

## ENGLISH SUMMARY

### **Foreign Direct Investment and the Creation of Local Organizational Capabilities: An assessment of the impact of the United States on the Spanish enterprise (1918-1975)**

More than a thousand years ago, in a remote valley in India, there lived six blind sages who spent their time competing with each other to see who was the wisest. One day, after a long argument about the true form of an elephant, they decided to go out and find a real specimen so as to clear up their doubts once and for all. With the help of a guide, they soon came upon the object of their search. The boldest of the six ran excitedly toward the animal, but in his haste ran smack into the elephant's side.

"Brothers!" he exclaimed. "An elephant is like a wall of sun-dried clay!"

Not too convinced of this, the second of the sages warily approached, arms outstretched, until he felt two long, curved and pointed objects.

"Oh my brothers!" he cried. "I say to you that an elephant is shaped like a spear!"

The others spoke softly in mocking tones, as none of them believed these explanations. And so each one approached the animal on his own. When the elephant wrapped its trunk around one man's waist, he deduced that the pachyderm had the form of a serpent. Another pulled on the beast's tail, the texture of which made him compare the beast to a length of old rope. The fifth raised his hand and touched an ear; for him, the elephant was more like a broad, flat fan. Finally, the sixth sage, the oldest of them all and therefore the most hunched over, walked right under the elephant without realizing this and, searching all about with his hands, grabbed onto one of the animal's legs. They were all wrong, he maintained; an elephant, without the slightest doubt, was shaped like a palm tree.

Once they had all experienced the form of the elephant for themselves, they set off for home, still arguing about which of them was in the right.<sup>1</sup>

How and why do nations grow? How do other countries contribute to this growth? And what role does a business play in all of this, as both the transmitter and receiver of knowledge? The present study has arisen from the intellectual restlessness which these questions have awakened in the author. It is surely not the first time that a researcher has wondered about such issues. Indeed, understanding the advance of both countries and businesses lies at the root of a variety of disciplines, and has been the object of continuous debate. Even so, we cannot claim to have achieved an inclusive vision of this phenomenon nor to have found accurate, unequivocal answers to the questions posed.

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<sup>1</sup> Adapted from a popular Indian folktale, available at <http://www.casaasia.es> (consulted 01/06/10).

In this work we have approached these questions through a study of foreign direct investment and the multinational enterprise. The two terms are not synonymous, although the former constitutes the principal indicator for measuring the activity of multinational enterprises, while such enterprises are in turn the corollary at the microeconomic level of foreign direct investment.<sup>2</sup> The choice of such an approach responds to a fundamental premise: that the enterprise is a key agent in the process of innovation, and thus in the competitiveness of nations.<sup>3</sup> It is upon this fact that the principal hypothesis of our research is built: the multinational enterprise, understood as one having productive assets which it owns and controls in at least two different countries, also has great potential as a vehicle for transmitting all manner of knowledge between nations.<sup>4</sup> This hypothesis has been founded on a wide review of the existing literature on the subject, ranging from economics and strategic management to economic and organizational sociology and political science. The body of academic work in this area is extensive and growing continually. For this reason, we have concentrated on current theories and the research lines which have created a school of thought over the last fifty years, during which foreign direct investment and the multinational enterprise have become subjects of serious academic analysis. It is not, therefore, a detailed "state of the art", but rather a systematic exploration of major currents, which has enabled us to identify those topics, questions and models which in the present work, markedly empirical and focused on the long term, we hope to analyse, contrast and comment upon.

Such a review has allowed us to see that the multinational enterprise has in reality been a sort of elephant whose form, origin and operation, among other factors, has sparked the curiosity of scholars from a diversity of disciplines, but who, unlike the

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<sup>2</sup> This identification is common among economists and business scholars, although the multinational enterprise may also operate in manners distinct from foreign direct investment, such as customer-supplier networks, technical assistance or consultancy activities, to name but a few. See Chenery and Srinivasan (1989), p. 1444.

<sup>3</sup> On the enterprise and the micro-fundamentals of the competitiveness of nations, see Valdaliso (2004) and López and Valdaliso (1997).

<sup>4</sup> This definition of the multinational enterprise has been taken from Caves (2007 [1982]), p. 1. The most important studies done on the multinational enterprise have used broad definitions like this, although it has at times been proposed, without much success, that a more restrictive criteria be established, according to a minimum number of countries of operation, the type of activity carried out, or a specific integration of the various units which comprise a multinational (Jones, 2005, p. 5; Gerras and Navas, 2007 [1996], p. 520). The multinational enterprise is also known by other names, but this is the most usual employed in specialised academic studies. On the origin of the term "multinational", see Fielhouse (1990).

sages of the tale, have rarely sat down to discuss their findings.<sup>5</sup> It has been no less surprising to find among these the scholars of business history, who, guided by their individual motivations and tools, have seldom attempted to give a comprehensive vision of the form of the elephant, even when they possess a great potential for doing so (Jones, 2003; Jones and Khanna, 2006; Buckley, 2009). With that in mind, this work has been undertaken with the firm determination to illuminate, with the tools of historical research, the various theories which have emanated from the various disciplines concerned with the study of international business. More specifically, we will try to respond to three questions: How does a multinational enterprise enter the country which receives its investment? How does it interact with the entrepreneurs of that country? What impact does it have on the local firms?

In our review of the existing literature on foreign direct investment, we have encountered a side issue as well: international aid. In fact, until bank loans assumed greater importance in the 1970s, foreign direct investment and economic aid programs were the main external sources of capital in less developed countries (Chenery and Srinivasan, 1989, pp. 1448-1449). Most certainly, while the accumulation of capital (physical and human) had been the obsession of the first development economists, economic and technical aid programs were the principal instrument of international cooperation agencies (Easterly, 2001; Lim, 2001; Mikesell, 2007 [1968]). However, the inclusion of technical progress in growth models, by Robert M. Solow (Solow, 1956 and 1957), and the first studies of the enterprise as a source of hard-to-codify and therefore hard-to-transmit capabilities (Selznick, 1957; Penrose, 1959; Chandler, 1962; Andrews, 1971), along with the limited results achieved by the first aid programs to third-world countries, promoted the vision among international organisms that the multinational enterprise is itself a dynamic agent of growth, a view which predominates today.<sup>6</sup> In spite of this, or even because of it, scant attention has been given to the interaction of international aid with foreign direct investment –beyond their macroeconomic effects— or of these two activities with the local business community.

If we consider the political, economic and technological leadership of the United States throughout the 20th century and its protagonism in the origins of international

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<sup>5</sup> As noted by Sumantra Ghoshal and Eleanor Westney in relation to organizational sociology and strategic management (Sumantra Ghoshal, 2005 [1993]). For an approach to the latter in the field of economics, see Caves (2007 [1982]).

<sup>6</sup> See, for example, UNCTAD (2005) and the *World Investment Reports* published annually by this organism.

aid, it is easy to see why we have focused our attention on foreign direct investment by the United States. However, the co-protagonists of the present study are Spanish businesses. Why? First of all, although Spain has been for much of its recent history a country that could be classed as intermediate or peripheral, in economic terms as well as in education or innovation, today it belongs to a select group of developed nations. Secondly, while economic and business historians have compiled diverse empirical evidence demonstrating the dependent character of Spain's progress with relation to foreign capital and technology, we still know very little about the role that foreign direct investment has played in that progress. Finally, as in the rest of Western Europe under the Marshall Plan, although businesses were the preferred recipients of the technical and economic assistance that the United States provided to Spain from 1953 to 1963, in the context of the Cold War, we know little of the effects this actually had.

The period we have chosen to study opens with the First World War and closes with the end of the Franco dictatorship in 1975. It is a period that coincides with a progressive increase in importance of the US for the Spanish economy, both in terms of international trade and foreign direct investment. Throughout these decades, the United States would share importance, to a greater or lesser extent depending on the period, with Germany, France and the United Kingdom (Puig, Álvaro and Castro, 2008). Our inquiries conclude in 1975, when the end of the dictatorship brought with it the unstoppable process of political and economic liberalization that would culminate in Spain's entry into the European Economic Community eleven years later. It was in this period, and not before, that US direct investment in Spain reached a volume comparable to that of our neighbours in Northern and Central Europe. It was also when the United States began to lose ground in relative terms to the Europeans. Nevertheless, it will be seen that we have applied this period loosely to our case studies, in which general criteria have been combined with the specific realities analysed.

The thesis has been divided into six chapters. In the first of these, a synthesis is made of the theoretical, empirical and conceptual framework for the study of foreign direct investment and the multinational enterprise to which, as explained earlier, we wish to contribute by means of this project. Chapter 2 goes on to deal with the foundations of US hegemony in the 20th century by reconstructing the changes its own companies had undergone and how these were brought to Europe –both informally, with the internationalization of US companies; and formally, through the technical

assistance program of the Marshall Plan, as well as later initiatives. This chapter concludes with a discussion of the possible effects of each, in a region –Southern Europe— which has until now been little studied, but which, for its traditional backwardness, was all the more able *a priori* to benefit from US aid. Spain, of course, belonged to this group. The fact that foreign direct investment, particularly from the United States, has been a pillar of the country's more recent growth, as has often been acknowledged, as well as its connection to the large US financial groups. Less is known, however, about the historical trajectory of this investment, the roots of said connections, how foreign investors operated or how foreign direct investment and international aid combined to fuel Spain's modernization. These points are examined in Chapter 3. The results obtained confirm the starring role that local partners played in the entry and evolution of US multinationals, as well as point to an increasing degree of involvement in Spanish markets on the part of foreign interests, reveal a multiplying effect on American aid to Spanish businesses and, lastly, suggest a market that was ripe for the collaboration of US mother companies and their Spanish subsidiaries. These points, I must stress, can only be reliably verified through the use of case studies; and this is precisely what we have done in the three subsequent chapters.

In Chapter 4 we examine the case of International Telephone and Telegraph (ITT) and its main Spanish investment, the Compañía Telefónica Nacional de España, also known as Telefónica. There are three reasons for choosing this as an example: first, from its foundation in 1924 to its nationalization in 1945, it represented the single largest US investment in Spain; second, it was also the country's leading telecommunications company, as it held a monopoly in the sector and, through ITT, was closely linked with one of the period's most important equipment manufacturers, International Standard Electric, also an American company; third, even the monopoly's eventual nationalization would not dissolve the Spanish company's ties with ITT.

In Chapter 5 we turn to the industrial sector, specifically to the manufacture of farm machinery, through an analysis comparing the trajectories of International Harvester and John Deere in Spain. Why this activity and these companies? It is, first of all, the manufacturing sector on which studies of the multinational enterprise have traditionally been based. Secondly, this comparison is of two companies with very different experiences in international markets (Spain included), but which would fight for world leadership in the crucial years of the sector's "Golden Age"; i.e. the peak of its expansion and globalization. Thirdly, the manufacture of agricultural machinery is

closely linked to the modernization of rural areas and, by extension, of the economy as a whole; it was for this reason that such development attracted (and still attracts) the interest of world governments and international aid organizations. Finally, we are dealing here with an oligopolistic sector, both inside and outside Spain, which would reach high levels of domestic concentration in the 1960's, its period of greatest growth and one of definitive modernization for Spanish agriculture. At the beginning of the next decade, domestic production of tractors was concentrated in two companies that relied on US investment and technical assistance; the Spanish subsidiary of John Deere was one of these.

Chapter 6 focuses on the service industry, particularly the development of a relatively young sector: engineering consulting. There are three reasons for this. First, firms such as these, as they apply whatever technical knowledge is currently available—whether self-developed or licensed—to the needs of each client, are considered to be a fundamental agent of technological transfer (UNCTAD, 1989 and 2002; OECD, 1990). Second, it is an activity which today includes a number of Spanish companies which are highly competitive in world markets. Finally, this sector has been led since the Second World War by the United States and its beginnings in Spain have been attributed (although this has not been proven) to US aid provided in the 1950's, and to American capital and technology in general.

With the exception of such engineering companies, whose historical evolution inside and outside Spain is little known, the other sectors analysed here have been dealt with previously by other authors, especially in the case of ITT and Telefónica. It must be said, however, that there has been no systematic, long-term analysis of how these US companies made their entry into Spain, how they interacted with businesses and other groups within the country, and whether there existed a process of knowledge transfer between them and Spanish firms. This topic will be addressed in the following pages, drawing upon an exhaustive range of sources, both internal and external to the companies involved, and with the firm resolution to contrast the theoretical framework developed in recent decades with the influence of foreign direct investment on the forming of capabilities in recipient countries. In this way, we will not only learn more about Spain's recent development, but also about the dynamics of the multinational enterprise, growth and the international transfer of knowledge.

## 1. Academic analysis of foreign direct investment. State of the art.

When a company decides to expand, it must make three basic decisions: where to do this –in its home market or abroad—; whether to continue operating with the same line of products or services, or to expand it, either with similar ones (*related diversity*) or ones that are completely different (*non-related* or *conglomerated diversity*); and what resources to use, its own (*internal growth*), those of other companies – obtained through total or partial acquisitions or mergers (*external growth*)—, or both, through joint ventures and other types of strategic alliances.<sup>7</sup> If the company decides to internationalize, it must also decide how to operate abroad: through the market – exporting, licensing or franchising—, or by moving part of its operations abroad. This last option implies a certain amount of investment in the new market, as well as managing the assets assigned there. The investment made, denominated as foreign direct investment (FDI) as opposed to mere portfolio investment (in which the management of the foreign company is not affected), converts the investing company into a multinational.

Understanding what leads a given company to go multinational, with all that such a decision implies, has stirred a great interest in the academic world over the last fifty years; more precisely, since Stephen H. Hymer questioned in his thesis –published posthumously 16 years after it was written— the treatment which economic theorists had given up to then to the international operations of companies (Hymer, 1976).<sup>8</sup> While these had been traditionally considered as mere movements of capital motivated by differences in interest rates, Hymer attributed to the multinational enterprise the transfer of resources which were not only financial, and the exploitation of individual advantages that enabled such companies to surpass their local rivals and obtain monopolistic revenues.

The postulates of Hymer's work have sustained later research done on the multinational enterprise, which, with respect to the advantages inherent to this type of company, has been further nourished by the field of evolutionary economics and the

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<sup>7</sup> See, for example, Grant (2008 [1996]), Collis and Montgomery (2007 [2005]) and Guerra and Navas (2007 [1996]) for a compilation relating to strategic management. With more emphasis on economics, Caves (2007 [1982]).

<sup>8</sup> A very brief but useful synthesis of this is given in Guillén (2001b), with more detail in Casson (1986) and Buckley (2009).

resource-based view of the firm.<sup>9</sup> These schools of thought hold that the competitive advantages of a given company—competencies according to evolutionary economics—lie in the resources available to it (tangible, intangible and human) and in its ability to identify, administer and orient these resources toward the execution of an activity and the achievement of a goal. This ability, which has received various names in the literature<sup>10</sup>, is generated and assimilated over time through learning and experience and the interaction of members within an organization, as well as between the enterprise and its environment. Such advantages have, therefore, a markedly tacit character and are difficult both to imitate and to codify; this has led to the multinational being viewed as the best vehicle for the transmission of these advantages from one country to another (Kogut and Zander, 1993; Blomström and Kokko, 1996). The multinational enterprise has, moreover, an additional capability: the knowledge of how to orchestrate an organization comprised of units which are more or less removed from each other and faced with different contexts (Prahalad and Doz, 1987; Bartlett and Ghoshal, 1989). As it coordinates and manages resources and capabilities on a world-wide scale, one would also expect it to develop a wider spectrum of organizational routines (Kristensen and Zeitlin, 2005, p. 9). The character of these advantages—or, at least, some of them—would therefore explain why an enterprise might decide to go multinational, rather than export or grant licenses to other companies.

Still more reasons for creating foreign subsidiaries have been noted in the literature, however. Among these are: the life-cycle of the product in question—in such a way that external production progressively assumes a greater maturity and standardization (Vernon, 1966)—; the experience gained from operating in other markets, if direct investment is seen (as by the Uppsala school) as the product of the gradual learning process that begins with exporting (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlen, 1977; Blomstermo and Sharma, 2003); and the imitation of competitors in order keep, in oligopolistic sectors, the internationalization of the

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<sup>9</sup> See the seminal work of Selznick (1957), Penrose (1959), Chandler (1962) and Andrews (1971). For a synthesis of these schools, see Valdaliso and López (2007 [2000]), pp. 41-52; and Grant (2008 [1996]), Chapter 5. An exhaustive review is given in González Cruz (2002), Chapter 2.

<sup>10</sup> From the perspective of strategic management, some authors refer without distinction to capabilities and competencies. However, there is at present a tendency to differentiate competencies from capabilities, the former being linked to the aptitudes possessed by individuals rather than the organization itself, as in the case of organizational capabilities. Competencies—which here have a meaning different from the term "competencies" in evolutionary economics—are distinctive characteristics of a company's human resources. In any case, the existing literature is not always clear about this. See the critical review of these terms presented in González Cruz (2002), pp. 111-118, and a synthesis of the various works which have appeared since then in Barney and Clark (2007) and Teece (2009).

pioneering company from eroding profitability for the rest of the origin market, as postulated by rivalry models (Knickerbroker, 1973). Finally, John Dunning, with his *eclectic paradigm*, proposes a framework which is at the same time more open and more complex (Dunning, 1977, 1979, 2001 and 2006). According to Dunning, a company will establish itself abroad when: a.) it has advantages of ownership not possessed by its competitors (*ownership advantages*), along the line of Hymer's thinking; b.) when it is more beneficial to internalize these advantages than to operate through the market by exporting or licensing (*internalization advantages*), minimizing the transaction costs and asymmetric information associated with this, as indicated in the theory of internalization (Buckley and Casson, 1976 and 1998); and c.) when there exist advantages derived from the exploitation of certain resources in a country other than the country of origin (*location advantages*).

In the field of economics, much attention has been given to the identification of localization factors like these, an activity which has benefited recently from the *new economic geography* (Krugman, 1991) and from the analysis of clusters (Porter, 1994; Gray, 1996).<sup>11</sup> Scholars of economic sociology have similarly pointed out the effect that the economic policy of the recipient country –restrictive or permissive with regard to foreign investors; aimed at substituting imports or toward exportation— has on a multinational's incentives for establishing itself abroad and the mode of entry it chooses (Guillén, 2001a). When intervention of this kind exists, entry is frequently preceded by a process of negotiation with the recipient government over the conditions for this. Thus, while decades ago there was harsh criticism of the power multinational enterprises have managed to amass (Vernon, 1971; Moran, 1974; Evans, 1979), more recent works have taken a more dynamic and complex perspective, holding that the strength of both parties varies over time according to the type of industry and the economic policy followed (Haggard, 1990; Dunning, 1993; Moon and Lado, 2000; Ramamurti, 2002), while within the governments themselves a diversity of opinions have existed. Third parties, such as international and non-governmental organizations, have also had an influence in such negotiations (Ramamurti, 2002; Levy and Prakash, 2003).

Whenever a company decides to operate in another country through direct investment, the best mode of entry must be determined. This decision depends on

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<sup>11</sup>For a synthesis of localization factors found in the literature, see Muñoz (1999), pp. 67-92; Díaz Vázquez (2003), pp. 55-72 and Jones (2005), pp. 7-12.

multiple factors: the characteristics of the industry and country in question –for example, the existence or non-existence of companies susceptible to acquisition or, as we have already noted, the development strategies of the local government—; the existing cultural distance –the greater this is, the greater the probability that a joint venture will be the vehicle (Hofstede, 1980 and 1996)—; country risk (Kobrin, 1982; Henisz and Williamson, 1999); contractual hazard (Henisz, 2000a and 2000b; Delios and Henisz, 2000); the type of ownership advantages the enterprise possesses –the more tacit and difficult these are to teach and share, the fewer incentives there will be to establish joint ventures (Kogut and Zander, 1993)—; international experience –a lesser degree of experience favours the formation of partnerships—; and the existence of complementary assets in companies being considered for acquisition, partnership or merger.<sup>12</sup>

In any case, whatever entry mode is chosen, the multinational must organize its own structure so as to obtain optimum efficiency. To do so, it must take advantage of economies of scale and scope, adapt to the destination market, and both generate and integrate knowledge at the international level by transmitting between the company's various units and affiliates the knowledge generated by each one (Barlett and Ghoshal, 2002 [1989]. To this effect, in contrast to the large, traditionally hierarchical and multidivisional company, the globalization of recent decades has stimulated the adoption of more decentralized structures (Nohria and Ghoshal, 1997; Ghoshal and Barlett, 2005 [1993]), in which subsidiaries, along with having greater autonomy, develop their own particular capabilities and thereby help create advantages for the multinational itself (Birkinshaw, 1997 and 1998; Birkinshaw and Hood, 1998; Birkinshaw, Hood and Jonsson, 1998; Blomström, Kokko and Zejan, 2000; Ghemawat, 2008). Such flexibility can also be found in other organizational structures identified by business historians, as in the case of *free-standing firms* (Wilkins, 1998; Wilkins and Schröter, 1998), networks and business groups.<sup>13</sup>

Now that we know something of the motives behind foreign direct investment and how a multinational enterprise puts such investment into practice, we will turn the prism of our analysis to focus on the countries which receive it. What do they gain from this influx of foreign capital? History shows that the benefits are diverse and subject to

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<sup>12</sup> A synthesis can be found in Caves (2007 [1982]), pp. 91-102) and, focused on economic sociology, in Guillén and Suárez (2005).

<sup>13</sup> The literature on such groups and networks has multiplied in recent years in a variety of different disciplines. For an up-to-date synthesis, see Fruin (2008) and Fernández and Rose (2009).

many different variables, among them the type of industry, entry mode, advantages of each company, the destination economies themselves, even mere chance (Jones, 2005, pp. 243-244 and 260-261). Studies on the impact of foreign direct investment from the macroeconomic perspective point to the accumulation of capital, the balancing of foreign accounts and an increase in international trade, human capital and the efficiency of local suppliers, among other effects.<sup>14</sup>

After five decades of academic analysis on foreign direct investment, it can be affirmed that we know quite a lot, both theoretically and empirically, about the causes and macroeconomic impact of such investment, about the strategies and structures of multinational enterprises and why these companies choose to go multinational. That having been said, we have much less knowledge about how FDI works in practice (and even less from the long-term and very long-term perspective) or its contribution to the accumulation of capabilities in the local business community. Nor has there been much study done of the possible inter-relation with international aid, even though for decades now both activities have appeared hand-in-hand on the agendas of international organisms concerned with development.

Something similar might be said of studies relating specifically to Spain. There is a general consensus, among both economists and historians, regarding the key role which foreign technology, innovation and knowledge have played in the development of Spain. This is confirmed by historical data on patents (Saíz, 2005), education expenditure (Núñez, 2005) and imports of machinery and equipment (Tena, 2005). Much less is known, however, about foreign direct investment, among other reasons for the lack of historical sources on the volume and long-term evolution of such investment. Indeed, the flow of foreign capital entering the country was not registered by country of origin or investment type (direct or portfolio) until 1975. Before then, and beginning in 1959, we had only partial data, as investment was recorded for a limited number of sectors, and even this varied over time. It included only those proposals with a majority of foreign capital and, in any case, projects which, by requirement of the existing legislation, had been authorized by the Spanish government. Such projects

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<sup>14</sup> A synthesis is found in Dunning (1994), UNCTAD (1999), Lin (2000), Caves (2007 [1982]), Chapter 9 and, from a business history perspective, in Jones (2005), Chapter 10.

were not necessarily carried out, and if they were, might be subject to considerable delays.<sup>15</sup>

This last point, together with the available data on contracts transferring technology and technical assistance from foreign companies, was the basis for a variety of studies done in the 1970's, in which the technological dependence of Spanish firms was criticized.<sup>16</sup> They were characterized as mere passive recipients of external knowledge –a knowledge which was, moreover, second-line, and monopolized by large national banking groups and a few dominant figures in business and politics.<sup>17</sup> Around the same time, economic historians would reach similar conclusions about the role of foreign capital in Spain's industrial revolution and its eventual failure. While such capital had contributed, in the second half of the 19th century, to the construction of the country's railway system, the development of its banks and the exploitation of rich mineral resources, the bandwagon effect of foreign initiatives in domestic industries was negligible.<sup>18</sup> Studies such as these filled out a body of work which, although not without its problems, attempted to reconstruct the historical weight of foreign capital in the evolution of the Spanish economy (Sardá, 1948; Broder, 1976 and 1979).

In recent years, coinciding with a more visible internationalization of Spanish companies, economic historians have taken a renewed interest in the evolution of foreign direct investment in the country. Using documentation conserved by the Bank of Spain, Teresa Tortella has registered the foreign companies that operated in Spain from the final decades of the 19th century until 1966 (Tortella, 2002 and 2008), completing the record of foreign companies published in the 1960's (Campillo, 1963; Saínz, 1965). Drawing on diplomatic sources and, for the case of US investment, on studies carried out by the economic agencies of the US administration, the works of

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<sup>15</sup> Spanish legislation on foreign direct investment and how this investment was measured and accounted for is synthesized in the Appendix 3.9 of the thesis.

<sup>16</sup> Aguilar (1973), Varela and Rodríguez de Pablo (1974), Cuadrado Roura (1975), Velarde (1975), Gallego (1975); Lucas Fernández (1975); Donges (1976); Fanjul and Segura (1977); Muñoz, Roldán and Serrano (1978) and *Información Comercial Española* (ICE), 493.

<sup>17</sup> On the connection between foreign investment and "national capital", see the pioneering work of de la Sierra (1953). Also Muñoz (1969) and Tamames (1976), as well as the studies, more descriptive than analytical, done by Guillén (1963) and Moya (1984). The works listed in Note 37 also deal, in greater or lesser detail, with this topic. The most exhaustive is that of Muñoz, Roldán and Serrano (1978). Somewhat later, but touching once again on the dependent character of Spain's economic growth, are the works of Braña, Buesa and Molero (1976) and (1984); Braña and Molero (1989), and Buesa and Molero (1989).

<sup>18</sup> Tortella (1973); Roldán and García Delgado (1974); Nadal (1975); Tedde de Lorca (1974) and (1978); Muñoz, Roldán and Serrano (1976) and (1977) and Broder (1982). See Tortella (2008) for an up-to-date summary of the role of foreign interests in the formation of Spanish capitalism.

Julio Tascón offer quantitative estimations of foreign direct investment in Spain and descriptions of the foreign companies that existed at given times in the mid-20th century (Tascón, 2002, 2003 and 2005). In greater detail and based on both diplomatic sources and private archives in Switzerland, Sébastien Farré and Jörg Ruckstuhl have traced the movement of Swiss capital during the Franco years (Farré and Ruckstuhl, 2008), as have, for the Civil War and immediate post-war periods, Julio Tascón and Albert Carreras (Tascón and Carreras, 2001).

These studies have allowed us to identify the principal foreign investors in modern Spain, when their interest in the country began and in what sectors they have concentrated their activities. With the exception of this last point, the results should once again be taken as approximate, given the difficulty of judging the total number of foreign enterprises operating within the country and, more importantly, the amount of foreign capital at work in each one. On the other hand, none of these studies has effectively evaluated the impact of this capital on Spain's economy and businesses, nor examined the interaction of foreign companies with their local environments. Indirectly, as it is not their main objective, it is a question dealt with in studies of specific sectors, such as the chemical and pharmaceutical industries (Puig, 2003, 2004 and 2005) or consultancies (Kipping and Puig, 2003a and 2003b). At the aggregate level, the impact of the institutional environment on foreign investors has been addressed monographically by Albert Carreras (Carreras, 2003), Lina Gálvez and Francisco Comín (Gálvez and Comín, 2003), Eugenio Torres (Torres, 2003a), Óscar Calvo (Calvo, 2008) and, on the connections with their Spanish partners, Núria Puig and Adoración Álvaro (Puig and Álvaro, 2007).<sup>19</sup> Finally, a last group of studies has tried to reconstruct the models of investment followed by Germany (Loscertales, 2002; López Morell, 2005; Puig, 2006, Puig and Castro, 2009) and France (Castro, 2007 and 2008; Puig and Castro, 2009), to which are added the United Kingdom and the United States in the synthesis presented by Puig, Álvaro and Castro (2008). These works examine Spain's technological dependence and the connections of foreign investors with the country's leading business groups. Unlike the research done in the 1970's, however, they concede a greater role to Spanish businessmen in attracting interest from abroad, and identify in them an ability to absorb information from outside sources.<sup>20</sup> Only some

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<sup>19</sup> For a general synthesis on the Spanish institutional context and its impact on companies, see Comín (2002), Cabrera and del Rey (2002), Miranda (2003) and Torres (2003b).

<sup>20</sup> This technological dependence may be traced, beginning with the first Industrial Revolution, in the *Atlas Industrial*, published by Jordi Nadal (Nadal, 2003). Contacts of Spanish businessmen with foreign firms are

of these authors, it should be noted, attempt to contrast the principal existing theories regarding the multinational enterprise (Puig and Castro, 2009; Castro, 2007).

It is precisely in this last direction that we here analyse US direct investment in Spain. Our interest is particularly focused on how foreign businesses entered the country, the relationships they established with the local business community and, finally, how they contributed to the creation of organizational capabilities in Spanish companies. It is thus our intention to strengthen the already extensive theoretical and empirical *corpus* of international business study with long-term evidence aimed at lessening the gap that has traditionally separated this discipline from the field of business history.

## **2. The United States and European businesses in the "race" for the 20th century (1918-1975)**

The winner of the race for the 20th century –this was how many Europeans viewed the United States at the dawn of the 1900's, and with good reason. The former British colony's industrial flowering, together with the integration of the world economy, had enabled an unprecedented internationalization of American companies. This was only the beginning of an undisputed economic and political leadership that would take shape during the First World War and be consolidated over the next sixty years.

A wealth of natural resources, a substantial domestic market and cheap capital in terms of labour combined, during the Second Technological Revolution, to reinforce the country's mass production and distribution activities. Investment in R&D and training by both the government and private interests would likewise facilitate the later development of cutting-edge technology –in the chemical and electro-technical sectors between the two World Wars and in the industrial electronics, aeronautics and petrochemical sectors in the post-WWII period. In business, the United States would become an important reference for yet another reason: an innovative management of resources that would generate the productivity needed to stimulate a rise in salaries and, as a result, in consumption.

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documented in many of the biographies collected in Torres (2000) and the regional compilations of Vidal (2005), Cabana (2006) y Germán (2007).

This was how the nations of Europe saw it, especially after the Second World War. While some earlier examples existed, it was then that the American business model began proliferate with greater strength. This model should be understood – rather than a single type of American firm– as a series of US-pioneered ideas, principles and techniques that each enterprise or organization would adopt, adapt or imitate, choosing whichever were best suited to its own characteristics and working environment. This is what happened in the United States and what would later happen in Europe.<sup>21</sup> But what ideas, principles and techniques were these? At the governmental level, there was the *defence of competition*, which would eventually put an end to the climate of concertedness that predominated in European business life between the wars; at the company level, techniques related to mass production and distribution; methods of work organization such as *scientific management* and the new field of human relations; corporate structures such as the large managerial, multi-divisional company; and other new trends, such as the use of external consultancies – though agencies and business school training— or the application of marketing and advertising. All of this new thought was disseminated through two vehicles: the multinational enterprise and the programs of international aid.

At the outbreak of the First World War, Europe was receiving only 20% of the United States' direct investment (Wilkins, 1970, pp. 201-202). While the first American multinational would arrive in the 20th century and expand powerfully in the 1930's, it was not until the so-called "Golden Age" that Europe became the principal destination for such investment, just as it was, relatively speaking, losing strength as a market.<sup>22</sup> Indeed, until the 1980's, goods and capital from the United States were concentrated in only three countries: the United Kingdom, France and Germany, especially the first of these. American companies came to Europe looking for new markets which they – especially the first companies to arrive— explored initially through local importers, and

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<sup>21</sup> The 50th anniversary of the Marshall Plan gave rise to numerous international research projects on the Americanization of the European enterprise and the spread of the American model of economic and business organization in Europe. On the post-WWII period and Europe, see the works of Kipping and Bjarvar (1998); Gourvish and Tiratsoo (1998); Engwall and Zamagni (1998); Zeitlin and Herrigel (2000); Barjot (2002); Barjot and Réveillard (2002); Barjot, Lescent-Giles and Fèrriere (2002); and Kipping and Tiratsoo (2002). On Spain, Puig (2005), García Ruiz (2003b), Puig and Álvaro (2002) and (2003); and Miranda (2004). Djelic (1998) compares France, Germany and Italy using institutional sources above all, while Schröter (2005) offers a valuable synthesis covering the entire 20th century. Guillén (1994) had previously dealt with the diffusion, from the US to the UK, Germany and Spain, of the principle paradigms of business organization. More recently, Bonin y De Goey (2009) about US investments in Europe.

<sup>22</sup> According to data on US accumulated direct investment Europe. The problems and limitations of this data are discussed in Appendix 2.

then later went on to establish subsidiaries of their own (Wilkins, 1974). Aiding in this gradual entry process were American diplomatic efforts, beginning in the 1920's, which provided not only a source of information on existing investment opportunities and how to carry them out, but defended the country's interests whenever these were hampered by local governments. Until the Second World War, the machinery, chemical, electricity, communications and petroleum sectors were those in which American companies were principally involved. To these were added, with growing importance, the mining, automotive and banking sectors, the last providing financial support to its clients' projects of international expansion (Wilkins, 1970 and 1974; Nelson and Wright, 1992).

Not having encountered great obstacles in adapting to the business climate of inter-war Europe, the companies with greater seniority would likewise have to adapt to the Common Market, adopting organizational structures which were more in accord with the opportunities of the new European stage. The expansion of American multinationals in this period was spectacular. By way of illustration, of the 1,857 manufacturing subsidiaries created or acquired between 1946 and 1958, nearly 60% belonged to US companies (Franko, 1976, p. 10). From 1959 to 1967, despite the expansion of their European counterparts, the percentage was still 54% of a total of 5,100. US capital was concentrated especially in the petroleum industry and in manufacturing, within which three sectors –chemical, machinery and transport materials— stood out more and more, coinciding in those areas where American exports were more competitive world-wide and in relation to the general pattern of foreign investment.<sup>23</sup> Meanwhile, the US Administration sought, in the development of multilateral organisms and various government programs (investment guarantees, for example), support for the expansion of its multinationals, an expansion which would eventually replace international aid as a vehicle for development.

The origins of international aid are linked to two phenomena: the recovery of Europe after the Second World War and US efforts to spread the virtues of the American model as a long-term growth strategy. The economic aid embodied in the Marshall Plan and the program of technical assistance it included were instrumental tools for accomplishing both. While the success of the first is inarguable, evaluating the second –a collection of initiatives in which "productivity missions" to the US were especially notable— is more a question of nuances. These initiatives would continue

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<sup>23</sup> *Survey of Current Business*, 19 October, 1970; and Lipsey (1988).

for more than a decade and their confluence would result finally in the creation of the Organization for Economic Cooperation and Development (OECD).

European companies, in any case, adopted and adapted these American methods, techniques and ideas selectively, and the intensity of the process would vary significantly from one country to another, according to the structure of their industries and markets, as well as the degree of acceptance demonstrated by the players involved, from business people, governments and political parties to the academic and scientific communities. Without forgetting that only through the study of specific cases can the real impact of these initiatives be judged, a diversity of factors have been pointed to as explaining the receptivity to these ideas, such as economic independence with relation to the United States, the positive understanding (in the linguistic sense as well) that existed between American cooperation agencies and their European allies, and the economic, diplomatic and cultural relationships that prevailed before the war. Still more interesting, and controversial, is one last factor: the level of backwardness perceived by economic agents in comparison with the United States (Djelic, 1998).

This backwardness was significantly greater, both economically and socio-politically, in Southern Europe (Aldcroft, 2003; Giner, 1995) –a strip of territory that encompassed Portugal, Spain, southern Italy, Greece, Yugoslavia and Turkey, and which was given its own category by American strategists and aid agencies. Less studied than their northern neighbours, these countries nevertheless possessed characteristics that made them especially open to US influence, as American intelligence services pointed out in the 1950's. Firstly, their governments as well as their wide business networks were aware of their own countries' backwardness and the need to introduce changes if they wanted to keep up with Northern Europe. Secondly, they were embarked on ambitious projects of industrialization and needed foreign input, capital and technology to carry these out. Thirdly, the protectionism and industrial regulation practised by their governments acted as an incentive for alliances between local agents –who possessed information about their own markets—, and the foreigners –who had the resources to exploit this information. Fourthly, among foreign investors, the United States held the preferential position: it was not only one of the main business partners in each of these countries, but represented the principal source of direct investment at least until the Second World War. Finally, the program of economic aid and technical assistance, aimed at enlisting these countries into the

Western defence effort, was continued for much longer here than it was in North-western Europe.

The case of Spain, however, is in some respects singular. To judge from the data on how this economic aid was channelled (with a relatively greater weight given to loans from the Export Import Bank, granted for projects with viability guarantees and preferably by private companies), the greater emphasis placed on technical assistance for executive training, and the wider involvement of US capital in the country's overall business structure –with greater investment diversification—, one can assume that the influence of private initiatives in the diffusion of the American model was greater in Spain than in the rest of Southern Europe. Although a lack of studies on other countries prevents a comparison, in the following chapter we will see if such private initiatives were indeed relevant, how they were received and what knowledge, techniques and ideas US aid agencies intended to transmit.

### **3. US direct investment in Spain (1918-1975)**

It has been argued that Spain took little advantage of the opportunities that arose with the first globalisation wave (O'Rourke and Williamson, 1999). This coincided, however, with a growing interest in the Iberian market on the part of the industrial powers of the day. Although quantitative data is lacking for the entirety of the Spanish economy, it is well known that French, British and Belgian capital played a major role in the modernization of the 19th-century banking structure, as well as in most of the great projects of the era, such as the building of the country's railway system, the exploration and exploitation of mineral resources, and some public services.<sup>24</sup> Joining them, as flag-bearers of the Second Technological Revolution, were Germany and the United States. These two countries, along with France and the UK, would be, from then until the end of the period analysed here, Spain's principal business partners and the country's leading foreign investors (Puig, Álvaro and Castro, 2008, pp. 21, 24).

The arrival of US capital and goods became highly visible in the years following the First World War, somewhat later than in the more advanced European countries. While the majority of American companies were connected with the industrial sector, the fact

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<sup>24</sup> See Note 18 and Puig and Castro (2009).

is that, by volume of direct investment, it was the public service and to a lesser degree the petroleum sectors that were the preferred destinations of US capital until the middle of the century (Tables 3.1 and 3.2). Indeed, one company alone was responsible for most of the direct investment in the country: International Telephone and Telegraph (ITT). Among this company's many investments was the Compañía Telefónica Nacional de España (CTNE), which in 1924 was granted a monopoly on domestic telephone services.

**Table 3.1**  
US DIRECT INVESTMENT IN SPAIN, 1918-2006

Year	Total	Annual variation	Entry of capital	Profits reinvested	Petroleum	Manufacturing	Transport and public services	Trade	Other
1929	72.23	68.93			11.74	17.22	0.00	5.58	65.46
1930	91.48	19.25							
1933	67.00	-24.48							
1936	80.53	13.53			1.70	20.28	0.00	1.79	76.23
1940	73.40	-7.13							
1943	124.30	50.90			1.37	14.08	72.16	4.67	6.92
1950	30.70	3.70	2.00		18.24	49.84	a	7.49	16.29
1955	58.00	8.00	4.00	4.00	31.03	36.21	a	6.90	18.97
1960	59.00	6.00	2.00	4.00	28.81	45.76	5.08	13.56	6.78
1965	275.00	79.00	54.00	17.00	23.27	51.64	2.18	16.36	6.18
1970	969.00	411.00	138.00	17.00	19.00	51.83	0.00	0.00	29.17
1975	1,763.00	368.00	365.00	126.00	14.24	56.72	0.62	11.97	a

Note: (a) included in total; (b) less than 50,000 dollars.

Sources: Appendix 3.3.

The nationalization of CTNE in 1945 had the immediate effect of increasing the importance of industry and petroleum to accumulated US direct investment in Spain. This nationalization would come at a difficult time for foreign investors. Added to the ravages of the Spanish Civil War (1936-1939) and the long post-war period – manifested most notably in a shortage of foreign currency— were the heavy restrictions on foreign investment imposed by the new regime of General Franco; among these was fixing a maximum limit of 25% on the amount of foreign participation allowed in the social capital of Spanish companies.<sup>25</sup> If we add to all of this the effects of the Great Depression and the Second World War on international business activity, it is no

<sup>25</sup>The prevailing legislation on foreign investment in Spain is synthesized in Appendix 3.9.

wonder that the number of American companies with operations in the country fell during the 1920's (Table 3.2). That company closures were not even more numerous was due to the fact that the shortage of foreign currency and the resulting difficulties of repatriating profits and resources in the event of liquidation and closure, encouraged or obliged at least the bigger companies to maintain their facilities until better times were in sight. Even so, the value of accumulated US direct investment would reach a peak in 1943, the result, above all, of the government's petrochemical projects and the need for external financing and technology to carry these out.

**Table 3.2**  
US ENTERPRISES IN SPAIN, 1930-1975

	1930	1943 <sup>1</sup>	1951	1961	1975
<b>Cinema</b>	6	7	7	8	6
<b>Trade</b>	2	4	5	3	13
<b>Consulting and advertising</b>	0	0	0	6	40
<b>Industry</b>	45	33	26	50	222
Food	4	3	4	5	28
Automotive	9	4	5	3	13
Machinery	19	12	8	13	43
Electrical	4	6	4	4	15
Metals	0	0	1	0	10
Chemical	10	8	5	17	63
Other	0	1	0	4	22
<b>Extractive industries</b>	11	7	7	4	11
<b>Petroleum</b>	7	7	7	22	26
<b>Insurance and finance</b>	8	3	1	7	27
<b>Transport, communications and public services</b>	7	5	7	6	5
<b>Other</b>	9	1	5	5	21
<b>TOTAL<sup>2</sup></b>	<b>93</b>	<b>64</b>	<b>63</b>	<b>109</b>	<b>348</b>

Notes:

<sup>1</sup> Not included here are those companies which we know were closed or in liquidation. (Paramount Films, Coca-Cola, General Motors and McAndrews and Forbes)

<sup>2</sup> Some US companies were operating in several sectors. For this reason, the total number of companies does not coincide with the sum of the corresponding rows.

Sources: Appendices 3.4, 3.5, 3.6, 3.7 and 3.8.

Added to foreign direct investment between 1953 and 1963 was another fundamental instrument of external assistance, and this was the economic and technical aid that the United States provided in exchange for allowing the establishment of American military bases in Spain. Thus, against the backdrop of an intensifying Cold War, the diplomatic isolation which Western nations had imposed on the Franco regime after WWII came to an end.<sup>26</sup> The aid given was administered much

<sup>26</sup> In reality, with a loan granted in 1950 by the Export Import Bank, the forerunner of later agreements signed in 1953. On Spain's diplomatic isolation, the tightening of ties between the two countries and the

like the European Recovery Program, and with it Spain would establish its own national productivity centre (the Comisión Nacional de Productividad Industrial, or CNPI), through which it intended, along with increasing the productivity of Spanish industry, to learn the secrets of the American economic and business model. Among the various activities pursued along these lines were, as in other parts of Western Europe, the productivity missions to the United States. The topic of management training predominated, followed, at some distance, by construction and urban planning.

Among the effects attributed to American aid, historians have noted its contribution to the reactivation the country's struggling manufacturing industry –even though production was limited, bottlenecks in the supply of raw materials and other inputs were so acute that their effects were multiplied—<sup>27</sup>, to the recovery of private investment (Calvo, 2001), to the creation of Spain's first business schools (Puig, 2003a), to the education of various types of engineers (Fernández Prieto, 2007, pp. 323-344; Delgado, 2005) and, according to the few case studies that have been done on the subject, to business training.<sup>28</sup> We still know little, however, about the transfer of knowledge that this program fostered. In the present study, a more attentive examination of the management of American aid –in its military, economic and technical dimensions— has enabled us to identify other ways in which it influenced Spain's business structure. Primary among these was the development of a sector which is now one of the country's most competitive and internationalized: that of engineering consulting, the subject of Chapter 6. Second are the business opportunities which rose above all from the construction of the US military bases and the services required for their operation. Finally, there are the new connections, perpetuated over time, between local business people and American multinationals, among which we can include the financial entities charged with administering loans and other assistance from the United States; in particular, Chase National Bank and National City Bank.

US direct investment in Spain would accelerate with the liberalization measures initiated, under the guidance of the OECD and the International Monetary Fund (IMF),

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terms of the 1953 agreements, see Portero (1989), Guirao (1998), Jarque (1998), Liedtke (1998) and Viñas (2003).

<sup>27</sup> Clavera, et al. (1978); Fanjul (1981a); and García Delgado (1986).

<sup>28</sup> See Puig and Fernández (2001), pp. 647-648, on the Rivière company; Moreno (2001), p. 211, on Fontaneda; Miranda (2004), pp. 647-648 on the footwear industry; and Puig and Álvaro (2002) and (2004) for a general overview of the technical assistance program.

in 1959 and implemented over the four subsequent years. Until the crisis of the 1970's, which in Spain coincided with the end of the dictatorship, the country had been growing at an unprecedented pace and had completed its economic modernization.<sup>29</sup> The information available –which, as we pointed out in Section 1, is not exhaustive— shows that the United States became at this time the country's principal foreign investor, a position it still held in 1975, the limit of the period researched here (Muñoz, et al., 1978, p. 130). US investments were concentrated in the petroleum, machinery, chemical, food and transport materials industries, as well as in new activities connected with the provision of services to businesses, such as consulting, engineering and advertising (Table 3.2). American companies occupied the top positions in their respective sectors, were counted among the great industrial enterprises of the period and, in some cases, maintained a high degree of market power.<sup>30</sup> A good example of this last point was in the manufacturing of agricultural tractors, an industry of vigorous growth in the 1960's due to the definitive modernization of Spanish agriculture. In 1974, two enterprises controlled 90% of production: the US company John Deere and Spain's own Motor Ibérica, 35% of which was owned by the Canadian firm Massey Ferguson and which had been receiving technological assistance from Ford. The rapid growth of the Spanish market, the country's economic, political and financial stability, and the low cost and high availability of manpower explains why the "American challenge" came to Spain.<sup>31</sup>

What entry strategy characterized the US companies which were present in the Spanish market? What kind of subsidiaries did they establish? To answer these questions, we have reconstructed the trajectories during the period of our study of those companies which, according to the US Embassy, had investments in Spain in 1943 and 1951.<sup>32</sup> This information has been combined with that provided by the Ministry of Industry on the presence of foreign capital in the great Spanish industrial concerns of the 1970's (Ministry of Industry, 1972) and with the data of James Vaupel and Joan P. Curham on the external activities of the 187 largest US companies during

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<sup>29</sup> The GDP rose in real terms by more than 7% annually from 1959 to 1975, a figure much higher than that for other Western countries. See Prados (2003) and Maddison (2002).

<sup>30</sup> Appendices 2.3 and 3.3; and Table 3.2; Velarde (1970); Ministry of Industry (1972); Gallego (1975) and Muñoz, et al. (1978).

<sup>31</sup> According to the conclusions of surveys done by Robinson and Barber (1972) and EAE (1971). The term "American challenge" was popularized by the French journalist and politician Jean Jacques Servan-Schrieber, who, in a book of that title published in 1967, warned of Europe's growing economic and technological dependence on American multinationals.

<sup>32</sup> This data, as well as information on the great Spanish industrial enterprises with foreign participation, is collected in Appendices 3.4, 3.5 and 3.7.

the first six decades of the 20th century, compiled in 1968 for a project directed by Raymond Vernon on the historic evolution of US direct investment abroad, the first such work on the subject (Vaupel and Curham, 1969).

According to this information, until the Spanish Civil War, the habitual mode of entry was the greenfield investment, followed by joint ventures with a minority share of national participation (Table 3.3). These facts are not surprising, given that in many cases there were no local companies dealing in the same social object that could be acquired, as happened with the first multinationals to enter other countries (Jones, 2005, pp. 148-149). However, to get round the ever-growing nationalism which impregnated the first third of the 20th century, companies with some type of manufacturing operation in the country tended to form partnerships with local businesses and, even when they possessed all or most of the capital, it was common for them to include influential figures of the day in their governing and representative bodies. Such tactics became still more visible in the 1940's, in consequence of the intensified economic nationalism practised in the early years of the dictatorship. Indeed, in most of the handful of companies created with US participation between 1936 and 1951, American capital counted for a minority percentage of total social capital. Even so, with only a few notable exceptions –such as the nationalization of CTNE and the departure of Ford from the country—, most of the multinationals created before the outbreak of the Civil War did not have great problems in retaining control of their Spanish subsidiaries.

**Table 3.3**

ENTRY MODE FOR US ENTERPRISES IN SPAIN, 1943 y 1951

	1943	1951
<b>Number of US enterprises</b>	68	63
<b>Number of Spanish enterprises</b>	85	70
	Of these, in liquidation	-
<b>Date of foundation</b>		
	Prior to 1936	52
	1936-1943	4
	1944-1951	3
	Unknown	11
<b>Entry mode<sup>1</sup></b>		
	Subsidiary belonging wholly to mother company	40 (32)
	Joint venture (majority of US capital)	12 (9)
	Joint venture (parity basis)	3 (2)
	Joint venture (minority of US capital)	14 (9)
	Unknown	1 (0)

Nota: <sup>1</sup> Note: In brackets, the figure for companies founded prior to 1936, not counting cases for which the foundation date is unknown.

Sources: Appendices 3.5 and 3.6.

Partnerships with Spanish companies and professionals also became more and more frequent as an entry mode during the 1950's and 1960's. Of the largest American multinationals in the mid-1960's, most of those with operations in Spain had opted for fully-owned subsidiaries until 1957 (Vaupel and Curham, 1969, pp. 384-385). After that, and unlike the rest of Europe, this strategy was combined with joint ventures in which the US enterprise was majority shareholder, to the point where, ten years later, each of these entry modes represented about 40% of the total. Greenfield investments, therefore, had declined in importance, and were even in the minority as an entry mode for large industrial enterprises. In 1971, the earliest date for which we have this information (Table 3.4), the principal form of entry was the joint venture with a minority of foreign participation in the total social capital. This strategy seems to have been even more common in the preceding decade. Although we still do not have exhaustive data on this, there were many cases (close to 30%) in which American companies had entered through Spanish partners from which they would over time acquire all of the capital, or at least a higher percentage than they started with.<sup>33</sup> On the other hand, US subsidiaries created prior to 1951, and operating in the Spanish market with primarily foreign capital, did not find it difficult to maintain their status, with the exception of film production companies, which suffered greatly from Franco-era protectionism in this sector (León, 2008).

**Table 3.4**  
ENTRY MODE OF US ENTERPRISES LISTED AMONG THE 300 LEADING SPANISH INDUSTRIAL ENTERPRISES IN 1971

	<b>Number of enterprises</b>	<b>Percentage of the total</b>
Subsidiary belonging wholly to the mother company	<b>7</b>	<b>12.50</b>
Joint venture (majority of US capital)	<b>15</b>	<b>26.79</b>
Joint venture (parity basis)	<b>10</b>	<b>17.86</b>
Joint venture (minority of US capital))	<b>24</b>	<b>42.88</b>
Total:	<b>56</b>	

Note: When dealing with companies for which this information is available, we have considered the mode of entry into the Spanish market and not the percentage of US capital in 1971.

Source: Appendix 3.8.

<sup>33</sup> This data is taken from reports presented to the Ministry of Trade for the authorization of foreign investments, as was required by legislation. In the first section we have already explained how this legislation varied and the limitations of such reports as a research source for studying foreign direct investment.

As for the type of subsidiary created, according to the data available for 1943, around 60% of Spanish industrial enterprises which had US participation and had been established prior to 1936 were involved in some type of manufacturing, assembly or conversion activity; that is to say, they were not mere commercial outlets. Chemical and electrical materials were the most representative areas for this. We do not, however, know the exact nature of the activities carried out. What is more, this vision changes if we consider sectors such as the cinema or petroleum industries. Indeed, the study by Vaupel and Curham points out the commercial nature of their subjects' Spanish subsidiaries until 1945 (Vaupel and Curham, 1969, pp. 13-15). This would diminish later, however, to the point that in 1967 the majority of large US multinationals had subsidiaries involved in some type of manufacturing –83 cases, as opposed to 22 companies with only commercial subsidiaries.

Local partners thus seem to have played a central role in both the entry and continuity of foreign firms, whether as shareholders, advisors or general managers who the company with a national image. Who were these partners? Without intending to give an exhaustive account, as there was no lack of individual initiatives, we can distinguish four large categories. First, there was the Spanish banking sector and the business groups that represented the country's largest enterprises. Among the longest standing of these, and the most closely linked to foreign investment in general, was the Urquijo Group, which was chosen by the Ford Foundation as its interlocutor in Spain and was present at the Franco regime's first negotiations to obtain credit from the United States.<sup>34</sup> Together with these groups, we find lawyers and private individuals who, in the years of greatest opposition to foreign investment (the 1940's), would serve on administrative boards or in management positions so that the multinationals could maintain control of their companies. In such positions we find representatives of the large groups mentioned earlier, but also some relatively unknown figures, like the attorney Luis Riera y Soler, advisor in the 1920's to the American Chamber of Commerce in Spain (Puig and García Ruiz, 2009, p. 391). Thirdly, there were, in the terminology of the US Embassy in 1961, *investment advisors*; i.e. lawyers specialized in legislation on the use of foreign capital in Spain. The best-known example is undoubtedly that of the Garrigues firm, tremendously popular with American investors in the 1960's and promoter of many of the initiatives that sprang up in relation to the technical assistance program (Puig and Álvaro, 2004, pp. 410-416). Finally, to the

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<sup>34</sup> On Urquijo Bank and its industrial and cultural activities, see Puig and Torres (2008).

previous categories may be added various business figures of the time, who sought in the foreign investors the financial and technological support they needed to carry out new projects.

Our research into the impact of US aid on the Spanish enterprise, the role of Spanish partners in the entry of US multinationals, and the fact that as the century progressed fewer and fewer commercial subsidiaries were established –and, in contrast, more and more manufacturing operations— lead us to surmise that, without overlooking the influence of the industrial framework on such behaviour, an environment was created that nourished a collaboration between everyone involved and, especially, the transfer of technology between US mother companies and their Spanish subsidiaries. The case studies analysed in the following chapters will allow us to cast still more light on this subject.

#### **4. The first great US investment in Spain: ITT and the Compañía Telefónica Nacional de España (1924-1973)**

There is no doubt that the invention of the telephone, in the 1870's, revolutionized the world of communications. This revolution, however, would be slow in coming, at first limited to only a handful of countries in North America and Europe, which themselves did not have proper domestic networks until well into the 20th century.<sup>35</sup> The heavy initial investment required favoured the domination of the industry by a single company, either private –as in the case of the United States or Spain— or, as was usual in Europe, run by the State itself, with an eye to the strategic character of this service in political and developmental terms. The resulting providers would then battle for the rest of the world's networks, which would later be inter-connected, by agreements signed between them, to provide services world-wide. The preservation of this business, specifically that of the national monopolies, demanded control over technical change. Consequently, the great European and North American providers would either create their own subsidiaries for the manufacture of materials and equipment, or establish exclusive, long-term relationships with existing firms. The

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<sup>35</sup> On the formation of the sector, see Schneider (1991), OECD (1991), Foreman and Peck (1991), Andersson and Skog (1997), Bertho and Lavenir (1998), Magnusson and Ottoson (2000), Fransman (2003), Huunderman (2003), Burns (2004), Milward (2005) and Calvo (2006a).

telephone sector's industrial branch would eventually form itself into an oligopoly headed by US and European companies (Table 4.1).

**Table 4.1**  
TYPE OF CONCESSION AND LEADING EQUIPMENT PROVIDERS FOR  
SEVERAL COUNTRIES IN THE INTER-WAR PERIOD

<b>Country</b>	<b>Type of concession</b>	<b>Leading manufacturers</b>
Germany	Public monopoly	Siemens, ISE
Austria-Hungary	Public monopoly	Siemens, Ericsson, WE
Spain	Private monopoly (to CTNE)	ISE
United States	Private monopoly (to AT&T)	Western Electric
France <sup>1</sup>	Public monopoly	Ericsson, ISE, SAT
Italy <sup>2</sup>	Competitive	Various enterprises
Norway	Public monopoly	Ericsson
United Kingdom	Public monopoly	Ericsson, WE, GEC
Russia	Public monopoly	Ericsson, Siemens, WE
Sweden	Public monopoly	Ericsson

Notes:

<sup>1</sup> In France, ISE was the undisputed leader in commutation equipment –after surpassing Ericsson in the 1920's—, while the French company SAT dominated in transmission materials.

<sup>2</sup> The five existing grantees merged in the 1950's to form the *Società Italiana per l'Esercizio Telefonico*, a subsidiary, through the *Società Finanziaria Telefonico*, of IRI (Foreman-Peck, 1991, p. 10).

Sources: Bertho and Lavenir (1988), Galambos (1988), Foreman and Peck (1991) and Fransman (2003).

With an extensive Pan-American network that connected the main cities of Latin America with each other and with the United States, Europe and Asia, a monopoly on services in Spain and other European countries, ownership of the former international branch of one of the world's largest equipment manufacturers –Western Electric, renamed International Standard Electric (ISE)— and manufacturing subsidiaries all over the world, as well as fixed agreements with other manufacturers, International Telephone and Telegraph (ITT) rose in the inter-war period to become world leader in the sector. In 1929, it was the leading US company in terms of its foreign investments, with interests that, besides telephone, included telegraph, underwater cable and radio services (Wilkins, 1974, p. 30; Tetsuo, 1991, p. 523). Of these, the jewel in the company's crown was the Compañía Telefónica Nacional de España (CTNE), granted a private monopoly in 1924 as Spain's telecommunications provider.

When ITT created this company and obtained its monopoly, it was still largely unknown, with only four years of experience in Puerto Rico and Cuba. Nor did it have its own technology, as ISE would not be founded until a year later. CTNE and ISE were, in fact, the cornerstones of the company's later expansion. It possessed,

however, two other weapons that enabled it to outstrip its rivals in its bid for the monopoly: the financial means needed to transform the Spanish telecommunications industry –thanks to its ties with US banks, as well as a presence in the New York Stock Exchange–, and Spanish partners who provided it with both market information and government contacts. Among such partners were engineers and executives of the Spanish telephone sector –working in subsidiaries of the leading equipment and materials manufacturers, or for providers of the main urban telephone networks—, politicians of various leanings and the influential financial groups of the period, most notably the Urquijo Group.<sup>36</sup> Urquijo not only had a presence on CTNE's Board of Administrators (as minority shareholders), but would occupy the posts of president and vice-president in the following decades, with the aim of giving a national character to the company. Members of the group held similar posts at ISE's Spanish subsidiary, which ITT had committed itself to building in order to obtain the monopoly.

The alliances formed with these groups, together with the intervention of US diplomacy, would be key factors in the company's hectic later development. As early as the 1930's, US government intervention proved decisive in preventing the seizure of the monopoly by the new Republican government, which, although not unanimously, denounced as illegal the contract signed by the dictatorial government that preceded it.<sup>37</sup> Shortly afterwards, during the Spanish Civil War (1936-1939), the management of the company was divided in order to retain control on both fronts. While the American managers, together with the government's delegation (whose presence on the Board was required by law) sided with the Republicans, the company's Spanish associates did the same in the insurgent territory. Such a strategy, however, made it difficult for the Americans to return once the conflict was over. Once again, US diplomacy was necessary and, through insistence and a loan from the Export Import Bank (for the purchase of cotton), ITT managed to regain control of its subsidiary. The Americans, in the meantime, were kept constantly informed of what was going on in CNTNE's management by their Spanish partners, who also tried to limit the powers of the

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<sup>36</sup> A detailed description of these Spanish groups is given in Appendix 4.4. The connection of ITT to Spain's "financial bourgeoisie" is well-known; for an academic view of this, see Carballo (1975) and (1979), Pérez Yuste (2004) and Calvo (2006b). It should be remembered, however, that previous studies do not cover all of the period analysed here, nor do they examine systematically and from a long-term perspective the relationships of multinationals with their Spanish partners and directors, or the impact of this on company management.

<sup>37</sup> Little (1979) was the first to address this topic for the period in question, but using only American sources (which in the present study have been complemented with Spanish sources).

government on their Board, as well as of any newly hired directors who were sympathetic to it.

Neither the American diplomats nor the Spanish business groups were able to solve the problems which from then on pitted the company against the State, among them the governmental approval of the company's accounts that was required during the war—a fact which damaged the multinational's standing on the New York Stock Exchange, at a time already complicated by the destruction and company seizures of WWII—, along with payments for services rendered to the insurgents throughout the conflict, and the rate hike considered necessary to balance the company's finances. Behind all of this was the desire of the new government to nationalize the "telephone Gibraltar", exploiting the fact that the contract signed between CTNE and the State twenty years earlier was set to expire in 1944 and that this contract stipulated the conditions under which the network could be taken over by the government on its expiration. Nationalization finally occurred in 1945, after arduous negotiations in which the intercession of the US government was once again vital to ensuring that the rights of ITT were respected.

What impact did ITT have on the Spanish telephone sector, and especially on CTNE? The creation of the monopoly and its immediate concession to the Spanish company inaugurated an era of great expansion in service.<sup>38</sup> In only one year, the number of telephones in operation practically doubled, a growth that was also accompanied by great advances in productivity. This expansion combined the widening of service territories, through the installation of manual stations in the smaller villages, with the progressive implantation of automated centres in larger ones. As early as 1928, functional lines connected by automated centres represented more than 50% of the total, and the commutation and transmission systems developed in those years were among the most advanced of their time. (Carrasco, 2001; Pérez and Salazar, 2003).

While telephone services were being modernized, ITT was implanting its own corporate culture at CNTE. This took form, first of all, in a hierarchical management structure firmly controlled by its president, Sosthenes Behn, who, when out of the country, received reports from his trusted associates in both the multinational and in CNTE. This structure was supported by the progressive establishment of protocols and

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<sup>38</sup> Appendices 4.1, 4.2 and 4.3 contain data on the evolution of various areas of telephone service, net investments in telephone facilities, CNTE's profits and staff during the years 1924 to 1973.

operational routines at all levels of the company: the bureaucratization typical of modern business enterprise (Deloraine, 1974; Sampson, 1973; Sobel, 2000; Bartlett and Ghoshal, 2002 [1989]). Secondly, ITT pioneered the development of one department in particular –Sales—, among whose responsibilities was the execution of marketing studies and advertising campaigns, still quite unusual for a Spanish company at that time. The multinational also introduced for the first time techniques of personnel management that were already firmly established in similar companies in other countries, especially the United States. These methods were related to the *rationalization of work* concept but were combined with that of the "*telephone family*" –a human relations approach by which the loyalty of employees is gained by improving their working conditions and making them feel that they are part of a collective success. To all of this was added a notable effort in training, drawing on ITT's ranks of engineers, accountants and management professionals. The departments corresponding to the company's various functions were in fact directed by North American executives, who were made responsible for training the same Spanish sub-directors that a few years later would be replacing them. All formal personnel training was channelled through the Escuela de Telefonía (Telephone School, created in 1925) and the company's own training department (1926).

The contract signed in 1924 between CNTE and the State already stipulated that the majority of staff (at least 80%) had to be comprised of Spaniards, a requirement that was subsequently applied to ISE's Spanish subsidiary as well (Cabezas, 1974, p. 49). The information available to us suggests that this commitment was quickly fulfilled, although US personnel continued to hold some of the top posts, especially in accounting and engineering.<sup>39</sup> From 1924 to 1928, a total of 250 American employees (more than 7,600 in 1929) were distributed between management positions and various posts in engineering and training. Four years later, apart from the five ITT representatives on the Board of Administration, there were only 13 foreigners on the staff.

The structure, routines and labour policy implemented in the early years of CNTE were maintained over the following decades –even after the company was nationalized— by virtue of the advisory and supply agreements signed at that time between the Spanish company and ITT. The few innovations introduced in company

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<sup>39</sup>Memorandum prepared by ITT, 26/02/40, MAE, R1671/6; AT, ACE 406 (28/09/32) and Appendices 4.3 and 4.4.

structure and work plans after the late 1940's relied on the aid of American advisors. To this effect, the Spanish engineers and managers charged with their implementation, and whose long professional careers had been developed under the wing of ITT, would often visit the multinational's facilities in other countries to guarantee that projects were done properly and to discuss various aspects of the company's development.

The weight of ITT in CTNE's management began to diminish in the late 1950's, at the same time that the inevitable generational renewal of the company's managers was occurring, along with an increase in government presence on its Board. The definitive turning point was the appointment, in 1965, of Antonio Barrera de Irmo as president. This technocrat, who had received the appointment of Advisor by the Treasury only a few months earlier, would over the eight years of his presidency transform the organizational and technological foundations upon which CTNE had been sustained up to then. The results were greatly successful. In illustration, the number of lines installed more than doubled, with notable advances in both productivity and call quality. The modernization of the telephone system that had begun in the previous decade was thus given a great boost forward, after the setbacks of the Civil War and its long aftermath.

Barrera's policies hinged on two goals: achieving technological autonomy for CTNE with respect to ITT; and implementing an internal structure that could adapt to the growth of services and of the company itself. The first was carried out through agreements of various kinds with some of the period's leading manufacturers, complementing the supply coming from Standard. The second depended on decision-making aimed at the creation of highly autonomous territorial divisions –coordinated by a central management commission– and on the professionalization of management, following explicitly in the wake of the great American enterprises. Training was also broadened within the company –with a Higher Education Centre created to increase the number of titled workers, as well as a Technical School (founded in 1924)–, as were the activities of marketing and public relations. A Department of Information Services and Social Relations was established to deal with the latter. Barrera was ever-conscious, as he made public on various occasions, of the virtues he saw in large US enterprises. For this reason, CTNE, although it had not been American for some time, continued to be –perhaps more than ever– "Americanized", and the groups that constituted ITT's natural business partners were kept on the Board at all times. ITT, for its part, proved to be slow in reacting to the digital age. The eventual sale, in 1989, of

its telephone operations to CGE (Alcatel, later Alcatel-Lucent) would put an end to one of the great stars of 20th-century telecommunications.

## **5. The US oligopoly in the manufacture of agricultural machinery. International Harvester and John Deere in Spain (1926-1980)**

The mechanization of agriculture is a recent phenomenon in a good many Western economies. The tractor, the maximum expression of this mechanization, began to be popularized in North America and some areas of Central and Northern Europe in the 1920's; its generalized use, however, would come after the Second World War (Grigg, 1992; Olmstead and Rhode, 2001; Federico, 2005). Fundamental to this diffusion was the greater versatility and lower price of the first tractors to be mass-produced (by Ford and International Harvester), along with the fact that these manufacturers also had extensive distribution networks through which farmers could be advised on the purchase and use of such machines. In addition, they offered an efficient after-sales service which guaranteed rapid repair work, as well as a reputation for quality products and technical support, and credit lines for end-users and dealers alike.<sup>40</sup> As these first manufacturers were continually consolidating, the entry of rival manufacturers was costly; and so, with the expansion of the sector, an oligopoly was formed in the North American market, which, timidly in the inter-war period but quite visibly after WWII, would spread to the main markets of Europe as well (Christensen, 2009, pp. 27-29).

The saturation of traditional markets and the growing standardization of business models would lead, in the 1960's, to a major, world-wide division in the processes of manufacturing, together with a search for new markets. As a result, the interest in large, developing nations—in particular Mexico, South Africa and Argentina, but also Spain—increased, given the growth potential of these markets for the great agricultural product lines, while so did the protectionist policies which then dominated. It was then that a portion of such manufacturing activities was de-localized, although not before negotiating product protection from the governments concerned in exchange for nationalizing production; that is to say, so that this took place using components made, in large part, domestically. Competition among the industry's major players thus

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<sup>40</sup> Schwartzman (1970), pp. 175-178; Kurdle (1975), Chapters 4 and 5; Carstensen (1984), pp. 107-108; and Wendel (1994), pp. 26-39.

increased and the oligopoly became international. Except for the production of farming tools and livestock-related machinery, the leaders in this activity were American. From mid-century on, two such companies would battle for the top position: International Harvester and John Deere.

International Harvester was among the pioneering companies of the US's international ventures at the end of the 19th century. The process it followed was a gradual one; from exporting through local representatives it moved to the creation of commercial outlets, and later made the leap to manufacturing and assembly (Wilkins, 1970, pp. 46-47). At the beginning of the 20th century, this multinational from Chicago already had a plant in Canada and four factories in Europe, and would expand this in Europe and other continents over subsequent decades (Table 5.1). John Deere, on the other hand, did not decide to emulate abroad its leading position at home until the late date of 1956. After creating commercial and assembly subsidiaries in Latin America, it sprang onto the European market by acquiring Heinrich Lanz, a German brand which, although it had enjoyed great repute between the wars, had become somewhat obsolete. By the beginning of the 1960's, John Deere had not only brought the German firm into line with its own corporate culture, but had built new production plants in France and Germany, dividing its operations between them so as to take advantage of the economies of scale facilitated by the Common Market (Table 5.2). The company's new strategy soon bore fruit, and in 1963 it surpassed International Harvester as the world's leading manufacturer of farm machinery.<sup>41</sup> It was at this time that both companies found themselves competing for market control in Spain.

The interest of these two companies for Spain, although there had been some earlier signs of this in the case of International Harvester, emerged within the context of the sector's globalization in the 1960's, a period that coincided with the definitive modernization of Spanish agriculture and the consolidation of the nation's industrial tractor industry.<sup>42</sup> This last was the result of State intervention, which in effect reserved the market for only a small number of enterprises; these had to be Spanish but their development, which was not without its difficulties, depended on foreign technical assistance. Protection and government loans for the purchase of domestic units

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<sup>41</sup> [http://www.deere.com/en\\_US/compinfo/student/timeline\\_1960.html](http://www.deere.com/en_US/compinfo/student/timeline_1960.html) (date consulted - 24/11/08).

<sup>42</sup> Among the numerous studies done on this, see Clar (2009); Barciela, et al. (2005), pp. 97-112; Barciela, et al. (2001), pp. 97-112 and 206-218; Martínez Ruiz (2000), pp. 159-160; Barciela (1997) and Buesa (1983). A reconstruction of the agricultural tractor market can be found in Appendices 5.1, 5.2 and 5.3.

brought nationally manufactured tractors to the top of the market in 1963. Specifically, these were represented by three brands: Motor Ibérica, assisted by Ford and the undisputed leader in the period analysed here; and, alternating in second and third place, Barreiros and John Deere Ibérica, associated with Germany's Rheinstall Hanomag and the American John Deere, respectively (Maritínez Ruiz, 2000; Álvaro, 2008).

**Table 5.1**  
INTERNATIONAL HARVESTER'S NETWORK OUTSIDE NORTH AMERICA IN 1965

Country	Subsidiaries' date of foundation	Main activity <sup>*</sup>
AFRICA		
South Africa	1954	Truck assembly. Tractor manufacturing (1964)
Tunisia	1963	Tractor assembly
LATIN AMERICA		
Argentina	1963	Manufacturing of farm implements
Brazil	1953	Manufacturing of truck parts. Truck assembly (1960s)
Mexico	1949	Manufacturing of farm implements and truck assembly. Tractor manufacturing (from 1964)
Venezuela <sup>**</sup>	1963	Truck assembly
EUROPE		
Germany	Neuss (1908)	Manufacturing of tractors and (from 1953) diesel engines
	Heidelberg (1959)	Harvester manufacturing and truck assembly
Belgium	1954	Truck manufacturing (for the Netherlands and Scandinavia)
France	Croix (1909)	Harvester manufacturing
	Dizier (1950)	Tractor manufacturing
	Montataire (1931)	Manufacturing of farm implements
United Kingdom	Doncaster (1938/1949) <sup>***</sup>	Manufacturing of tractors, harvesters and (from 1951) diesel engines
	Bradford (1954)	Tractor manufacturing
	Carr Hill Works (1965)	Assembly of tractors and trucks
Sweden	1905	Iron foundry and manufacturing of tractors and farm implements
Turkey	1965 <sup>**</sup>	Truck manufacturing
PACIFIC AREA		
Australia	Geelong (1937)	Assembly of tractors and farm implements
	Dandenong (1952)	Truck assembly
Philippines	1960	Assembly of tractors and trucks

Notes: <sup>\*</sup> In brackets, the year in which a new activity was initiated at the plant; <sup>\*\*</sup> Joint ventures with local firms; <sup>\*\*\*</sup> Although founded in 1938, it was requisitioned by the British government a few months later and held until 1949.

Sources: IH, *Annual Reports* (1952-1980); Wilkins (1970), pp. 6, 187 and 190; and Carstensen, Chapter 7.

International Harvester had been exporting to Spain for several decades when it decided to establish a sales outlet in the country. On the advice of various European directors and legal counsel in Spain –connected with US international banking

operations and the American Chamber of Commerce in Spain (one of these was Luis Riera y Soler, the Spanish partner mentioned in Section 3)—, the company decided that the subsidiary would be structured and would act as merely another independent agent and so avoid possible protectionist action against it. The new company in fact complemented, rather than substituted, the existing distribution network, and was treated much the same as any other Spanish importer. Limited demand, due to an agriculture which was still largely traditional, along with the instability caused by the Civil War and the penury that followed, explain the company's poor showing in those years, as well as its lack of interest in the first State initiatives, in 1940 and 1942, to boost the domestic industry.

**Table 5.2**

INTERNATIONAL HARVESTER'S NETWORK OUTSIDE NORTH AMERICA IN 1968

<b>Country</b>	<b>Subsidiaries' date of foundation</b>	<b>Main activity</b>
<b>AFRICA</b>		
South Africa	Nigel (1962)	Manufacturing of farm implements and assembly of tractors
<b>LATIN AMERICA</b>		
Argentina	Rosario (1961)	Manufacturing of farm implements and tractors
Mexico	Monterrey (1959)	Manufacturing of farm implements and assembly of tractors. Tractor manufacturing (from 1963)
<b>EUROPE</b>		
Germany	Mannheim (1956)	Tractor manufacturing
	Zweibrücken (1962)	Manufacturing of harvesters and farm implements
Spain	Getafe (1956)	Tractor manufacturing
France	Saran (1962)	Manufacturing of engines
	Senonches (1963-68)	Manufacturing of farm implements

Notes: John Deere had sales branches in Belgium, the United Kingdom, France, Germany, Italy, Spain, Sweden and South Africa. It was also associated with France's Thiébaud Bourguignonne for the distribution of fertilizers and forage harvesters, and with the Argentina's Cindelmet, for the distribution of metal parts.

Sources: JD, *Annual Report* (1968); Broehl (1984); and the company's web page (<http://www.deere.com>).

Over the following years, however, the progressive recovery of the Spanish economy and the changes that were taking place in the sector, both inside and outside Spain, would rekindle the company's enthusiasm for the Iberian market. Thus, in 1959, through a British subsidiary, it granted a license entitling a public enterprise in the country to assemble one of its products. Four years later, encouraged by a wave of growth in domestic tractor production, by the protagonism of its rivals in this type of

production and by expectations of increased protection for this activity, it decided to begin manufacturing locally. To do this, like other foreign brands had, it decided to form a partnership with a Spanish group, specifically with one of its longest-standing distributors. These plans, however, fell short of their goal. The obtention of the governmental authorization needed to manufacture in the country, and the fear of being definitively barred from an expanding market in which its competitors were gaining territory, made it accept entry conditions it had not initially wanted to consider: absorbing the public enterprise it had licensed (SACA) in order to create a new company in which the capital was divided between the State and the Spanish group it had originally planned to manufacture with (even though a confidential agreement signed with this group guaranteed that International Harvester would maintain control of the new company).

Nor was reaching this agreement with the government a guarantee of success, but rather quite the contrary. The State's non-compliance with the terms and dates by which the absorbed factory had to be signed over and the new company established, and with the guarantees made that no other manufacturers would be authorized, would lead International Harvester to liquidate the new company, despite the opposition to this by some of those affected. The company's departure was again negotiated with the State—which received a monetary compensation that has never been made public—and was fraught with miscalculations on the part of the multinational's directors and their Spanish partners regarding the new company's profitability and the fact that the product line projected for Spain was already being produced by IH's French and German plants (with a division of tasks to exploit economies of scale). The company's Spanish sales subsidiary continued to operate throughout these years, with market shares that never rose above 4%, until it was finally absorbed by one of the large farm machinery distributors in the 1970's.

The case of John Deere in Spain was radically different from International Harvester's. The firm from Moline, Illinois arrived in the Spanish market through the Heinrich Lanz company, a minority shareholder of one of the first companies authorized to manufacture tractors in Spain, to which it provided technical assistance. With the firm support of one of its Spanish shareholders with a certain amount of experience in farm machinery distribution (the Medem family), it would over the course of the 1960's take control of the venture, finally acquiring the total capital in 1970. The subsidiary, however, acted as a sort of franchise. Its management, headed by

Spaniards, had from the start a great amount of autonomy in the company's daily operations, although obviously within the general guidelines set forth by the mother company.

As its participation in the Spanish company increased, John Deere gradually adapted it to its own corporate culture –as it had done with its other European subsidiaries—, as well as to the government's requirement that the majority of tractor production be domestic (close to 100%). The American executives were convinced that Spain would follow the same pattern that the US economy had decades earlier; and so, to achieve the same type of success, one had only to apply the same methods. All that was necessary, they felt, was to "Americanize" the Spanish enterprise –from factory organization to sales structure. To do this, specialized training was provided to top and middle managers in Spain, who were then charged with implementing and coordinating the new methodology. The knowledge assumed in this way would in fact pass beyond the confines of the factory itself, as some of these managers also worked as instructors at one of the country's first business schools.

To what kind of knowledge and changes are we referring? Let us begin with the transformations that took place at the factory level. In accordance with procedures derived from the *scientific management* –a concept that was not new to Spain at the time, and one which was vitally relevant at that time—, the production line was redesigned, techniques of time control were introduced, job categories were redefined and extended, and a new incentive-based remuneration system was created. Added to these innovations were a strict set of safety measures –for which the position of Industrial Safety Manager was created— and an equally strict quality control system, for components acquired from other manufacturers and later for those made at the company's own plant (Nieto, 2003, pp. 57-58). None of these practices had existed prior to this. The process of transformation soon became the responsibility of the newly-created Department of Industrial Organization, comprised of Spanish engineers.

The rise of John Deere can also be traced to a radical transformation of its sales system. While its Spanish partners contributed their experience of the market, the multinational brought both the knowledge needed to revolutionize sales and distribution methods, and the financial resources to introduce installment-purchase plans. The biggest change was the elimination of the company's own branches in favour of a network of independent dealers who were in turn responsible for after-sales service, a formula that became widespread across the entire sector in this period. All of these

dealers –and all of the group's dealers world-wide— were provided, not only with technical documentation, but with precise instructions on financial policy, stock control, warehouse and sales outlet organization, sales and advertising policies, and personnel management, among other practices (John Deere Ibérica, 1966; Magee, 2005).

The type of Americanization exemplified by John Deere's Spanish subsidiary had also been projected by International Harvester for its own facilities in the country. We will never know what the result of this would have been. It is true, however, that in the early 1970's the company's Spanish subsidiary received specific training from the multinational in business management, advertising and marketing. Of course, neither John Deere's nor International Harvester's plans for innovation were actually developed on the premises of the two companies' subsidiaries. Their engineering departments in Spain were, rather, charged with adapting existing models to the specific needs of the local market and in accordance with the materials available. This did, however, as witnessed in the case of John Deere, serve as a foundation for the development of local capabilities. John Deere Ibérica is today, through the initiative of its own directors and engineers, the most highly specialized in the production of high-tech components of any of the group's companies.

## **6. The United States and the creation of a knowledge-based sector: Spanish engineering consulting (1953-1975)**

Engineering services, also denominated as technical consultancies, have been principal actors in the post-WWII international technology market. Even so, little is known about the origins of this activity. The first studies to address the subject, focused on the workings of the technology market in the chemical industry, traced these origins to the US petroleum industry at the beginning of the 20th century. Such services would spread from there to Europe after the Second World War, always in step with American companies and stimulated by both the expansion of chemical engineering and the development of the petrochemical industry (Landau and Rosenberg, 1992; Arora and Rosenberg, 1998; Arora and Gambardella, 1998; Smith, 1998).

Later studies, however, have demonstrated that US leadership was in reality limited to a specific type of capability and product: *project management* and *turnkey projects* (facilities delivered ready to operate) (van Rooij and Hamburg, 2002; van Rooij, 2004). In projects like these, the consultancy is responsible for the entire process

of planning and execution, in effect selling its ability to manage a complex, diversified project –for example, sub-contracting companies which best know how to carry out each phase and each process required. Other types of advisory or product-related services –such as those designed for a specific process, or for the supervision of equipment purchases and installation— had already existed in Europe since the mid-20th century. The new American methods, however, would cause a great commotion in post-WWII Europe, and lead to a transformation of the entire sector. The knowledge needed to provide such services came not only from the petroleum and chemical industries, as was initially argued, but also from the construction of the 19th century's great public works (Linder, 1994; Hartley, 2000; Henry, 2002; van Rooij, 2004; Marshall, 2009), and from the interaction of companies and clients and, in some cases, equipment providers (Dienel, 2004; van Rooij, 2004).

The existing literature has dated the birth of Spanish engineering consultancy at the middle of the 20th century, coinciding with the construction of US military bases in the country and the expansion of North American consultancies.<sup>43</sup> The first employers' associations and published registers for this type of enterprise are thought to have appeared around the same time. Nevertheless, it seems logical to assume that, as in the rest of Europe, some type of precedent must have existed in Spain, especially considering that the larger engineering firms had by then been firmly established for decades. Our investigations into how the great public works of the 19th century –e.g. the country's railway system and hydroelectric infrastructure— were achieved, the type of projects that were then being carried out by construction firms, and the acquisition of technology by chemical companies, reveal that engineering consultancy was not unknown to Spain in the first half of the 20th century, but was a service closely connected with public works, with foreign initiatives and with the laboratories and engineering departments of industrial groups (rather than the province of independent service companies).<sup>44</sup>

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<sup>43</sup> Bances (1972), p. 26; *Doblón*, 7 June, 1975; Egurbide (1976), Cos (1990), Ministry of Public Works and Transport (1998), and Tecniberia (2008).

<sup>44</sup> On the construction of the railway, see Tortella (1973); Nadal (1975); Broder (1982); Pascual (1999) and (2000); Castro (2007), pp. 89-91; and Puig and Castro (2009), pp. 4-6. On hydroelectrics and the electro-technical industry, see Bernal (1993) and (1994), Núñez (1994), Chapa (1999) and (2002), Maluquer (2000), Loscertles (2005), Bartolomé (2007) and Gangolells and Magrinyà (2008). On the construction companies, Torres (2009); and, finally, on the chemical industry, Puig (1999) and (2003); Puig and Loscertales (2001); Tortella, Ballester and Díaz (2003), pp. 224-246; and Puig and Castro (2009), pp. 16-18.

The modern technical consultancy, however, made its appearance in Spain in the mid-20th century, and would come into its own in the 1960's. From the earliest data available for the main businesses in this sector –dating from 1975— we can distinguish four great protagonists: business groups, including the existing public holding and the Urquijo Group –as we have seen, one of the traditional partners for US investment in Spain—; construction and electricity companies, which eventually created consultancies of their own; independent engineers operating in the modern sense of technical consultancy; and foreign multinationals.<sup>45</sup> The importance of the last of these was, to say the least, limited, depending the number of companies in which they had participation and the amount of foreign capital invested. However, the importance of foreign technology to Spanish engineering is the most relevant factor contained in this data. In the first place, the signing of technical assistance contracts with foreign, and especially US, companies was a constant among the sector's leading players (Molero, 1979). Secondly, although the information available to us is not exhaustive in this respect, the majority of consultancies offering services similar to North American *project management* in the industrial field were or had at one time been connected to foreign groups, particularly those from the US.

The stamp of American consultancy was already clearly visible on the Spanish technical consultancies of the 1970's. North American knowledge had been disseminated over the previous two decades in two ways: one official, through the technical and military aid provided by the United States to the Franco regime during the Cold War; the other private, through US direct investment and the various strategic alliances of Spanish and American engineers. Regarding the first of these routes, both the productivity missions undertaken –which, we will remember, concentrated first on business management and then on construction and urban planning— and the construction of military bases served to familiarize their participants with the modern working methods of US engineering firms, in both project management and internal company organization.

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<sup>45</sup> This listing of the leading Spanish engineering companies in 1975 was compiled by professionals in the sector and published in the journal *Doblón* (7 June, 1975). The data has here been completely revised and completed from other sources, among them a 1979 employers' association report on the type of services offered by its members, as well as annual reports for firms with higher turnovers, reports presented to the government for the obtention of permits (in the case of foreigners) and company directories. All of this is collected in Appendix 6.3.

The construction of the military bases and all of the associated infrastructure was a project of great technical and administrative scope.<sup>46</sup> Two contractors, each comprised of several different firms, were given the duties, respectively, of design and of management and supervision, with execution –except for very specific projects— subcontracted to Spanish architects, engineers and builders, and materials and machinery for the most part imported. Although the work was initially tendered by public auction, before long the bigger projects –representing more than 40% of the total— were assigned directly to a small number of local companies or tendered at auctions in which only they could participate. This was a consequence of the difficulties the contractors encountered in finding Spanish companies capable of working "the American way". Indeed, although they did not find the jobs they were required to do strange, the Spanish construction companies were hard-pressed to meet the many conditions that the American contractors demanded at auction, in the form of technical specifications, the exhaustive documentation that had to be submitted (and the detailed preliminary planning required), deadlines for presenting applications and completing projects, the funds required as guarantees, or the freezing of budgets once these were approved. It is therefore not surprising that the smaller companies eventually stopped bidding for these contracts and that some Spanish companies formed partnerships with American companies who in turn provided them with the needed skills and technical means. Even so, the contractors were obliged to work closely with the subcontracted companies to familiarize them with the machinery and with US methodology. After expending such efforts, the American contractors then preferred to continue working with companies they had already trained and which had proven to be competitive, and did this by means of restricted tenders or direct adjudication. This decision reveals two facts: that a collaboration and cooperation existed between the foreign contractors and the domestic construction companies; and that some Spanish companies were able to learn rapidly indeed from their American employers.

What happened, then, when the route of knowledge transfer was private; that is, through direct investment and strategic alliances? As in other sectors, the great

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<sup>46</sup> The reconstruction of the design process and building of the military bases is based primarily on the Spanish periodical *Gaceta de la producción*. As this publication itself admitted, it is very possible that not all of the contracts that existed are included, but we have been able to verify from secondary sources that the sample is at least significant. In Appendix 6.3, an exhaustive account of all the companies involved is given, as well as the type of service performed, characteristics of tender, amount of contract and, when possible, the amount of the highest bid tendered in each case (data which also reveals the scant experience of Spanish bidders). It is surprising how little on the subject we have been able to gather from US sources.

international engineering firms made their entry into the Spanish market primarily through local partners. Of the US companies, only one, Foster Wheeler (leader in the petrochemical sector) established a greenfield subsidiary, after operating in the company for several years through its French subsidiary. The more usual method, on the other hand, was to create mixed companies or establish temporary strategic alliances (without participating in the other company's capital) in order to carry out specific projects or pioneer changes in local consultancies. In the case of joint ventures, the data indicates that it was apparently the Spaniards who went knocking on the doors of their future foreign partners. By the 1970's, after a few years of such collaboration, the Spaniards had generally assumed full control of these ventures.

With the aim of understanding how knowledge was transferred from foreign to local companies, we have examined case studies for the following three situations: greenfield investments –Foster Wheeler and its subsidiary, Foster Wheeler Iberia—; joint ventures –Lummus and Lummus Española (today Técnicas Reunidas, one of the world's largest engineering firms)—; and temporary strategic agreements –Kellog and Spain's Sener (for petrochemical projects and the internal restructuring of the latter), and Westinghouse and Tecnatom, in the field of nuclear energy. We have been able to confirm that the American multinationals provided technical assistance to their subsidiaries and local partners, while also training their staffs, entirely Spanish in all of the cases analysed. In addition, the United States supplied the basic engineering needed for the development of these companies, as previous studies have maintained. Knowledge imported from America would also extend to the area of project management, as it introduced the concept of the general contractor and the integral management of projects, and to company organization, by promoting codes of conduct and methods that emphasized, among other aspects, preliminary planning, cost control, a rigorous compliance with promised timeframes, and coordination and teamwork among all participating parties. In this sense, Spain was echoing the changes that had occurred, somewhat earlier, in the European chemical sector (van Rooij, 2004) and in French civil construction (Barjot, 2002). Spanish engineering firms did indeed contract foreign technology, something which is now the norm, especially among modern consultancies using integral project management. In this way, they were, in effect, importing knowledge. Moreover, they were able to transform this knowledge into organizational capabilities, particularly project execution capabilities, which have currently situated them among the most important firms in the sector.

## **7. Conclusions**

The progress of Spain has been influenced by a number of factors, among them the financial and technological support of other economies. In the present study we have tried to understand the role which a business enterprise has in this process of knowledge transfer and investment, both as transmitter and receiver. More specifically, we have dealt with knowledge which is difficult to codify and which, according to the research done in recent years in a variety of disciplines, confers competitive advantages to such firms and, by extension, to the nations or regions to which they belong. This has led us to focus on foreign direct investment and the multinational enterprise as the transmitter of such advantages from one country to another. For our setting, we have chosen the United States, undisputed world leader for a good part of the 20th century, and Spain, a country with possibilities, though by most indications not among the most advanced, at the end of the 19th.

We opened our study with a promise to respond to three specific questions in this respect: how does a multinational enter the country which receives its investment, how does it interact with the businesses of that country and what impact does it have on the local business structure? Let us now examine what we have learned on these points through a general reconstruction of US direct investment in Spain and the case studies analysed.

### **7.1 How does a multinational enterprise enter?**

Up until the Second World War, the preferred entry mode for US multinationals was through the creation of new companies which they wholly owned, followed by joint ventures with a minority of national capital. However, in those businesses involved in some type of manufacturing or assembly, partnerships with Spanish businesses were the more usual method. Our research shows, moreover, that these type of subsidiaries—which imply a greater commitment to the local market than do mere commercial outlets; i.e. those concerned only with the sale of goods imported from the mother company—were common in various industrial sectors (and not in other sectors, although we do not know the exact nature of their activities). Beginning in the 1950's, the number of multinationals which had only sales outlets fell farther and farther behind those which actually manufactured in the country. Simultaneous to this, partnerships with local firms became more and more frequent as an entry strategy, whether these were joint ventures with a majority of US capital, or entities in which the majority of

shares were in Spanish hands. The former would predominate among the leading multinationals of the 1960's, but the latter was common when the Spanish subsidiary belonged to one of the era's great business groups. It is, however, necessary to clarify some points in relation to this. In the first place, it seems to have been a common strategy to enter the market by means of a local partnership and then to eventually acquire all of the Spanish subsidiary's capital, or at least a greater amount than the investor initially possessed. In the specific case of engineering firms, on the other hand, the exact opposite of this was more common. Secondly, in the more long-standing investments, which from the beginning had taken the form of wholly- or almost wholly-owned subsidiaries, there were no great changes. Lastly, a long-term examination of the Administrative Boards, upper management and representatives of the largest US enterprises in Spain, as well as the case studies we have analysed, has enabled us to observe that on occasions the Spanish partners referred to did not in fact participate in the social capital of the subsidiary companies. In the case of John Deere Ibérica, for example, it was the multinational's local allies, the Medem family, who pushed its initiatives forward, while gradually losing their own share of the subsidiary. Likewise, the influence of Telefónica's Spanish partners was in fact much greater than their minority share of the company's capital would suggest. Working together with ITT, they established a wide network of contacts that reached as far as both the US and Spanish governments. Unlike the ties within business groups which previous studies have pointed out, such networks were more flexible, informal and autonomous than those which united the businesses of particular group, and were not guided by a common management, but by a common medium- and long-term strategic interest; the same type of flexibility and autonomy would be witnessed in other sectors as well. (Puig, 2004)

Local partners, then, seem to have occupied a central role in the entry and continuity of foreign enterprises, either as shareholders, advisors or general managers who provided the company with a national "face". But who were they? Without intending to be exhaustive, as there was no lack of such individual initiatives, we can distinguish four broad categories. First, there were representatives of Spain's banks and the business groups comprised of the country's largest entities. Among the longest-standing of these, and the most closely linked to foreign investment in general, was the Urquijo Group, which had had a presence in many of the initiatives that appeared with the arrival of American economic and technical assistance. Along with these groups, we find lawyers and private individuals who, in the years of most heated

opposition to foreign investment, secured seats on Administrative Boards and management positions that enabled the multinationals to maintain control of their companies. We find here the aforementioned groups as well, but also little-known figures like the lawyer Luis Riera y Soler, advisor in the 1920's to the American Chamber of Commerce in Spain, or legal advisors working in US international banking, as we saw in the example of International Harvester when it founded its first Spanish subsidiary. Thirdly, there were, in the terminology of the US Embassy in 1961, the investment advisors; i.e. lawyers specialising in Spanish legislation on foreign investment. The best-known example is surely the Garrigues firm, which was extremely popular with American investors in the 1960's and the promoter of many of the initiatives that sprang up in relation to the technical assistance program. Finally, to the preceding categories we can add several entrepreneurs of the period who sought in the foreigners the financial and technological support they needed to carry out the projects they had in mind. This is what can be observed, in the various sectors, for the large Spanish industrial concerns of the early 1960's. Of the case studies we have chosen for this study, those of farm machinery manufacturers and engineering firms provide useful examples.

Connections between multinationals and local firms were extended and strengthened through the various initiatives related to US aid to Spain under the agreements of 1953. Puig and Álvaro (2004) have already done a synthesis of these initiatives –such as the creation of business associations, the establishment of business schools and the cultural activities and training programs of the Ford Foundation— and the "pro-American circles" that were established as a result. We have observed that such links had been forged even earlier, during Spain's diplomatic negotiations with the US government and various financial institutions to obtain credit after the Second World War. We have seen this in the dealings of Antonio Garrigues Díaz-Cañabate with Alfred Barth, the representative of Chase National Bank in Spain, and of Foster Wheeler with the Spanish authorities. The construction of US military bases was at the same time a launching pad for the engineering activities of the Urquijo group and its association with the American company Lummus, among others. Although we have not been able to do this here, it would also be interesting in future studies to examine the relationships of Westinghouse and General Electric with the companies that received loans from the Export Import Bank. We know that the latter were required to guarantee the technical and economic viability of their projects in order for these loans to be granted, and that these two American multinationals

supplied the equipment. It would be strange indeed if they had not provided, along with the expected technical assistance, advisory services on dealing with the official bank as well. In both cases, the companies' Spanish partners would have received various types of specialized training.

What explains the choice of entry mode for the US companies? In the case of the first companies to arrive in Spain, it is logical to assume that often –especially in new sectors such as petroleum, chemicals and electrical materials— there were no local companies dealing in the same social object that were open to acquisition or partnership, as characterized the arrival of multinationals in other countries (Jones, 2005, pp. 148-149). In the case of the extractive industries, in particular cork, the acquisition of an existing entity was indeed the option taken, as a local network of companies already existed in this area.

Alliances with local partners depended on a variety of circumstances. The first of these was what they had to offer, as exemplified in the engineering sector. Secondly, it was important that these companies had a greater knowledge of the local market than their foreign partners, as in the cases of ITT, John Deere and International Harvester (in the latter company's frustrated attempt to manufacture in Spain). Finally, it was necessary to deal with the increasing nationalism of the time. This would reach extremes in the 1940's and 1950's, when, among other restrictions, limits were placed on the amount of foreign participation permitted in Spanish companies –although we have found that, in actual practice, this did not affect existing companies not operating in sectors considered by the government to be strategic. However, even in other periods, the effects of this nationalism were still felt. It would thus have been very difficult for ITT to establish its telephone monopoly if it had not had a Spanish company among its partners –even if later it would own most of this company—, or for John Deere, like other companies of the time, to have benefited from the State-backed oligopoly or from the various subsidies and financial help this oligopoly received. Even for engineering firms, priority in the 1960's was given to those projects which, although they had foreign backing, were executed by national companies. To this effect, Foster Wheeler, although it had completely owned its own subsidiary in Spain since its entry into the country, was also well-connected with the government –which it had advised in the latter's dealing with the US-based Export Import Bank— and so had "Hispanicized" its local company. This strategy was also followed by International Harvester when it created its own first subsidiary (the *Compañía Internacional de Maquinaria Agrícola*). Indeed, the true origins of this company would not be made public until forty years after

its foundation; not even in the American Embassy's register of US investments was its existence so much as mentioned.

The singular characteristics of the local market also explain the peculiar character of International Harvester's Spanish subsidiary. The limited scope of the local distribution networks had led the company to establish its own subsidiary, which, rather than acting as a wholesaler (as in the US market), functioned as merely one distributor more. It was not the first time that this had occurred –something similar had in Russia at the beginning of the century (Carstensen, 1984)—, but in Spain's case the subsidiary received exactly the same treatment as all the other distributors, at least until the outbreak of the Civil War. From indirect references, it appears that the same policy was also followed in France and Italy.

There is no doubt that location factors count greatly at the time of choosing an entry mode. What can be said, then, about the type of subsidiary created? Certainly, behind the foundation of many of the local sales outlets of the early 20th century are the protectionist measures then being promoted by the government. We have found this to be true of International Harvester, and it is logical to suppose that it was State intervention that forced the creation of factories in Spain, using Spanish materials and personnel –the training of whom thus contributed to the creation of capabilities and the accumulation of the recipient country's human capital. We have seen that this is what happened with ITT –with the creation of Standard's telephonic equipment and materials plants— and with John Deere – which, for this reason, was not able to exploit the economies of scale derived from the specialisation of its European factories. We do not know what might have happened had such legislation not existed. We can, however, deduce from our case studies that all of this would have been difficult to implement without the active role of local private initiatives, the same private interests with which, in the late 1960's and early 1970's, US intelligence services and the American Embassy itself recommended that US companies form alliances in order to operate successfully in the country.

Finally, as for the entry modes chosen by these multinationals, our research has enabled us to clarify some of the conclusions and theories posed by previous studies, which we synthesize as follows:

- The literature up to now has pointed to the short average lifespan of joint ventures or, more exactly, the rapidity with which one of the partners acquired the totality of the capital, as being an indication of the venture's failure. Caves has already noted

that this causal relationship is not necessarily inevitable (Caves, 2007 [1982], p. 93). Our research reveals that, in protectionist contexts, forming a joint venture can be a strategy for smoothing off rough edges, so to speak, with the firm intention from the outset to acquire the totality of capital as quickly as possible. The eventual acquisition of this capital and the speed with which it is done is then more a reflection of success than of failure.

- The case studies presented here show that the gradual process of internationalization attributed to multinational enterprises –specifically by the Uppsala school— and to US multinationals (Wilkins, 1974) in terms of their manufacturing activities, was not, by contrast, usual in the service field. Among the engineering firms it is true that when multinationals created subsidiaries they had usually worked in the country previously; however, with the exception of Foster Wheeler, it seems that they made this step more on the initiative of local engineers than on their own. The study of International Harvester, on the other hand, enables us to better delineate the role that market experience played in a company's strategic decisions. Thus it seems that the knowledge accumulated by this particular multinational during its years of operation in Spain was not enough to gain it the contract tendered in 1953 for the country's first production of tractors<sup>47</sup>, or at the least, to correctly assess the medium-term consequences of this tender for tractor importers, as, when the company finally decided to make the move to manufacturing, it was already too late. The documentation we have studied leads us to conclude that the company's power to negotiate with the Spanish government had waned significantly, and there were now several other companies with similar objectives vying for the favour of Spain's Ministry of Industry. This led it to accept a series of conditions which it had initially been reluctant to agree to and which would eventually spell failure for the company. Likewise, the world-wide expansion of the company's competitors also influenced its decision, in accordance with the models of company rivalry in oligopolistic contexts, such as existed in this sector –a factor which has been noted, with regard to expansion in other countries, by Kurdle (1975).

The State undoubtedly had much to do with the entry modes chosen by US multinationals in Spain, although, as we have already indicated, there were other

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<sup>47</sup> This might have been due to a fragmented distribution network, the primary source of information in the early years of the sector. In any case, the initial network of John Deere (provided by its local partners, the Medem family) was not much bigger, as we saw in Chapter 5.

factors as well. In this sense, the line of thought developed by Guillén (2001) seems to be supported. In a context of government permissiveness toward foreign investment, and with an industrial policy aimed at substituting imports, as characterised Spain in the 1960's, the predominating company types were foreign multinationals and local business groups. In reality, as the same author suggests (Guillén, 2001; Kock and Guillén, 2000), these were business groups whose market power depended on the financial and technological resources of their foreign partners; i.e. the multinationals. The present study shows that this connection had in many cases been forged earlier, in similar contexts of nationalism and import substitution (as were the 1920's in Spain); nor should we forget the discretion with which some of these activities were exercised. Contexts which are more closed to the outside, as in the case of 1940's Spain, also provide excellent opportunities for doing business with foreign interests. The example of the petroleum industry is a good illustration of this.

## **7.2 How does a multinational interact with the local entrepreneurs?**

This question has in fact been answered in the preceding section, but we would like to add two clarifying points. On the one hand, the creation of partnerships –formal and informal— with local businesses enabled foreign companies not only to deal effectively with economic nationalism, but with other contexts as well, such as the Civil War, when control of foreign-run subsidiaries found itself endangered. On the other, such partnerships were a means (though not the only one) of obtaining information on the Spanish market. Over the course of our research, we have examined the behaviour of the principal constituents of these partnerships: the international branches of American banks, especially in the 1920's –as in the cases of both ITT and International Harvester—; various legal professionals –connected with the American Chamber of Commerce (Luis Riera y Soler) or with diplomatic circles (Garrigues)—; and private businessmen seeking financial and technological support for their projects, as in the case of the various consortiums formed for the construction of US military bases – Corbetta-Coviles is the best example—, a good many of the engineering firms analysed in Section 6, and the examples documented in Section 3 –in particular the large industrial concerns. In contrast, American diplomatic efforts in this area do not appear to have been significant, despite the campaigns of trade offices in the 1920's and the reports made by the US Embassy on business opportunities in Spain throughout the period of our study.

The connection of foreign capital with Spanish banks and business groups has been pointed out previously by other authors, particularly for the 1960's, the period of greatest growth for the Spanish economy.<sup>48</sup> We have shown here, in the case of US investment, how these ties were created over the years, how they functioned and, beyond the sphere of private interest, how they contributed to the generation of capabilities in Spanish companies.

As for how business between locals and foreigners was negotiated, it appears that private initiatives had more influence in this than did the public efforts and circumstances of the time. This is also true of the effects of the technical assistance program and the country's receptivity to it. As other authors have indicated for other countries (Djelic, 1998), the degree of backwardness which Spaniards perceived in their own country would have made them very receptive indeed to knowledge provided through the American program. This has been demonstrated by other authors for sectors such as management training (Puig, 2003a) or the footwear industry, which, although it eventually chose to introduce different techniques from those observed in the United States, did however import the idea that increasing the productivity of Spanish enterprises was a matter of urgency (Miranda, 2004). We have seen that something similar happened in the areas of engineering and construction. The productivity missions of Spanish businessmen to the United States made them aware of their own backwardness, and some would indeed introduce changes when they returned to Spain. The real motor of change, however, was once again the collaboration, in various forms, between foreign enterprises and their local partners. This impulse would in fact multiply the effects of the technical assistance programs then underway. It would be interesting to contrast in a future study the case of Spain with that of the Southern European nations, which, possessing similar socio-economic characteristics, were receiving economic and technical assistance at the same time.

### **7.3 What impact does the entry of the multinational enterprise have on the local firms?**

The case studies analysed in the last three chapters have brought us closer and closer to answering this question. In them, we have been able to observe the ways in which the rise of foreign multinationals brought changes, inspired by the "American model" described in Chapter 2, at three levels: manufacturing; distribution and

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<sup>48</sup> See Note 18, as well as Guillén (2001).

organization; and company management. Regarding the first of these, and as it occurred in the telephone sector and in the manufacture of farm machinery, this involved the introduction of techniques connected with the *scientific management*, combined with policies aimed at improving working conditions and increasing employee loyalty. This is what happened, first with Telefónica in the 1920's, and later with other large companies of the period like John Deere (and would have happened with International Harvester if its plans to manufacture in Spain had succeeded). As in other European countries at the height of their "Americanization", with all of this came the implementation of work safety norms, quality control measures and new systems of remuneration, among other innovations. Although such changes provoked negative reactions among workers, repressed for much of the period analysed by the existing legislation, this was not the case among Spain's business leaders and company managers.

In terms of distribution, the examples of ITT, International Harvester and John Deere all reveal the interest for marketing and advertising that the multinationals awakened in their subsidiaries. This was something quite new for the first two, as in Spain such activities would not reach their full importance until the 1960's. For the manufacture of farm machinery, the US companies tried on the one hand, with various degrees of success, to expand and improve distribution as well as technical support, crucial for gaining market share in this sector. John Deere Ibérica, moreover, created a system of independent dealers and stressed the importance of sales training. In the space of a few years both concepts would transform the entire sector.

What can be said about company management and organization? The reasoning here was varied, depending on the international context and the realities of each sector. In the case of ITT, its subsidiary followed the canons of the group –as a hierarchical, bureaucratized enterprise, with great emphasis on decision-making by its president. These characteristics would be maintained even after the company's nationalization. Indeed, it was not until the State actually took the reins of the company, under the presidency of Antonio Barrera de Irímo, that a more decentralized structure was implemented, like other multinationals of the time were doing in America and elsewhere. The John Deere plant can serve as a prime example of this. The subsidiary was adapted, as in other parts of Europe, to the corporate culture of the mother company. Once this was established, however, it was the local managers who were charged with the company's day-to-day operations, much as Spanish engineers adapted their models to the Iberian market. Finally, when it came to the training of

engineering firms, the influence of the United States was not limited to basic research activities –as has traditionally been maintained in the literature (*Doblón*, 1975; *Egurbide*, 1976; *Molero*, 1979)—, but crossed into the area of project management, through the figure of the general contractor and the concept of integral project management. It had a hand in company organization as well, promoting codes of conduct and methods which emphasized, among other things, preliminary planning, cost control, a rigorous compliance with deadlines and teamwork by all involved. In this sense, Spain was echoing the changes which somewhat earlier had transformed both the European chemical sector (*van Rooij*, 2004) and French civil construction (*Barjot*, 2002).

The changes we have indicated were implemented by American directors and staff, who were then charged with training Spanish personnel. In all of the cases analysed, the majority of staff were Spanish within a few years of the multinational's entry into the country. Such training was also given in the temporary alliances of engineering firms we have studied, as well as the construction of military bases; after it was completed (either formally or informally), Spanish managers would take control of the changes. This enabled them to go on accumulating, when they had had a sufficient amount of experience, the capabilities needed to compete in international markets or, as in the case of John Deere Ibérica, to seek refuge within the group when the protection that had originally given rise to the subsidiary had disappeared. In this sense, our research helps us to understand the creation of organizational capabilities which are considered vitally important from the perspective of evolutionary economics or strategic management. In the particular case of engineering, this includes the ability to execute projects, which, according to the literature, has enabled business groups to grow and diversify in protectionist countries whose industrialization was late in coming (*Amsdem and Hikino*, 1994).

Finally, it was common practice for the engineers and managers of some of the companies we have studied to collaborate as instructors in the various training institutions of the time. In this way, the knowledge gathered from their foreign partners was in turn transferred to the rest of Spanish society. This is a point, however, which needs to be studied in greater depth.

## 7.4 Other questions

Apart from our main objectives, the research has allowed us to add new data to other topics relative to multinational enterprises, training activities in the sectors of our case studies, and Spanish economic and business history in general. With the aim of contributing to the collective knowledge on such topics, we offer these reflections below.

### *Contributions to the history of the multinational enterprise*

On the support given by US authorities and diplomatic services to American business interests abroad:

- Wilkins (1979 and 1974) has minimized this question for the largest of US overseas investments. Little (1979) showed that it was not applicable to the case of ITT or to CTNE in its confrontation with the government of the Second Republic, though only from US diplomatic documentation. Using internal documentation, the present study corroborates Little's research (1979), but shows additionally that said support continued after the Civil War. It was decisive in the return of US managers to the company and in the process of nationalization which the telephone provider was to undergo; all of this was closely linked to the first manoeuvres of the regime to obtain credit abroad –an aspect which has for the large part been overlooked by historians, who have focused more on the Franco regime's efforts to receive funds from the aid programs that appeared at the end of the Second World War (Section 3).

### *Contributions to Spanish economic and business history*

On the strategies developed by large Spanish firms to protect their interests during the Civil War:

- For CTNE, the division of the company's management into two fronts was vitally important, although, logically, this did not avoid the problems which arose from the conflict. On the Republican side, and especially in Barcelona, while ITT's representatives could not control the company, they were able to follow its evolution at close range. In the *franquista* zone, despite the emergence of new figures, the presence of ITT's traditional partners kept the company informed of what was brewing. The support of these partners, as well as of American diplomatic services, would enable ITT to seize the reins once again when the conflict was over.

#### On foreign policy in the early years of the Franco regime:

- As mentioned earlier, the Franco government used the Telefónica negotiations to obtain US resources after the Civil War. Far from timid in the matter, it did not hesitate to use pressure to achieve its goals. It was thus made clear in the negotiations that the US managers were to return to CTNE, as they were needed to resolve a number of outstanding, as well as to manage the company's nationalization, much the same as with earlier attempts by ITT to sell the company. Nevertheless, in our example what is also clear is the discrepancy in visions that existed within the government itself, from the type of foreign policy to follow, to the treatment given to ITT's president—who had both notable allies and powerful enemies within the regime. Franco's government, moreover, was astute in dealing with the influence of Germany, which was willing to seize ITT's properties during the Second World War. Thus, despite the pressure to do so, the properties of ITT were not confiscated, an act that would definitely have led to serious diplomatic problems at the end of war.

#### On the real impact of post-Civil War nationalism:

- The information we have available on the evolution of Spanish companies with US participation in their social capital offers nuances on the practical effects of economic nationalism. During the most heavy-handed years of the autarky, the biggest problem for foreign enterprises was, as for many Spanish firms, a shortage of foreign currency. For this reason, neither the inputs necessary for manufacturing, nor merchandise to sell could be imported; nor could profits earned abroad be repatriated. However, restrictions on foreign participation in the capital of Spanish companies did not affect —except in very specific cases, generally in sectors considered by the government to be strategic— the subsidiaries of American multinationals already operating within the country. For some of these, the petroleum companies in particular (though not exclusively), it was even a time of new business opportunities. It was not, as we have seen, an obstacle to Spaniards taking management positions or seats on Administrative Boards, in order to avoid unwanted official interference. What is more, the dependence on foreign technology made it difficult, as other authors have demonstrated, to apply this theoretical economic nationalism in its most rigid sense. (Gálvez and Comín, 2003; Puig, 2003; Puig and Álvaro, 2007; Tascón, 2003).
- The case of CTNE corroborates what has been indicated above. Technological dependence, broadly speaking, on the multinational would persist even after the company was nationalized. In the course of the negotiations leading up to this, the State itself would strive to guarantee the technical continuity of the telephone company, a point which was surely of great interest to ITT. Indeed, this particular nationalization stemmed not only from the desire of the State to purchase, but of the company to sell —the consequence of a

financial situation it had dragged with it from the Great Depression and which only worsened after WWII. The fact that the company was so visible and so vital to national sovereignty, in its role as telecommunications provider, carried additional risks for CNTE in comparison with other foreign companies. It was precisely for this reason, however, that ITT drew so much attention from the American authorities. Technological dependence did the rest to minimize the impact of government regulation. Indeed, State intervention did not imply real changes in companies until the 1960's, when it coincided with crucial changes in telecommunications technology and with the shift from the traditional closed business model to the open, or global, model of the digital age.

- Greater success was achieved if, on the contrary, the domestic market was strengthened, as can be deduced from the manufacture of farm machinery. The case of International Harvester thus shows the influence that the INI was still able to exert on industrial policy in the 1960's, despite the conflicts that seem to have existed, at least for the American company's venture, with the Ministry of Industry. Indeed, the Institute's objective –the acquisition of SACA at any cost– was initially given top priority, then relegated to lower status when the multinational later decided to liquidate the company it had formed with its Sevillan partner –at the price, it is true, of a series of indemnifications that served to uphold the regime's public image after the closing of the factory.

#### The formation of the technical consultancy sector:

- The literature had previously attributed the origins of Spain's engineering firms to the construction of US military bases in the country (*Doblón*, 1975; *Egurbide*, 1976), but without explaining the evidence on which this affirmation was based. In this study we have found that this is indeed what happened, although the type of work involved since then was not unknown to the Spanish builders and engineers. We have also demonstrated how the construction of these bases facilitated the formation of the sector and how US knowledge was transmitted through the technical assistance that foreign multinationals provided to Spanish engineers and the relationships that were built as a result.
- The case of Spain, finally, has widened the spectrum in terms of the origins of this sector, with an emphasis on the role of civil engineering; it shows how engineering was carried out before the birth of the consultancies and, lastly, suggests that its expansion was intimately linked to its connections with the diplomatic apparatus, as well as private organizations with the same objectives.

With this study we have tried to answer three great questions: How and why do nations grow? How do other nations contribute to that growth? And what role do firms play in all of this, as both the transmitter and receiver of knowledge? There is still much to be learned regarding these questions. However, for the particular case of US direct investment in Spain and from the lessons contained in our case studies, we have seen that nations learn from each other and that companies, whether they represent the origin or destination of investment, play a fundamental role in this process. Finally, we have been able to learn more about how foreign knowledge contributes to generating capabilities and, in particular, to forming such capabilities among local enterprises.