3 in # Spain, no. 3, Ford Motor Ibérica 1950-53, *Ford Archives*, Dearborn.

of Commerce had reached an agreement concerning the amount of foreign currency the Spanish government would receive as a result of the conversion of the present company into a Spanish company.⁶⁸⁶ In spite of the fact that Ford abandoned its Spanish equity participation in FMI, it continued to field a presence through technical assistance and commercial agreements. However, the company, Motor Iberica, became 'nationalised' in the sense that it was fully-owned by Spanish capital, although there were no public funds in it. Therefore, Americans and British were removed from the Board of Directors in favour of new members from the army and the military. The civil war had already provoked big changes in the management of firms, specially big enterprises. For instances, managers loyal to the Republican regime lost their positions after the war. A new managerial class rose with good political connections as their main asset. Many of the new managers came from the military and diffused their own professional 'culture' in the managerial field. After the stagnation of the 1940s, the creation of the National Productivity Commission in 1952 and, just afterwards, the by-products of the US-Spain military agreement of 1953, opened a new period. For some twelve years, the activity of managerial training and professional development was very much intensified. Many 'productivity missions', public grants, new committees, new specialised journals and, even new management schools, built new managerial capabilities in Spain's business world. Therefore a real managerial tradition began in Spain only toward the early 1960's.⁶⁸⁷

⁶⁸⁶ Ibid.

⁶⁸⁷ Carreras and Tafunell (1994); see also Aldcroft (1992); Fox and Guagnini, eds. (1993); Fuller and Robinson, eds. (1992); Mathias (1975).

Table 8-1. "Ebro" Tractor. Profit Breakdown

Years	ptas.	1948	1955
Imported parts		4,064	12,361
Freight, insurance, Banking charges, clearing expenses & import duty on import parts		2,931	6,883
Spanish bought out parts		104,173	100,019
Manuf. & assist. labour, including overhead		17,343	16,869
Royalties & Technical assistance, including taxes		1,461	1,461
Depreciation		4,315	4,315
		134,287	141,858
Commercial expenses 4,25%		5,708	6,029
		139,995	147,887
Retail Price		155,000	175,000
		15,005	27,113
Sales discount		15,500	17,500
Net profit		-495	9,613

Source: FMI Archives, Barcelona.

4. Growth by merger, concentration and integration: The formation of the Motor Iberica Group (GMISA) and Massey Ferguson (1967-1979).

The case of the Canadian multinational enterprise Massey Ferguson and its association with Motor Iberica, the former Ford Motor Company's subsidiary in Spain, has to be approached in the context of the period of Spanish openness of the 1960s and 1970s, where through state intervention and multinational investment the motor vehicle industry saw a remarkable increase in output. The present section stresses the merger strategy with several Spanish supplier manufacturers and commercial and distribution firms that led to the formation of the GMISA as a means of entering a new field of automotive production.

Motor Iberica had held long negotiations for almost three years with the Ford Motor Company, due to the expiration in September 1965 of the license contract and the technical assistance agreement between both firms.⁶⁸⁸ The negotiation had revealed the essential divergence between MF and MISA; manufacturing MISA tractors and trucks, it was easy to understand the difficulties of those negotiations with a multinational enterprise like Ford, concerned mainly with the manufacture of automobiles, whereas tractors and trucks were seen only as complementary production. Therefore during the negotiations for the renewal of the technical and commercial relationship, FMC wanted to impose conditions that MISA considered were limiting its liberty to exporting and its access to the modernisation of its products. As a result, the directors of MISA initiated parallel negotiations with Massey Ferguson (MF) that ended in an agreement between both firms.⁶⁸⁹

A second step between MF and MISA consisted in determining the practical ways and means by which both interests in Spain could be merged.⁶⁹⁰ On the one hand, MF was a multinational enterprise, with 33 factories in ten different countries and exporting to 151 markets. Although it was well known internationally, it had taken only the first steps towards full and effective establishment in Spain. Furthermore, and prior to the development of its discussions with MISA, MF had proposed to extend its interests in Spain by undertaking the manufacture of tractors and, to this end, a plan was submitted to the authorities of the '*Polo*' of Zaragoza.

⁶⁸⁸ According to Richardson, co-operation may take place within the framework provided by sub-contracting, by firms that rely on each other for manufacture or marketing or, finally, to transfer technology. These technical agreements are commonly based on the licensing or pooling of patents and often associated with the acceptance by the parties to them of restrictions regarding price, market sharing and the like. Richardson (1972: 886).

⁶⁸⁹ "Escrito dirigido al Excmo. Sr. Ministro de Hacienda solicitando la concesión de las exenciones y bonificaciones fiscales previstas en la orden 5 de abril de 1965 para los actos, acuerdos y documentos a que de lugar al proceso de concentración de Motor Ibérica, SA y otras sociedades españolas y su integración con Massey Ferguson Services, NV" 19 December 1965, Box 7545, *FMI Archives, Barcelona*.

⁶⁹⁰ Acquisition occurs when the firms are willing to part with their assets, including their 'goodwill', at a price equal to or less than their value to potential buyers. Thus, both seller and buyer must expect to win in the transaction. See Penrose (1959: 157).

In Spain, MF had a majority investment in Perkins Hispania, which had been established in 1954 under the name 'Transformaciones Diesel, SA.'. This company was a diesel engine manufacturer. Furthermore, MF also had a minority interest in a combine harvester and tool manufacturing company, 'Motorizaciones Agrícola SA. (MASA)' of Noain (Pamplona), established in 1958.

On the other hand, MISA had interests in the following companies:

- "Representaciones, exportaciones e importaciones comerciales" (REICOMSA) with headquarters in Madrid, set up in 1953, for the commercialisation and distribution of 'Ebro' trucks and tractors under MISA license (see table 8-1);
- "Automoviles y Tractores Agrícolas S.A" (ATASA), set up in 1960 in Madrid and dealing in all types of vehicles and spare parts, which concentrated its activities in the province of Ciudad Real, with its main distribution centre in Valdepeñas;
- "Maquinaria agrícola e industrial" (MAINSA) set up in 1954, in Egea de los Caballeros (Zaragoza), which manufactured agriculture machinery under license;
- "Compañía de automoviles, tractores, aperos cordobesa, S.A." (CATACSA) founded in 1960, and which imported mechanical motor vehicles and engines.
- "Sociedad Anonima Bosuga, SA." set up in 1958 and established in Montcada (Barcelona), it manufactured metal bodies, spare parts, and cabins for 'Ebro' trucks, which were manufactured by MISA.⁶⁹¹

MISA and MF, the companies promoting the merger agreement, had similar social objectives, and complementary and analogous industrial and commercial activities. Therefore, they decided to co-ordinate their efforts in order to achieve a satisfactory structure to their enterprise that would have assured them of a certain profitability. Moreover, it would have allowed them to respond to the market

⁶⁹¹ Massey Ferguson Ltd. May, 5 1965. Plan of Action (MF to the Spanish Minister of Industry). Box 7545, *FMI Archives, Barcelona*.

demand as well as gain access to foreign markets through MF's extensive commercial, distributive and world-wide dealer network. Two circumstances had influenced decisively the consolidation of this association. First, the unavoidable exigencies derived from the 'Economic Development Plan', that meant a progressive liberalisation of the domestic and foreign trade, as well as openness to European markets and the rest of the world which would therefore increase competition regarding price and quality. In the second place, the need to strengthen the performance of the different societies' interests - in the face of possible foreign competitors, generally with more modern technical means - had been indispensable and increasingly strengthened the collaboration among the eight Spanish firms and MF through this strategy of concentration and integration.

A twofold approach was essential to the merger. On the one hand, and from an internal and technical standpoint, the intention was to achieve a major rationalisation of production, with a better use of the facilities, tools, raw materials and human resources, in order to improve the way that the involved firms were working. This afforded the possibility of achieving sensible costs reductions, and at the same time, allowing the control over fixed costs, and utilisation at the maximum productive capacity that at that moment was misused, partly because of MISA's financial and technical difficulties. On the other hand, from an external and legal standpoint, the eight firms were interested - in a market like the Spanish, characterised by poor definition and subject to changing circumstances, with difficulties as regards the agricultural sector - to discipline and regulate their own competence, in a manner that would allow them to establish normal conditions for collaborative production of their products.

The form of association on which MISA and MF agreed stipulated that all current MISA interests and those of MF be merged, creating a corporate structure in which the stockholders of MISA secured more than 60 per cent of the total shareholders capital in the enlarged company, while MF and its present Spanish associates would secure more than 30 per cent. In other words, the agreement meant that over 60 per cent of the capital of this company was kept in Spanish

hands. The merger operation implied that MISA would increase its capital as well as acquire Perkins Hispania and MASA. Moreover, the MF participation was represented by its current shares in these two companies, by the investment of cash to an amount of 495 million pesetas, and by the investment of MF know-how, designs, technical assistance and management. In exchange for full level assistance and the company's unrestricted access to MF's world-wide R&D and production know-how, MF had agreed to accept royalties calculated at a rate of 2 per cent on MISA's turnover. This agreement included tractors, combine harvesters, engines and implements, but excluded sales turnover in trucks since it was proposed that the costs involved in truck R&D should become a separate and direct charge to the company.

To conclude, it was foreseen that the new association was going to foster exports of all MISA's products to all possible markets through and aided by the MF's world-wide marketing and sales organisation, which was more efficient than MISA's. Although a great deal of detailed planning and development and re-arrangement of manufacturing facilities was necessary, the intention was to make the best possible use of available human resources and of all assets currently existing in Spain, including the area of land allocated to MISA in the Barcelona Free Port. However, MF remained responsible for the management of the company.

5. Conclusion

I conclude the chapter by arguing that pure market transactions are but limiting cases, and what the reality seems to exhibit is a continuum passing from transactions where the co-operative element is minimal, through intermediate areas in which there are linkages of traditional connection and goodwill, and finally those complex and inter-locking clusters, groups and alliances which represent fully and formally developed co-operation.⁶⁹² Co-operative elements for manufacture,

⁶⁹² Richardson (1972: 887)

marketing and technology were constantly present at MISA in its different phases: Ford, Massey Ferguson and the 'national' period. However, production has to be undertaken by an human organisation embodying experiences and skills. The activities undertaken had to be carried out by an organisation with appropriate capabilities and thus the firm tended to specialise in those activities for which its capabilities offer some comparative advantage, and these activities would be similar in the sense that they required the same capabilities, though they may lead the firm into a variety of products and lines.⁶⁹³ Hence, agricultural machinery was the new field of business that the firm undertook.

Appendix

Table 8-2. Motor vehicle firms ranking position by volume of assets among the main Spanish enterprises.

1917		1930		1948		1960		1974	
Firm	Rk	Firm	Rk	Firm	Rk	Firm	Rk	Firm	Rk
Hispano	34	Hispano	33	ENASA	9	SEAT	1	SEAT	5
		Ford *	34			ENASA	14	Ford***	9
						MISA**	42	Renault	13
								MISA	20
								Citroen	29

Source: elaborated from Carreras & Tafunell (1994) * Ford Motor Ibérica; ** Motor Ibérica, S.A.; *** This is the new Ford Spanish subsidiary established in 1973 and of no relation at all with Motor Ibérica, the successor to Ford Motor Ibérica.

⁶⁹³ Richardson (1972: 888). See also Langlois and Robertson (1995: 14-17).

Table 8-3. Automobile Production in Spain (1960-90)

Years	Authi	Ford	Talbot	Citroën	Renault	Seat	GM	Others	Total
1960				15	8,407	31,073		237	39,732
1961				1,386	15,158	33,920		1,763	52,227
1962				3,684	22,083	38,484		2,052	66,303
1963				4,192	27,727	45,291		2,039	79,249
1964				8,101	30,085	72,779		1,707	112,672
1965			1,000	17,514	39,084	87,651		211	145,460
1966	27		48,218	24,373	53,187	120,877		424	247,106
1967	14,645		7,546	15,325	58,616	158,294		33	254,459
1968	21,020		31,886	23,834	58,983	175,751		57	311,531
1969	15,789		36,627	23,876	75,063	218,275		25	369,655
1970	18,570		36,979	26,981	87,612	280,280		4	450,426
1971	31,401		25,263	36,923	100,926	254,322			448,835
1972	34,199		62,962	41,567	126,491	335,340			600,559
1973	43,318		85,510	52,098	166,003	358,504			705,433
1974	30,763		76,097	69,671	166,771	361,272			704,574
1975	15,121		66,655	92,783	192,759	328,806			696,124
1976		17,508	82,453	108,721	201,557	342,886			753,125
1977		213,268	96,435	108,368	224,538	346,535			989,144
1978		260,939	98,934	106,434	235,329	282,480			984,116
1979		227,493	72,981	109,130	261,430	294,865			965,899
1980		260,005	65,756	84,836	324,680	293,536			1,028,813
1981		248,045	58,909	74,495	269,029	204,847			855,325
1982		222,026	53,052	94,498	296,107	240,005	21,812		927,500
1983		221,912	54,094	112,221	283,172	223,887	246,340		1,141,626
1984		262,099	86,207	98,506	214,786	255,324	259,971		1,176,893
1985		254,906	95,850	73,367	224,094	204,753	277,101		1,130,071
1986		256,873	101,072	70,156	231,405	318,303	304,090		1,281,899
1987		263,382	107,960	112,985	237,736	386,421	294,090		1,402,574
1988		266,565	105,722	110,925	253,953	406,594	354,208		1,497,967
1989		293,927	131,425	119,298	274,334	449,904	369,727		1,638,615
1990		325,890	141,398	113,541	253,866	467,292	377,314		1,679,301

Source: Anuarios "El País"

Epilogue. Later Developments: from Fordism to Toyotism

1. Nissan's strategy. Dynamics of a firm in a changing environment

This section addresses three important features of the firm: its strategy, its structure and its core capabilities.⁶⁹⁴ First, strategy is defined as a "set of broad commitments made by a firm that define and rationalise its objectives and how it intends to pursue them. Some of this may be written down; some may not be, but is in the management culture of the firm."⁶⁹⁵ Second, structure involves "how a firm is organised and governed, and how decisions are made and carried out, and thus largely determines what it actually does, given the broad strategy."⁶⁹⁶ And, third, core capabilities are the things that a firm is capable of doing well. In addition, "strategy and structure call forth and mold organisational capabilities, but what an organisation can do well has something of a life of its own."⁶⁹⁷

Japanese penetration in Europe had risen quickly through the 1970s and manufacturers focused their attention on direct investment in the protected European markets.⁶⁹⁸ Nissan Motor Company was the first Japanese automobile firm to establish a strategy of penetration in Europe.⁶⁹⁹ They built a manufacturing plant from scratch (the so-called "greenfield") in north of England, on the one

⁶⁹⁴ On strategy and structure, worth consulting is Chandler (1966, 1990). On core capabilities see, for example, Teece (1982) and (1986). See also Nelson (1993), and Langlois and Robertson (1995)

⁶⁹⁵ Moreover, Nelson also stresses that in the first place, the commitments contained in a strategy often are as much a matter of faith of top management and company tradition, as they are of calculation. Second, firm strategies seldom determine the details of the actions of the firm, but rather the broad contours. Third, there is no reason to argue *a priori* that these commitments are in fact optimal or not even self-destructive. Nelson (1993: 234).

⁶⁹⁶ Nelson (1993: 234).

⁶⁹⁷ Ibid.

⁶⁹⁸ Nissan's global strategy was to build up a world-wide production network where car and component output at different sites were interchangeable, depending upon economic circumstances. Strange (1993: 283-8).

⁶⁹⁹ Cusumano (1985); Dore (1987); Aoki and Dore, eds. (1994); Suzuki (1991); Nakamura (1994); Morishima (1982); Morikawa (1992).

hand.⁷⁰⁰ And, in Spain, on the other, they took over a capital participation of Motor Iberica.⁷⁰¹ There, Nissan found an organisation with more than sixty years of history. The Japanese reorganised the operation of production, introduced advanced technologies, and also provided technical assistance in design, manufacture and quality control. One of Nissan's aims was to be seen as a strong European manufacturer in the same way that GM or Ford were viewed.

The Japanese multinational introduced different methods of organisation of production into the old Spanish Fordist firm. A crucial practice was the 'kanban' system, that is, the just-in-time delivery system.⁷⁰² "The kanban system promoted quality control and design changes by sharply decreasing the delay between the perception of a problem or opportunity at the end stage of production and the time that inputs could be improved or adapted to new requirements."⁷⁰³ Furthermore, the just-in-time co-ordination methods consisted in producing in the neighbourhood of what is actually sold, catering for orders in so far as they appear, rather than producing and stocking on the grounds of expectations of future sales.⁷⁰⁴ In addition, it is worth noting that whereas the "Fordist" practice⁷⁰⁵ separated the functions of production, maintenance, quality control, planning etc. and fragmented the tasks required by each function, the "Japanese" systems creates workstations where the different tasks are to different degrees re-aggregated.⁷⁰⁶ This re-aggregation and de-specialisation of tasks implies four specificities: first,

⁷⁰⁰ Garrahan (1992).

⁷⁰¹ This participation was 67.7 per cent. Today, however, it is 100 per cent.

⁷⁰² The origin of the kanban system, however, is not Japanese, but American. According to Temin (1997: 274): " Japanese observers, seeking to rebuild their economy after the World War II, noted how American supermarkets cut down on inventory costs by scheduling deliveries as close as possible to the time of sale (...) The Japanese innovation was to generalize the American process to manufacturing." For Womack, Jones and Ross (1990) the so-called Japanese industrial model, that is the system of lean production, is a superior method of production.

⁷⁰³ Temin (1997: 275).

⁷⁰⁴ Coriat and Dosi (1995: 18).

⁷⁰⁵ Tolliday (1995) analyzes the viability and advisability of transferring Fordism in the inter-war period to Britain and reaches conclusions diametrically opposed to those drawn by Womack, Jones and Roos.

⁷⁰⁶ Coriat and Dosi (1995: 19).

'versatility' and multi-specialisation are the norm and stand in opposition to the principles of compartmentalization and repetitively featured by Tayloristic practices; second, self management and self-inspection make sense and prove effective only if the front line operatives are also in charge of routine maintenance of the plant and machinery; third, the reintroduction of quality control at the workstation. Finally, there is a re-aggregation of programming and manufacturing tasks.⁷⁰⁷

At the beginning of the 1980s, the Japanese Nissan Motor Company had decided to establish itself in Spain as part of its strategy to penetrate in Europe not only through exports but above all through the establishment of production itself. They had chosen to develop Motor Ibérica, a company that as we have already seen had enjoyed a long history in the Spanish motor vehicle industry. The fact that MISA had already developed certain manufacturing centres prevented Nissan from building a factory from scratch as they did years later in England.⁷⁰⁸ The different origins of the two Japanese subsidiaries in Europe thus meant a very different running of each of them. The NMISA's (i.e., Nissan Motor Iberica) plants was obviously very different, when comparing with other Nissan plants.⁷⁰⁹ At first view, comparisons may appear easy, though the wide range of vehicles, some only built in Spain, made it very difficult.⁷¹⁰ It can be said in general terms that Nissan Motor UK (NMUK) was the most efficient plant outside Japan and Nissan's executives

⁷⁰⁷ Ibid.

⁷⁰⁸ Thus, the case of Nissan Spain diverged from those cases where a new concern is built as a pure assembly plant, or 'transplant'. These latter cases tended to be preferred as the adoption and introduction of new methods, forms of organisation and management style from the home office to the subsidiary firm are easier because neither corporate culture nor routines have been established before.

⁷⁰⁹ On the transfer of Japanese productive practices by multinational firms, see Sako (1995)

⁷¹⁰ In effect, NMISA had inherited a great deal of vehicles from previous production of FMI and MISA. For example, by the time Nissan arrived in Spain it was producing tractors, trucks, light commercial vehicles, and later a four wheel drive car.

believed it would take at least a couple of years to match the efficiency of the English plant.⁷¹¹

By the mid-eighties, the Spanish Nissan subsidiary firm was realising steady profits. In fact, the company was making record profits in each of the last five years of the 1980s with a maximum of 10.25 billion pesetas in 1989. Those profits were plugged back into the manufacturing business in a massive investment program designed to provide NMISA with new products and modern plants. In the period 1985-89, investment was 150 billion pesetas, 100 billion pesetas of which corresponded to the last two years. About one third of the total (57 billion PTAs.) was financed directly from cash flow, the rest by means of debt.⁷¹² However, while the company had invested for its long term success, its significant decline in the Spanish domestic market since 1989 put pressure on its financial position.⁷¹³ The reality had showed that such a plan is unfeasible by definition. Firms have to act prematurely on a very incomplete information base if they do not want to see one of their competitors scoring a success. Thus, top firm management had to be equipped with a good 'sense of direction', which is the first dominant competence requisite for success.⁷¹⁴ In order to understand the firms that worked well it is important to distinguish between the "organisational routines, which define lower organisational skills and how these are co-ordinated, and higher order decision procedures for choosing what is to be done at lower levels." Thus, "simply producing a given set of products with a given set of processes well will not enable a firm to survive for long."⁷¹⁵ A firm needs to innovate, but what it needs also is to develop new modes of organisation. But, devising and learning to use new

⁷¹¹ NMUK was a one model manufacturer (the "Primera" car); later, it started production of the "Micra".

⁷¹² Data from NIMSA's Annual Reports.

⁷¹³ According to the classical model of the economy, firms can plan, in principle, to achieve the state of full-information, and this possibility exerted significant influence on the business administration literature of the 1960s and early 1970s, which abounded with treatises of 'business planning'. See Eliasson (1976). This literature, however, passed away in the 1980s and 1990s following the macroeconomic crises of the 1970s.

⁷¹⁴ Eliasson (1993: 185).

⁷¹⁵ Nelson (1993: 234).

organisational forms effectively involves uncertainty, experimental grouping, and learning by making mistakes and correcting them. There, it should be emphasised that "it is organisational differences, especially differences in abilities to generate and gain from innovation, rather than differences in command over particular technologies, that are the source of durable, not easily imitable, differences among firms. Particular technologies are much easier to understand, and imitate, than broader firm-dynamic capabilities."⁷¹⁶

At the beginning of the 1990s, Nissan Spain was undergoing a fundamental change. NMISA in the 1980s was a producer of commercial vehicles for the highly protected Spanish domestic market with a modest level of exports of the 'Vanette' and 'Patrol'. The Spanish commercial vehicle market of fell dramatically after 1989 and NMISA's models were not so competitive as newcomers into the market and so they lost market share as well. What the massive investment program was designed to do was change NMISA from a commercial vehicle maker, highly dependent upon the domestic market, to an efficient car and commercial vehicle manufacturer with a healthy export business. The launch of 'Serena' and 'Terrano II' models were crucial in this new strategy with the latter being exported to Japan from 1994. However, their old markets had declined before they could start production of Serena and start pulling in revenues, which did not materialise until the second half of 1992. As a result, the investment program meant a higher depreciation charge.⁷¹⁷

⁷¹⁶ Nelson (1993: 239).

⁷¹⁷ The competitive situation is such that the firms are always more or less mistaken, these 'business mistakes' being the important cost to society for making room for business success, which is needed to achieve economic growth. In addition, mistakes are part of the on-the-job learning process of firms, and of society contributing to the updating of the organisational memory of firms and the economy at large." See Eliason (1993: 183) in Magnusson. However "there are learnable, administrative techniques to minimise the costs of mistakes. Techniques can be developed that make it possible to take on large risks, that is, a technique to manage in situations when the first competitive requisite (intuition) has failed. This management techniques consists of two elements: 'identifying' mistakes early on and 'correcting' mistakes immediately." (Eliasson 1993: 185) and (1990).

However, it appeared that losses had increased as exports had risen. Nevertheless there were too many factors involved to make a link between the two phenomenon. As mentioned, NMISA was undergoing a profound change and to look to the European car market, rather than the Spanish commercial vehicle market, for future profits was certainly tough. NMISA was, it is also worth noting, both manufacturer and distributor. The sharp decline in the domestic market had obviously had an impact on the distribution business, which like the plant was having to invest in order to become effective at marketing and selling cars like the 'Micra' in addition to trucks. NMISA was not able to price exports at a level that would have allowed to make a profit, the reason being that profits were a function of cost and price. Therefore, because they only fielded a small presence on the European car market, price was determined by the major competition. This left NMISA with higher costs.

As regards trucks and light commercial vehicles (LCVs), it was more difficult to understand what Nissan's strategy was in Europe, because with a few models, Nissan's presence appeared doomed to a slow demise. There were two issues at hand. In terms of NMISA's business strategy, the firm was moving away from its past dependence upon trucks and LCVs and the Spanish commercial vehicle market (the weight of Ford and MISA's past). They offered a balanced range of 4x4 vehicles with two major customers Nissan and Ford,⁷¹⁸ they offered the Serena multipurpose vehicle and the Vanette and trucks up to 14 tons. This was a much more stable and favourable position for NMISA, particularly because they could sell the majority of their production to a large number of export markets. (In 1992 NMISA's exports to the rest of Europe climbed 52 per cent compared with 1991). The other issue was Nissan's strategy for LCVs in the European market, which was at more than 3 per cent a significant part of the total business. They were going ahead with a new van so believing that Nissan would continue to have a good LCV

⁷¹⁸ Ford and Nissan had signed a joint-venture agreement for the commercialisation and distribution of the "Terrano II".

range but it was a difficult time for all commercial vehicle makers to invest heavily in new models.

2. From Fordism to Toyotism

As regards the difference in the production system, we may compare and contrast the Toyotist production system and the Fordist mass production system. Each system demands adherence to a different set of rights, objections and responsibilities, the nature and character of which is partly cultural specific.⁷¹⁹ The present case study has also introduced certain peculiarities worth noting. First, skills are incorporated into the firm as part of its 'organisational culture', that is to say, its knowledge repertory is embedded in the employees' experience and in their organisational routines.⁷²⁰ For example, in the 1980s, when Nissan took over Motor Iberica (MISA), though MISA had no ties at all with Ford, latter modes, methods and forms of organisation of production were nevertheless deeply rooted in the former. Second, the influence of Japanese organisational methods had been initially incorporated into products and processes instead of personnel and administrative areas.⁷²¹ For example, in areas of manufacturing, such as the production process and product technology, Japanese had initiated in a first phase collaboration with its Spanish partner.⁷²² Consequently, years after the arrival of NMC, NMISA was able to produce vehicles with quality standards akin to those manufactured in Japan.⁷²³ In addition, in terms of production methods, the Spanish subsidiary had learnt how to manufacture better products with less cost. They had

⁷¹⁹ Dunning (1993).

⁷²⁰ Langlois and Robertson (1995) especially Chapter 2. Moreover, and going further to the mere concept of culture within an organization, the corporation is a cultural construct because it exists in a culture, and the history of this institution in turn affects the culture. See Temin (1997: 279).

⁷²¹ Factory-level organisation has been the driving force behind Japanese competitiveness. See Abe and Fitzgerald (1995).

⁷²² The case of Japanese car makers indicates how technology acquisition, scarce resources and the nature of indigenous demand stimulated 'lean production' methods and quality control programs. See Womack, Jones and Roos (1990). For a critical view, see Tolliday (1995).

⁷²³ For instance, in 1994 the Spanish subsidiary was exporting vehicles (Terrano II) to Japan.

also introduced employee participation on the shop floor and contributing to continuous improvements through shop floor groups.⁷²⁴ Furthermore, because in the automobile industry the relationship with the supply industry is fundamental, Japanese manufacturers have transferred a large percentage of the value of the components to its suppliers.⁷²⁵ For instance, NMISA went from more than 1,000 suppliers in the 1980s to only around 300 at the beginning of the 1990s. Furthermore, the relationship between supplier and Nissan has varied substantially in the last decade, going from a 'mere' client/supplier relationship to a closer collaboration in the development of components.⁷²⁶ Within the philosophy of co-operation, NMISA selected its suppliers in terms of quality, price and service, and based on mutual trust,⁷²⁷ has developed the 'simultaneous engineering' that allowed them to reduce the times of component development of new projects and also take advantage of all the know-how of the supplier and the client.

Moreover, design and development of new vehicles was carried out in local centres in close collaboration with Nissan technological centres, especially in Europe. Japan intervened closely in the basic concepts and principal units of the models. Furthermore, local engineers were in continuous communication with Nissan engineers, and Spanish employees were trained during long period of time in Japan, while there were always Japanese technicians on hand in the subsidiary. Thus, the

⁷²⁴ Japanese value-creating capabilities derived not only from the possession of superior product design process technology but also from the way in which the Japanese manufacturing enterprise 'organized' its productive activities. In particular, Japanese manufacturers surpassed their competitors by developing the skills of their shop floor workers. By the flexible Manufacturing System (FMS), the more skills the workers possess and the more effort they supply, the greater the reduction in unit costs as the fixed costs of plant and equipment are spread over the output produced for a variety of market sectors. In the US, there was increased separation of asset ownership from managerial control as successful firms expanded and the replacement of owner-entrepreneurs by professional managers promoted through the ranks. This is similar to the first two decades of the twentieth century, which saw a radical transformation of the US system of higher education to serve the technical and organizational requirements of big business. Lazonick (1990).

⁷²⁵ "Many Japanese firms are combined into groupings known as 'keiretsu'. Firms in a 'keiretsu' are neither subsidiaries of a single firm nor arms-length competitors." Temin (1997: 277).

⁷²⁶ Interview with Huguet (1992), former Technical General Manager of NMISA.

⁷²⁷ On trust, see Khalil (1994: 339-345); see also Gambetta (1988); Williamson (1996: 256-257); Thomas (1991); Hart (1988).

experience and knowledge of the Japanese was very important because they were able to design new vehicles in three years whereas American and European car makers needed between five and seven years. Technology and production (both were the first to receive the greatest Japanese influence) were easier to be transmitted because they were less subject to local habits and customs that determined their own 'corporate culture'.⁷²⁸ As a consequence Nissan, in its attempt to introduce both cultures and prevent conflict had incorporated low levels of Japanese management (2% during the 1980s) into its subsidiaries.⁷²⁹

Managerial and organisational processes are directing forces in the firm, and might otherwise be referred to as its routines, or patterns of current practice or learning. Thus, this processes cannot be immediate replicated because replication takes time, and the replication of practices can be illusive.⁷³⁰ Moreover, the former organisational form embodied specific forms of internal governance of conflicts and incentives which can be identified with the "Fordist" pattern.⁷³¹ However, in the "Japanese" firm, the patterns of competence accumulation are to be found in quite different forms of governance and conflict management.⁷³²

A further feature consequent to the present discussion regards the concept of 'culture', or especially, what might be called the cultural determinants of

⁷²⁸ See Warner (1995).

⁷²⁹ Integration, commitment, and value creation. The historical transformations of work organization in successful capitalist development demonstrate the growing importance of organizational integration as a key structural element in international industrial leadership. The behavioral foundation of organizational integration as a key structural element in international industrial leadership is 'organizational commitment': the inclusion of individuals as members of an organization with the rights to enjoy its benefits and the consequent willingness of those individuals to contribute to the organization's success. The basic principle of successful economic performance is the transformation of the fixed costs of investments in plant, equipment and personnel into low unit costs by achieving a high degree of utilisation of these investments. Value creating organisation increasingly invested in the development of productive capabilities of the resources not as individual inputs but rather as integral and interconnected elements of an investment strategy. Lazonick (1990).

⁷³⁰ Teece, Pisano and Shuen (1990).

⁷³¹ Chandler (1992).

⁷³² Aoki (1988) and (1990).

organisational behaviour.⁷³³ In spite of the fact that the term local culture is very limited,⁷³⁴ it does have useful applications. For example, in Britain Nissan succeeded in transplanting its cultural practices to another firm - and to certain extent to a city or region - whereas in Barcelona it failed. The fact that the former was a greenfield site and the latter an acquisition of a previous established firm is essential to the point and entails different organisational behaviour.⁷³⁵ Indeed, the cultural context of organisational behaviour is bounded; that is, organisations normally fit into a national framework. Thus, management attitudes to such settings sometimes took a good deal of time to develop. In the Spanish firm, management culture was imported originally from Ford, and then adapted to and shaped by the local environment.⁷³⁶ Thus, management evolved over time and from a specific national cultural environment. In addition, the role of the state during the Francoist period had been determinant to frame the firm's behaviour in Spain.⁷³⁷

At the beginning of the 1990s, NMISA had difficulties in adapting itself to both the changing external environment and the new internal organisational structure. The increase of losses and the need to re-shape the organisation in order to cope with Nissan Motor Company's plans for Europe that had carried out the introduction of innovations in products, process and marketing led to a new phase in the history of the Spanish subsidiary.⁷³⁸ The solution was thought to be found in a complete process of re-organisation that led to the splitting of the company into several different firms. This process of splitting and the formation of new subsidiaries seems to support the idea that radical organisational re-engineering⁷³⁹ is usually

⁷³³ For the concept of 'culture' on organisational literature, see Hofstede (1980, 1991).

⁷³⁴ I use local culture instead of national culture, which I dislike. For example, some countries might not be culturally homogenous.

⁷³⁵ See Penrose (1959: 161).

⁷³⁶ See previous chapters 3 and 4.

⁷³⁷ See previous chapters 5,6 and 7.

⁷³⁸ I am referring to the company that was established in 1920s and that the current research has enlightened all its different phases over almost a century.

⁷³⁹ See Conti and Warner (1995). On re-engineering see Hammer and Champy (1993). The concept of 're-engineering' evolved from an attempt to determine why the huge investments in Information Technology (IT) during the 1980s yielded such low costs. According to Hammer, IT was used primarily to automate existing processes instead of making fundamentally different

required to support the new product, which may well do better embedded in a separate subsidiary where a new set of coherent organisational processes can be fashioned.⁷⁴⁰ It has to be noted, however, that the concept of re-engineering it is not applied here in a strict sense because it is not focused simply on process redesign but refers broadly to organisational design.

To sum up, the process by which the old Spanish Ford subsidiary was transformed into the Nissan subsidiary exemplifies the alteration from the "American" (Fordist or Tayloristic) organisational form to the "Japanese" form frame within a host country.⁷⁴¹ Both systems differ in their internal architecture with respect to both information-processing and incentive-governance, which, thus, might yield different performances.⁷⁴² However, it has been argued elsewhere that it represents in many ways a kind of continuity in organisational theory stretching back to its earliest roots in scientific management, yet it is also clear that it has distinctive features. Indeed, in management, many innovations have cross-cultural origins, especially between western countries and Japan, or are a hybrid of both, such as Total Quality Management (TQC).

3. Historical Interpretations and Theoretical Implications

The preceding sections have mostly addressed extent issues of management. Let us now turn to some features where the evolutionary theory of the firm - put forward in Chapter One, and strongly addressed in the following chapters - and its applications to management stand close together. Let me argue, first of all, that firms (and other organisations) consist of two distinct but changing parts: first, an 'intrinsic core' that comprises elements that are idiosyncratically synergistic,

and more effective ways of existing work possible. To address this shortcoming, re-engineering focuses on the redesign of business processes using IT, to make possible 'breakthrough' improvements in performance and cost.

⁷⁴⁰ Teece, Pisano and Shuen (1990). See also Abernathy and Clark (1995).

⁷⁴¹ I am aware that by using both the concept, "American" and "Japanese", I am referring to two ideal types.

⁷⁴² Aoki (1988, 1990).

inimitable, and non-contestable (i.e. capabilities that cannot be duplicated, bought, or sold). And second, 'ancillary capabilities' that are contestable and may not be unique.⁷⁴³ Therefore, the "boundaries of the organisation - or to put it another way, the extent to which ancillary capabilities will be internalised or bought through the market - depend on the strength of the organisation's own capabilities relative to those that can be purchased and on the respective transaction and governance costs involved in making or buying the capabilities."⁷⁴⁴

Moreover, in the search for an explanation of how and why firms evolve, Niman argues that the firm consists of an organisational structure that is comprised of various assets and a set of rules determining how those assets are to be allocated. Thus change can result from changes in the available assets and/or changes in the rules. However, while the rules may be designed to promote the maximisation of some objective function subject to a set of constraints (the neo-classical theory of the firm), the existence of rules implies that these constraints are also constantly changing. Moreover, if the assets comprising the constraints facing the firm are placed into the broad categories of human, physical, and technological assets, then each category of asset will have its own 'biological clock' changing at a different rate.⁷⁴⁵ Further, if the assets are transaction cost specific, then the concept of asset specificity can be incorporated to explain not only why the firm exists, but also why variation exists in the population of firms.⁷⁴⁶

Knowledge, moreover, is a key feature and thus the firm is considered as a repository of knowledge. In addition to knowledge the concepts of learning and routines have been emphasised, where learning by doing is a source of endogenous growth. Therefore, it can be argued that a "firm's competitive position is defined by a bundle of unique resources and relationships that the task of general management is then to adjust and renew these resources and relationships, as time,

⁷⁴³ Langlois and Robertson (1995: 7).

⁷⁴⁴ Ibid.

⁷⁴⁵ Niman (1994: 369).

⁷⁴⁶ Williamson (1985). See Niman (1994: 381).

competition, and change erode their value.”⁷⁴⁷ Moreover, instead of an exclusive outward orientation market niches and advantageous cost-revenue combination, the evolutionary/competence based approach also puts emphasis on building up resources and organisational routines within the firm itself. Organisation and production are emphasised as well as the market.⁷⁴⁸ Indeed, “the competitive advantage of firms stems from dynamic capabilities rooted in high performance routines operating inside the firm, embedded in the firm’s processes, and conditioned by its history. Because of imperfect factor markets, or more precisely the non-tradability of ‘soft’ assets like values, culture, and organisational experience, these capabilities generally cannot be bought; they must be built. This may take years - possibly decades. The capabilities approach accordingly sees definite limits on strategic options, at least in the short run. Competitive success occurs in part because of processes and structures already established and experience obtained in earlier periods.”⁷⁴⁹

Turning to the case study, I argue that the steady negative results of NMISA over the course of these last years are not just a consequence of external market forces but, on the contrary, they are a reflection of the organisation and production shortcomings.⁷⁵⁰ In fact, what Teece and Pisano called ‘soft’ assets like values, culture and organisational experience are in fact ‘hard’. Also, the changes of organisational method brought about by the parent company Nissan have been inappropriate because of problems in the ‘organisational learning’ of the subsidiary.⁷⁵¹ This present case study, which begun with the origins of the company and has followed its history, have provided strong arguments to defend the evolutionary perspective. In fact “winners in the global marketplace have been

⁷⁴⁷ Rumelt (1984: 57)

⁷⁴⁸ Hodgson (1995: 29)

⁷⁴⁹ Teece and Pisano (1994: 533) quoted in Hodgson (1995: 29)

⁷⁵⁰ Managers both from the Spanish firms and the Japanese home office argued that external market forces had caused the dramatic fall in NMISA’s showing.

⁷⁵¹ These problems have stemmed from several of the following features: inaccessible and obscure mental models, defensive modes of behaviour, lack of good team work, lack of shared vision, and lack of a system-wide view by employees. Senge (1990).

firms that can demonstrate timely responsiveness and rapid and flexible product innovation, coupled with the management capability to effectively co-ordinate and redeploy internal and external competences. Not surprisingly, industry observers have remarked that companies can accumulate a large stock of valuable technology assets and still not have many useful capabilities. Teece and Pisano refer to this source of competitive advantage as “dynamic capabilities” to emphasise two key aspects which were not the main focus of attention in previous strategy perspectives. The term “dynamic” refers to the shifting character of the environment; certain strategic responses are required when time-to-market and timing is critical, the pace of innovation is accelerating, and the nature of future competition and markets is difficult to determine. The term ‘capabilities’ emphasises the key role of strategic management in appropriately adapting and integrating, functional competences toward the changing environment.”⁷⁵²

Economists, generally, are more interested in aggregated variables than in individual firms. These tend to be macroeconomic variables and even the ‘microeconomics’ is about industry level variables rather than firm level ones. What is needed, therefore, is a theory of economic change that can link the behaviour at the micro level to the process of growth, technical change, and innovation at the macro level.⁷⁵³ In this aim, I argue that institutional and evolutionary theories provide a realistic starting point.⁷⁵⁴ If we agree, on the one hand, that long run growth depends strongly on technical progress⁷⁵⁵ and that, on the other, not only the employment of professionals trained in the relevant underlying engineering and

⁷⁵² Teece and Pisano (1994: 538).

⁷⁵³ At this point, the shortcomings of neo-classical theory are clearly exposed because it does not provide a realistic theory of the firm. Since the firm is a key actor in modern capitalist economies, a proper understanding of its behaviour is necessary for a real comprehension of issues such as the process of innovation, economic change and growth. For a discussion, see Chapter One of the present work.

⁷⁵⁴ Nelson and Winter (1982); Nelson (1995).

⁷⁵⁵ According to the model put forward by Piore, Sabel and Zeitlin, technology, organisational change and the role of institutions are downplayed. Instead they have emphasised the role of ‘external’ forces such as culture, ideology and political systems. See Piore and Sabel (1984), Sabel and Zeitlin (1984).

scientific disciplines but also learning by doing and using are required to reach such a technical progress, then, it can be argued that to a considerable extent this learning goes on in firms.⁷⁵⁶ Therefore, the practice of complex technologies inherently involves organisation and management - the way a firm organises to implement a common broad technology can make an enormous difference. However, although economists are paying more attention to firms, few are able to see firms as the key actors in economic growth.⁷⁵⁷ In addition, what firms do, and the technologies they employ, and develop, are influenced to a great extent by the environment they are in. This environment goes beyond the market place, and it extends to other institutions⁷⁵⁸ such as "universities that do research that feeds into technical advance in industry, and whose teaching programs affect the supply of scientists and engineers, government agencies financing certain kinds of R and D, and others setting standards, banks, and banking system, and a variety of organisations and laws which affect labour supply, and demand."⁷⁵⁹ It might be concluded that the characteristics of firms, as they have developed in a particular period of time and country, can be considered as a factor influencing growth.⁷⁶⁰

Therefore, a final remark that I would like to put forward regards one of the major concerns as to the current economic debate: the notion of 'competitiveness' and 'competition'. The former concept is taken to concern "some organisational traits of firms; behaviours and strategies; production technologies and efficiencies; product characteristics; and realised economic results, such as profitability or

⁷⁵⁶ Rosenberg (1994).

⁷⁵⁷ Nelson (1994: 20-21). For economists' concern with firms as key actors, see Williamson (1985) and Holmstrom and Tirole (1989).

⁷⁵⁸ It has to be emphasised also that institutions are not merely constraints on a fundamental mechanism, which is basically 'effective', but that they take part in the actual shaping of the mechanism itself. See, for example, Hodgson (1988). On the other hand, on the view of institutions - such as the state - as a 'structures' or rule maker in the game, see North (1981,1990).

⁷⁵⁹ Nelson (1994: 22).

⁷⁶⁰ "Growth theory has to be oriented towards considering things like technology as a body of practice and understanding firms as productive organisations, or national and international institutions, particularly those that shape the evolution of technology and the organisation and behaviour of firms." Nelson (1994: 18).

market shares.”⁷⁶¹ I could like to ask two broad questions whether these micro diversities carry aggregate implications. First, do they influence the dynamics of aggregate variables such as GDP and average productivity? Second, can one extend the notion of ‘competitiveness’ to aggregates such as countries? According to the evolutionary view of the economy, micro diversity is a ‘necessary’ condition for the innovative exploration of a rich and largely unknown set of innovation opportunities.⁷⁶² Also, the processes through which diversity continuously emerges via innovative activities have to be emphasised and at the same time the way it is permanently checked and selected by competitive interactions.⁷⁶³

According to Dosi, the microfoundations of national competitiveness also entail an organisational dimension. At the microeconomic level, this implies that, given any set of technological competences which a firm can master, particular organisational structures and strategies affect the actual efficiency that a firm displays, the rates and direction of accumulation of innovation knowledge and its competitiveness. At an aggregate level, the general conjecture is that the international distribution of such organisational structures and strategies is not random but reflects, too, some country-specific characteristics displaying persistence over time.⁷⁶⁴ Size distribution, degrees of diversification and vertical integration, propensity to invest abroad, etc., are obvious indicators, but equally important are the attitudes towards growth, profitability, the willingness to take risks, the nature of internal hierarchies, the relationship between industry and finance and the ways conflict is managed.⁷⁶⁵

In addition, in order to interpret the differences in the national patterns of organisational evolution as well as the distribution of competences across countries it is necessary to account for the properties of the networks in which firms are

⁷⁶¹ Dosi (1994: 72).

⁷⁶² See Magnusson and Marlund (1993: 310 ff.)

⁷⁶³ Dosi (1994: 74-75).

⁷⁶⁴ See Porter (1990).

⁷⁶⁵ Dosi (1994: 76-77). See Chandler (1990) for historical examples of this phenomenon. See also Aoki (1988).

embedded and the 'national systems'⁷⁶⁶ of production and innovation that entail also a broader notion of embeddedness of microeconomic behaviour into a set of social relationships, rules and institutional constraints.⁷⁶⁷ These concepts link up to a considerable extent, with what Abramovitz has called "social capabilities";⁷⁶⁸ that is, adequate human capital, the ability to organise and manage competent firms, financial and educational institutions that can support economic development.

Putting the aforementioned concepts into a concrete time and context, it can be stated that the post-war period brought an unprecedented growth of wealth to the industrial capitalist world. Indeed, for industry this period saw a general and continued growth in the size of firms, a steady growth of the internationalisation of markets, with free international flow of both financial and physical capital, a much large role of technology in firms' activities, together with an ever growing 'scientification' of technological knowledge and a generally growing importance of government involvement in economic life.⁷⁶⁹ Although this argument about the role of national and international institutions in the growth process is a complex one, it could be argued that Spain missed the post World War II environment that made that period more conducive to convergence among neighbour countries. In effect, according to Carreras and Tafunell, the long term projectionist tradition, but above all the post civil war and autarkic period reduced, to a considerable extent, the growth potential of Spanish firms, mainly in those export oriented sectors.⁷⁷⁰ Moreover, the industrialising policy of the Francoist regime, with its strong

⁷⁶⁶ "An institutional theory about innovations and technical change assumes that innovations implemented are diffused differently, depending on which economic-institutional forms of organisation they are taking place within. The speed of these processes should also be influenced by the same factors. Such forms of organisation also contribute to the determination of the boundaries within which choices of technology may take place. It is important to recognise that influential factors in this case are such things as culturally molded ideas and habits, ideologies, etc. These forms of organisations could be viewed on different levels of aggregation. When viewed on a national level, we talk about different national innovation systems." See Magnusson and Marklund (1993: 306).

⁷⁶⁷ Granovetter (1995). Borrowed from Coriat and Dosi (1995: 2).

⁷⁶⁸ Abramovitz (1986).

⁷⁶⁹ Magnusson and Marklund (1993: 315). See also Dunning (1993).

⁷⁷⁰ Carreras and Tafunell (1993, 1994).

autarkic content pushed in non-competitive directions - with notorious failures - cut short those firms and sectors with natural growing potential. The outcome was many, small, non-competitive manufacturing firms. During the first period of the Franco regime (1939-1953), the majority of the firms were unable to make positive net investments. The private sector, to a considerable extent, was unable to invest in production, and only the newly created public firms committed themselves to a substantive growth in production. Therefore, Spanish big business became increasingly smaller over the twentieth century, reaching its minimum size around 1960.⁷⁷¹ Therefore, the decade of the 1950s emerges as a period of failed catching-up. In fact, the decade of the 1950s was a decade of growth and convergence. Spain failed to catch-up because it remained closed and did not compete in international markets for similar goods and did not share the productivity growth benefits deriving from the leading countries.⁷⁷²

Two critical questions for the future stands as regards Spanish competitiveness.⁷⁷³ The first one would consider to what extent Spain, in order to stay ahead, will have to base its economic wealth on a new type of smaller scale, competence-intensive production.⁷⁷⁴ The second question would ask whether the country might be able to enjoy the presence of highly mobile international firms operating in global markets.

⁷⁷¹ Carreras and Tafunell have adopted a Chandlerian view of big firms. However, the debate over the institutional forms most conducive to economic growth has intensified recently in other directions. Piore and Sabel (1984), Sabel and Zeitlin (1985), Sabel *et al.* (1985) and Sabel (1989) have challenged the notion that the growth of large businesses in twentieth-century Britain and the US had been either necessary or desirable. On the basis of developments in Europe, especially Italy, they have contended that communities of skilled craftsmen are capable of generating high standards of living as when compared to vertically integrated firms. For a survey, see also Langlois and Robertson (1995), especially chapter 7.

⁷⁷² Prados de la Escosura (1992) xerox.

⁷⁷³ The question has a competence and a policy side. Both concepts have been borrowed from Eliasson (1993: 180) for the case of Sweden.

⁷⁷⁴ Smaller than the bigger European firms, but of course not smaller than the already small Spanish firms.

4. Conclusion

At the micro level, in the real world economy, the firms that perform better raise product quality through innovation or lower prices (such as NMISA new models 'Serena', 'Terrano' and 'Micra'), which thus provoke the market exit of the worst firms. However, when "the firm finds itself at the top, or close to the top,"⁷⁷⁵ as was NMISA when it dominated the light commercial, industrial and four wheel drive car Spanish market, "it knows that a whole lot of 'closely inferior' firms feel threatened and are taking action to better their positions through innovation or imitative learning."⁷⁷⁶ Indeed, NMISA was becoming increasingly threatened not only by 'closely inferior' companies but, mainly by new entrants brought about by the process of internationalisation and globalisation, especially European integration. In addition, firms learn directly for themselves when they enter the market as NMISA did, when it entered the 'multi-purpose' car market. The critical learning experience is to observe how competitors can do better. Finally, this process at the micro level of the firm can be extended to the macro level. Thus, understanding of the markets comes with the understanding of the nature of competitive, innovative entry and the dynamic market process that the innovative entry keeps in motion. This new entry - as shown in our case study- might come through the establishment of a new business activity or through the introduction of a new product.

⁷⁷⁵ Eliasson (1993: 189).

⁷⁷⁶ Ibid.

Conclusion

Alfred Marshall linked the rise and fall in the population of trees in a forest with the statement that one did not need to know the individual histories of the trees in order to analyse the forest as a whole. However, for Joseph Schumpeter, competition was in its very essence a dynamic process where the winning trees, that is the firms, would grow and the losers decline. A step forward was made by Edith Penrose who provided a dynamic framework for the analysis of firms. In his historical accounts, Alfred Chandler described the dynamics of the complex structures that characterise modern multiproduct firms. The main line of my thesis has been a case study, or business history of an individual firm's life and growth experience. The case of Ford in Spain has been approached from its origins as a branch of the parent firm to the latter developments as a subsidiary of Nissan Motor Company.

I am aware that case studies might be of certain limited value, as frequently argued by economists, because they represent 'non-random' samples. The difficulties of gaining access to archives inevitably make cases studies 'non-random'. However, business historians, with reference to case studies, would argue that the performance of a certain firm or firms can be more representative of a whole, than a random sample of firms, as in the case of automobile firms. The aim of this thesis has been to address issues of interest not only for business historians but also for economists. The attempt has been made, moreover, to mix together organisation theory, economic theory and business history. Further issues concerning application policy and strategic management have also been hinted at. Nevertheless, it seems clear that the scope of the thesis has not presumed to tackle such a vast set of topics in depth. On the contrary, our case study has provided a strictly limited scope.

At this point, I would like to point out the main conclusions drawn from the preceding chapters. I have grouped them in three sections. The first points to methodological and analytical questions, while the second is concerned with the

Conclusion

relationship between the parent firm and the subsidiary, and the development of the motor industry in Spain. Finally, the last section points to new directions as regards business history.

I

The research has pointed to two main areas of interest, the first being the concept of organisational capability, which might be called 'inside the firm' the second, the relationship between 'the firm and its environment'. However, the thesis has also cut across different (and inter-related) levels, thus another main area to be addressed here refers to multinational firms and their subsidiaries.

The first area of interest, *inside the firm*, stresses the main features of a business organisation, for example: the codes of communication that the firm develops, the routines that it employs, and the corporate culture that has taken shape. As firms act, they accumulate skills and capabilities, which in turn affect future performance. Therefore, where a firm can go is shaped by the path it has been followed, by its current position, and by the possible path lying ahead. In other words 'history matters' because the firm's previous investments and its repertoire of routines constrain its future behaviour. This path not only defines what choices are left open to the firm today, but it also puts bounds around what its repertoire is likely to be in the future. Thus, firms, at various points in time, make long-term commitments to certain domains of competence. Deciding, in conditions of uncertainty about the future, which long term paths to commit to and when to change paths, is the central strategic problem confronting the firm, as Part II of the thesis has argued. Thus, from a methodological perspective, the thesis establishes the importance of path dependence and then could conjectures that evolutionary economic theory might be helpful in analysing it. I would conclude, therefore, by arguing that every technique, mode of production, or organisational form has a predecessor, and the new ideas and outcomes are always "local" improvements or adaptations to existing ones. This is because learning is often a process of trial, feedback, and evaluation that tends to be local. Part II of the thesis has focused on what really

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goes on inside the firm; that is, how the subsidiary firm, Ford Motor Iberica, received and adapted the policies and procedures of the head office, Ford Motor Company. Part III, though being concerned with the external impacts affecting the firm, has attempted to capture the process by which the subsidiary firm recreated in its own way the rules and policies of the head office.

In addressing what goes on inside the firm, the thesis has indicated the experiences that give a firm valuable tacit knowledge. Hence, our case entails a trade-off between the capacity to adapt for survive, on the one hand, and the capacity to develop unique capabilities which would give the firm a superior advantage, on the other. The thesis has illustrated that the Spanish firm, Motor Iberica, did not develop its own capabilities by itself during the period 1954-67. It needed, in the end, to venture with other firms (Massey Ferguson and Nissan Motor Company) in order to continue its activities. The role of this specific firm's history has also been given prominence. Likewise, the microanalysis has emphasised the organisational processes inside the firm; and thus the thesis orientation at the level of the firm has helped to trace, for instance, the construction of the corporate culture over a long time-span. This 'culture', it has been argued, is embodied in the firm's organisational routines, as well as the skills and experience incorporated in its members. In addition, 'corporate culture' also refer to the values and beliefs that employees hold.⁷⁷⁷ Moreover, methods and forms of organisation, though determined by the parent company, are recreated by the subsidiary in its own way, and influenced by the environment of the host country. Chapters Three and Four have showed the introduction and adaptation of the norms, policies and procedures of the parent company within the subsidiary. The remaining chapters have illustrated how the different circumstances affecting the host country contributed to configure the subsidiary's own processes, positions, and paths which at the end have determined its own capabilities. All of them had configured the firm's management style as well as its 'organisational culture'. It might be argued,

⁷⁷⁷ Culture can be a 'de facto' governance structure as it mediates the behaviour of individuals and economies on more formal administrative methods. See Teece and Pisano (1994: 9).

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furthermore, that some routines and competences are attributable to local or regional forces that shape the firm's capabilities at early stages of its developments. In referring to the concept of culture,⁷⁷⁸ I argue that, though the firm has established routines and capabilities that mould behaviour, culture gives an additional dimension because in interpreting and creating an internal culture, the firm draws on a variety of influences that make us turn back to history and politics, as well as to the people employed.⁷⁷⁹ For example, the establishment of the firm and the process by which it has been transformed - *from Fordism to Toyotism* - as emphasised in the Epilogue, illustrates that its commitments and capabilities are not necessarily the rational anticipation of the reactions of rivals, nor the clear information-processing activities, respectively.

The second major area addressed here has been the relationship between *the firm and the environment*. By environment, I mean not only the market but also the political process, of which the state is but one important aspect.⁷⁸⁰ Thus, the thesis has tried to capture the political economy affecting Ford Iberica's strategy, structure and performance. In other words, it has stressed how governments and institutions influenced and determined firms; in the present case, the focus has been primarily on a single firm. To this end, it is important to address the concept

⁷⁷⁸ The term "culture" has been used by the "old" institutionalists to define institutions. Therefore, "under this perspective, institutions refer to the complex of socially learned and shared values, norms, beliefs, meanings, symbols, customs, and standards that delineate the range of expected and accepted behaviour in a particular context," quoted from Nelson (1995: 81). On the other hand, for the "new" economic institutionalists, institutions are "the rules of the game" that determine how and why it is played as it is. See Schotter (1981, 1986). Moreover, for North (1990), as interpreted in Nelson (1995: 81), institutions influence and constrain, but leave considerable room for variability in the way society actually organises itself.

⁷⁷⁹ Lipartito (1995).

⁷⁸⁰ The environment is interpreted generally as a market or a set of markets. However, I argue that we should enlarge this interpretation of the market to include other spheres, such as universities, industrial associations, government agencies, legislatures and so on. Indeed, according to many sociologists studying industrial evolution, "the industry itself strongly moulds its own environment. It does so through the rules of behaviour and the interaction among firms that evolve spontaneously, through the formation of a variety of industry-related organisations (...) and through political action." See Nelson (1995: 77). For a full discussion of the evolution of institutions and their influence on the nature of firms and the organisation of the industry, see Piore and Sabel (1984), Sabel and Zeitlin (1993). For a review, see Nelson (1995).

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of embeddedness put forward by the institutionalist approach. This line of thought emphasises that the market must be regarded as a social institution made up by norms and behaviours that have evolved over time. Thus, the market is a result of social evolution. Moreover, the changing environment has become a crucial factor in Ford Iberica's evolution because the dynamic process has suggested its adaptation to new circumstances. In effect, the implications that the environment brought to Ford Iberica's activity and performance have been stressed. For example, the new environment principally considered is that which followed the civil war and was characterised by an increase in state economic interventionism - not only in the economy but in many other spheres. Indeed, from the second half of the thirties, the role of the state was crucial in the evolution of the Spanish economy; no more so than in the case of the motor industry and the role of foreign concerns. The government was perfectly aware of the importance of this industry, for military and defence reasons, as well as economic. It was aware also that the country had not been able to develop a local industry. From early 1938 there were plans to establish a national motor industry. However, World War II slowed the process. Moreover, foreign capital was curtailed to a maximum intervention of 25 per cent. This prevented General Motors and Ford, for instance, from entering in any joint-venture with the state.

A final main area of interest (within this first set of conclusions) leads to the relation between multinational enterprises and the subsidiary firm in the host country. The research has studied the establishment of a branch from the MNE's point of view, tackling first, the principal problems concerning the establishment, control and management of the branch in the host country. It might be concluded that, from the 1930s onwards it was necessary for the firm to implement changes in its organisation as growth proceeded. During and after the civil war, there were readjustments in the divisional structure when the range of products changed, and changes in the structure of functional departments when the output of existing products expanded or contracted. As a consequence, new posts were created and new people appointed to them; existing people had to adjust to the new structure

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of formal communication; and new employees not only to learn their jobs but also integrated themselves into the informal social network built up by the long-serving employees. The implementation and adjustment to these changes could not easily be speeded up without disrupting the day-to-day management activity.

A major point advanced regarding the role of foreign subsidiaries and MNEs in the host country, argues that foreign subsidiaries (Ford and Nissan) provided, from the perspective of the host country, a contribution to the upgrading of workforce skills and research & development. In effect, the consequences entailed by MNEs usually include the types of innovatory and product strategy adopted, the location of production and the methods of advertising and training methods employed. In particular, the techniques and capabilities of an MNE to transfer its intra-firm domestic organisational capabilities to a foreign location may rest on the transaction costs associated with the adoption of these methods, or on the cost of replanting them in an unfamiliar environment. As the thesis has sought to demonstrate, an significant task of MNEs has been to understand and assimilate the different ideologies, perceptions, laws and regulations of the host country. Frequently, MNEs and host governments sometimes misunderstand the other's objectives and actions due to the different cultural codes used to interpret them. Part IV of the thesis has shown that (Nissan) organisational methods take much longer and, in the long run, were likely to be more expensive to transplant than machine intensive production techniques and processes. Moreover, the extent and speed of the transfer could vary according to the cultural distance between the investing and recipient country, as well as the experience of the parent firm in the host country.

II

The firm has been the unit or subject of analysis, and thus I have focused my attention on and within the firm. However, this could not afford to be done at the expense of ignoring the context of the firm under analysis. By the context, I refer primarily to the motor vehicle industry. Consequently, reference to the industry has

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cut across the narrative of the thesis. The modern motor industry that emerged since the mid-1950s grew dramatically, and today it occupies a central role in the Spanish economy. However, this centrality stems entirely from foreign firms. Indeed, the development of the Spanish motor industry has been accompanied by a near total absence of national firms. Furthermore, the remaining national firms were state controlled, operating with significant foreign participation. Assembly operations dominated vehicle production before the decade of the 1950s, but by the mid-1970s advanced manufacturing operations comprised the bulk of total production. During the first half of the century, Ford and General Motors dominated the industry through assembly operations. Conversely, the period from the 1950s onwards has seen the installation of manufacturing plants - including those of Ford, in the 1970s, and General Motors, almost one decade later. Two factors help to explain this passage from assembly to manufacturing: first, there was the intensification of competition in the international industry; and, second, the bargaining process between MNEs and the host government has also been central to understand manufacturing activities as well as the increase in exports.

The assembly phase saw Ford establishing a branch in Spain. During the 1920s, it initially assembled 'knock down' units requiring only final assembly. Thereafter, it accepted partial assembly ('semi-knockdown'). While volume production was relatively low (though profitable) - production never rose above 10,000 units per annum -, capital costs of this operation were very modest; Detroit virtually made no investment at all, and the branch would pay off its debt as it sold vehicles and from their profits invest in new equipment. However, the depression of the 1930s, and the general tendency of European host governments to increase their pressure for the inclusion of local parts, changed this situation. The Spanish government, in its aim to nationalise the industry, what I have called 'partial nationalisation', pressured for the inclusion of local parts and components. A local parts supply sector emerged that would be important for the future development of the industry. Furthermore, during and after the Second World War, small national motor vehicle manufacturers emerged, though this local handicraft industry lacked the resources

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and the expertise to establish a full-scale manufacturing industry. It was during this post-war period that European manufacturing firms began to establish agreements with local firms, notably among them the case of Fasa-Renault and Fiat-Seat. Moreover, the effort of the government to promote local production depended primarily on the emergence of European manufacturers instead of US producers. And, the motor vehicle industry set up in Spain followed the promulgation of several national companies. Three phases might be pointed out: the European phase during the 1950s and 1960s with Renault, Fiat, Citroen and Peugeot. The American phase with the establishment of Ford and General Motors during the 1970s. And, finally the Japanese phase with Nissan Motor Iberica and Suzuki Santana in the 1980s.⁷⁸¹ Thus, this process demonstrates the centrality of state intervention in shaping the industry, during whose phase of initial establishment the state provided important incentives to induce MNEs to establish manufacturing facilities. However, while state support remains essential, the internal dynamics of the motor vehicle firms and the industry is also fundamental.

At the firm's level, the history of Ford in Spain points to the development of three types of activity. First, forward vertical or market-oriented operations. These activities represented the extension of the sales policy of Ford Motor Company after World War I, the main purpose of which was to advance or protect its markets and facilitate domestic production. Second, vertical backward or cost oriented operations. These activities were undertaken by Ford during the 1930s and significantly increased in the following decades. These types of operations represented the extension of the purchasing function of the firm. Third, horizontal operations, consisting in technology and intermediate technology investment. These operations were undertaken once Ford had left its Spanish subsidiary.

⁷⁸¹ I am, however, aware that this is an oversimplification; thus, there are cases like Chrysler, VW and so on that do not fit these periods.

III

The thesis has attempted so far as possible to tackle broader issues, confronting economic theoretical issues as much as historical ones. In fact, as has been pointed out, the skills of both economists and historians should be highly complementary. This means that while historians should be aware of the currents within economics, economists need reciprocally to be aware of the concerns of historians. This is because history provides stories that suggest new and overlooked factors and the connections between them. In effect, first historians have the possibility to access the records of the past. Second, there is a set of records that in combination among themselves were not available by a single contemporary actor; that is, records from the parent firm, the subsidiary, the state, and so on. And third, by knowing the end, it is possible to ask the relevant questions. I am aware, however, that our archaeology is partial because some relevant variables might have not been captured on paper. Moreover, the study of concrete cases can sometimes prevent excessive generalisations. To this end, the present research has attempted to recount the detailed history of a single company which might have not been large nor even innovative. It has, however, considered the firm a dynamic 'organism' in order to comprehend the firm itself as well as its actions: this includes an understanding both of the firm's own inner dynamics and the firm's relation to a dynamic environment.

Finally, let me argue that the appropriate theory for business historians ought to be animated not only by historical questions but by more abstract ones. Thus, the question now is where are we going from here? That is, what kind of business history should we do? Probably, business historians with good theoretical knowledge are well placed to achieve an intellectual synthesis. The relatively stable and self-reinforcing character of institutions provides a basis for theoretical analysis. The institutional approach of the firm concentrates on the historical evolution of the organisations and cultures of specific firms, rather than placing supreme emphasis on construction of a general and ahistorical theory to explain the nature of all firms. However, historically motivated accounts do not deny theory, they just relegates the overformalised theory to a secondary level. To this aim, I

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think that evolutionary economic theory gives insight to business historians because evolutionary models allow economic activity to unfold through time and thus to be moulded by the forces of history. Thus, an evolutionary approach has been pursued in order to capture the processes by which firms learn, search and adapt

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