# <u>Reshaping entrepreneurship after a civil war. The case of the industrial districts in</u> <u>Catalonia during the 1930s</u>

## **I. Introduction**

Catalonia has been one of the most commercialized and industrialized regions of Spain during the twentieth century. Home of the first industrial revolution during the nineteenth century, it started to adopt technologies and organizational structures of the Second Technological Revolution by the end of that period and the first third of the twentieth century. During the period 1890-1935 Catalan industry grew significantly and diversified. Textile still was the most important sector, but at the end of this period it started a process of industrial restructuring. On the other hand, chemistry, metal and construction showed a great dynamism. Some firms were introducing the most innovative advances developed abroad and grew fast.

In 1936 the civil war started a time of increased isolation and backwardness. The development paths followed by the innovative firms broke off. During the war, Catalan industrial production was characterized by the establishment of a war economy, the difficulty for obtaining raw materials and the use of substitutes with a minor quality. Therefore, Catalan enterprises lived a double restructuring: the transformation of their industries in war industries and the adaptation to new sources of energy and raw materials.<sup>1</sup>

The end of the war and the establishment of Franco's dictatorship marked the beginning of the decline of Catalonia as the first industrial region of Spain.<sup>2</sup> Industrial policy discriminated against Catalan enterprises, as far as forced industrialization promoted by the national institute of industry (INI) favored Madrid. Catalan entrepreneurs also had to face up to the lack of raw materials and energy sources and the international isolation. On the other hand, textile, the sector that leaded the industrial revolution in Catalonia was in an irreversible decline.

<sup>&</sup>lt;sup>1</sup> BRICALL (1978)

<sup>&</sup>lt;sup>2</sup> PUIG (2006)

During autarchy some enterprises took strategies that just made sense in that context. Some firms started to produce their own inputs, as it was not possibly to import them. That's especially true for chemical firms. Many firms were producing in an inefficient way. The Stabilization Plan of 1959 changed considerably the economic context in which Spanish enterprises operated. It started a period of normalization, recuperation and liberalization.

As Carreras<sup>3</sup> notes, between 1930 and 1960 there was a revolution in the big Spanish enterprise. The breakdown in the entrepreneurial landscape took place mainly between 1930 and 1948. The most important transformation is the creation of big public property enterprises. Such measures were consistent with the interventionist policy that aimed to participate in strategic sectors during the dictatorship. However, the majority of the important big enterprises weren't nationalized because most of the biggest Spanish enterprises operated in sectors not strategic.

The period of the civil war and the first years of the dictatorship, when the new regimen established an autarchic policy, constitute a moment of great transformation of the Spanish, and Catalan, entrepreneurial landscape. Such transformation affected not only the big enterpriser, but also small and medium ones. The aim of this paper is to give a wide vision of the war's impact, paying attention on the differences between sectors and enterprises dimension. It is also relevant to examine how the Second Industrial Revolution enterprises behaved during this period, especially the small and medium ones, since they were the most dynamic.

Most of the studies concentrate on big societies or public limited companies, but focusing on this kind of enterprises could provide a biased view. Small and medium enterprises historically have had a crucial role in the modernization of the Catalan productive system. In some sectors these enterprises were the most dynamic and innovative. Besides, there's not a correlation between enterprise size and the fact of being a public limited company. Because of this, to examine the impact of the war between sectors it's important to consider all the enterprises, not only the biggest ones.

<sup>&</sup>lt;sup>3</sup> CARRERAS (2003)

On the other hand, a wide sample allows us to compare the different effects by enterprise size.

## II. Historical context and theoretic and methodological issues

After the outbreak of the war, industry in the Republican Spain was conditioned by the progressive reduction of the loyal territory (reduction of the market, raw material availability), the break up of the traditional exchange channels and the debility of the democratic institutions. The production of the war industry increased considerably, but other activities less related to the war lost importance. The reorganization of the industry directed by the Government achieved to avoid the collapse of the Catalan economy until summer of 1937. However, the lost of the north of Spain meant another reduction in the energy resources availability and entailed an important reduction of the Catalan industrial production<sup>4</sup>.

During the war, a social revolution started in Catalonia. The new economic regime was absolutely different from the previous one. There was an intense process of labor intervention of factories, collectivization and socialization, leaded by the anarchist union CNT. This process started, in part, spontaneously. When workers returned to their jobs after the coup d'état, the board had run away or disappeared. This new regime was consolidated with the Decree "Collectivization and control of the Catalan industry and trade", approved on 24<sup>th</sup> October of 1936. Until this date, the Catalan Government had a cautious and expectant attitude in front of the confiscations and revolutionary interventions. After October 1936 the Government tried to legalize the new revolutionary regime and lead it. In July 1937, the cabinet started the setting up the institutions in charge of organize and direct the labor self-management. However, at the end of 1937 the revolutionary process was restrained and was eventually replaced by a system of directed economy trough a system of special interventions.

The main source used for this paper is the Barcelona Chamber of Trade and Industry collection "Commission for the Industrial and Trade Incorporation n°2" (CIIM

<sup>&</sup>lt;sup>4</sup> CATALÁN (2006)

n°2). This source has not been used in economic history so far. The reason for using this source with business history purposes is that it provides with wide information about a large number of enterprises from different economic sectors.

The Commission for the Industrial and Trade Incorporation was an institution created in May of 1938, during the Spanish Civil War. It was composed of ministerial and public institutions representatives, entrepreneurs, nobles and military. Its main purposes were to foster Catalan industrial recovery and the return to normality after the war; to establish an economic policy based on State intervention; to implement measures that allowed the new authorities to confiscate and militarize some industries; and to guarantee the continuity of industrial and commercial labor through the repression<sup>5</sup>.

The Commission worked during 31 months, from May 1938 to January 1941. During this period it had two presidents, José María Milá y Camps, conde de Montseny and Santiago Gotor Aisa. Milá was a monarchic with an important influence in the Barcelona Bankers Association and a Primo de Rivera collaborator. Ideological and political differences between Milá, a conservative bourgeois, and the fascist authorities appeared soon. Finally, on September of 1939, Milá was replaced by Santiago Gotor, an entrepreneur and commander of artillery, who chaired the Commission until its dissolution on January of 1941.

Initially, when the war had not finished in Catalonia yet, the Commission operated from Bilbao. On January  $30^{\text{th}}$  of 1939, four days after of Catalonia occupation, the Commission announced the beginning of its actuation in Catalonia. General Eliseo Álvarez Arenas, governor of Barcelona, insisted on the importance of the Commission in the recuperation in raw materials availability. This was a fundamental matter, and the role assigned to the Commission proves the importance conferred to this organization in Catalonia economic recuperation<sup>6</sup>.

For this paper I have used three of the collections of the CIIM n° 2. The first one is called "Informative Expedients of the Catalan Industry" and was elaborated between

<sup>&</sup>lt;sup>5</sup> ARACIL, SEGURA, OLIVA and PONT

<sup>&</sup>lt;sup>6</sup> ARACIL, SEGURA, OLIVA and PONT

June of 1938 and February of 1939, when the war wasn't finished yet in Catalonia and the Commission was working in Bilbao. This collection is composed by files that provide information about Catalan industry before July of 1936. Catalan entrepreneurs (most of them had escaped to the National zone) addressed to the Commission to get the authorization to get back their properties when the war ended. Secondly, I have used the collection "Unemployment and lack of raw materials statistic", which was elaborated in April of 1939. In an advertisement on the journal, the Commission asked all the entrepreneurs to send them a "note" informing about he number of workers they employed and the number of unemployed, indicating if the unemployment was related to the lack of raw materials. This statistic was elaborated in order to link the existent unemployment to the problems in the raw materials supply. Finally, I have used the "Production and raw materials statistic" of 1940, which had the purpose of making an inventory of industries and get information about production and raw materials and energy consumption.

These three collections provide wide information about a considerable number of enterprises, both small and big ones. All this information made possible to elaborate a series of employment for 1936 and 1939. As data for a representative number of firms is available, it is possible to aggregate them and have an indicator of the reduction in the employment for different sectors, in order to compare them and analyze the different effects of the war in each sector. It is also possible to organize data by enterprise size and examine the impact of the conflict in different kinds of enterprises. On the other hand, data about energy consumption is particularly available for chemical and metal enterprises, so it is possible to compare the different paths in these two sectors. The comparison is interesting because chemicals and metal are the most important sectors of the Second Technological Revolution, and in the interwar period these sectors lived an intense process of modernization and transformation.

To complete the information of the CIIM collections, I also have used other sources. One of these is the Memory of the Commission of Statistics set up by Fernando de la Torre, commander of artillery, and Mariano de Salas, captain of artillery, in 1916 in order to determinate what kind of support to the military industry could be given by the civil industry. This commission collected information about employment and energy power of the most important firms in order to evaluate their capabilities and the possibility of reconvert their activities to produce armaments. Having information both for 1916 and 1939 allows us to analyze the evolution of the most important firms.

Another source used for my objective is the Financial and Public Limited Companies Yearbooks. The reason for using them is to determine if there was a correlation between firm dimension (ranked by number of workers or by energy consumption) and the fact of being a public limited company. It's important to notice that such a correlation didn't exist. Not all the biggest companies were constituted in public limited companies and not all de public limited companies were between the biggest ones. Because of this, a study based on the public limited companies could not be accurate, as they could represent neither the most important enterprises of a sector, nor the sector globally. Otherwise, in some sectors, the smallest firms demonstrate to be the most innovative and dynamic.

The main advantage of this paper is that uses data from a big number of enterprises (approximately 2.250) from different sectors and of different sizes. It provides a panoramic vision of the Catalan entrepreneurial landscape during 1930s. Although data are considerably heterogeneous, and this could subtract soundness to the results, the high number of observations may attenuate this problem. It's important to notice that statistics elaborated by CIIM n° 2 were based on the information provided by entrepreneurs and it could be not absolutely reliable.

#### **III. Results**

Having occupation data for 1936 and  $1939^7$  allow us to compare the situation before and after the war, and the impact of the war in each sector in terms of reduction in the employment.

<sup>&</sup>lt;sup>7</sup> These data are elaborated from the Unemployment and lack of raw materials statistic elaborated by CIIM n° 2 in April 1939.

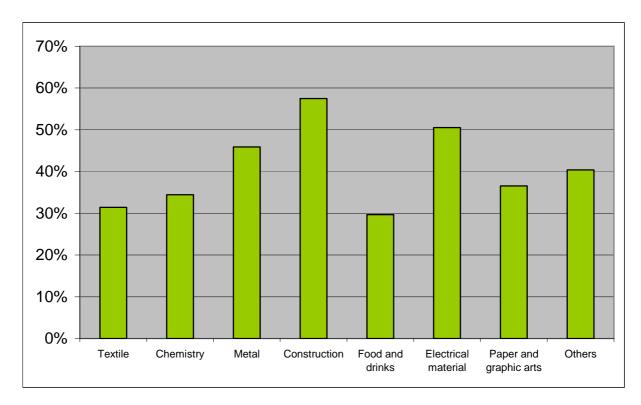


Figure 1: Fall in the employment by sectors, 1936-1939 (%)

Source: Own elaboration from the "Unemployment and Lack of Raw Materials" and the "Informative Expedients of the Catalan Industry" of the Commission for the Industrial and Trade Incorporation n° 2

This figure shows the reduction of the employment between 1936 and 1939 in each sector in percentage. The most important reductions in occupation took place in construction, electrical equipment and metal, whereas the sectors less affected were food and drinks and textile. Therefore, consumption goods industries were less damaged in terms of employment than capital goods industries. When analyzing this evolution in employment, it's important to regard that employment and production can follow different paths, because of productivity behavior or extra-economic reasons.

The distinctive impact of the war on employment could be related to the strategic interest of each sector. The process of collectivization and state intervention affected mostly strategic enterprises, as they were vital for the war. Textile and food were not as important for military objectives as construction or metal may be. During the war, consumption goods industries were collectivized or nationalized in a minor proportion than capital goods ones. As we can appreciate in figure 2, capital goods industries suffered larger reductions of employment.

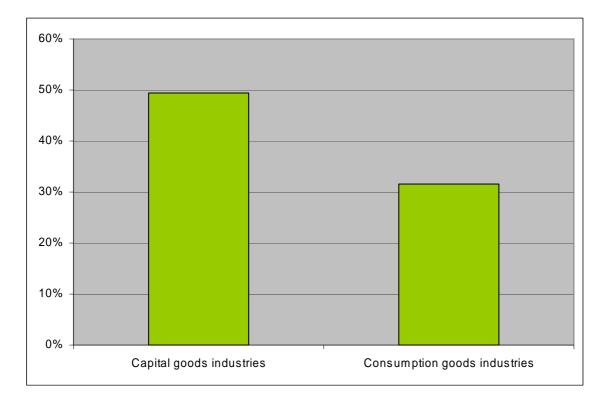


Figure 2: Fall in the employment on capital goods industries and consumption goods industries

Source: Own elaboration from the "Unemployment and Lack of Raw Materials" and the "Informative Expedients of the Catalan Industry" of the Commission for the Industrial and Trade Incorporation n° 2

During the war, in Catalonia important enterprises were directed by unionists or persons loyal to the republican regime. With the establishment of the fascist dictatorship, these enterprises were more liable to have important process of employment depuration and an important breakdown in the enterprise management and in labor relationships. As the process or intervention and collectivization affected more some sectors than other ones, it's reasonable to assume that the fall in the occupation was higher in these sectors.

War also affected diversely enterprises according to their size. As we can see in figure 3, the largest reduction in employment took place in the biggest enterprises, followed by the smallest, while medium ones were the less damaged.

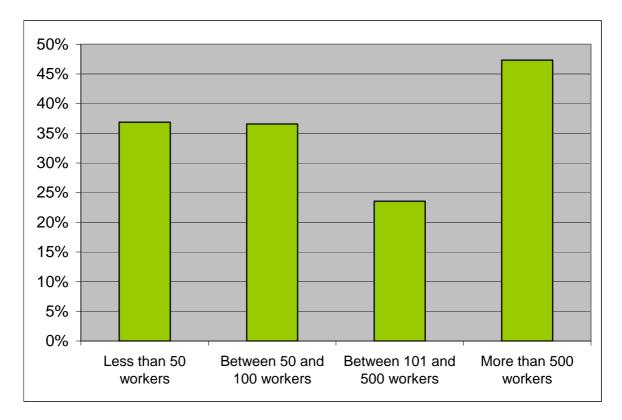


Figure 3: Fall in the employment by enterprises size

Source: Own elaboration from the "Unemployment and Lack of Raw Materials" and the "Informative Expedients of the Catalan Industry" of the Commission for the Industrial and Trade Incorporation n° 2

Big enterprises had important reduction on their employment because they were intervened or collectivized more than the smallest ones. Furthermore, a great proportion of these big enterprises operated in strategic sectors. Medium firms could resist better because they didn't suffer as many disturbs in their management (during and after the war) and they had a critic size that allowed them to keep working. They were sufficiently versatile to overcome the difficulties in getting raw materials and energy and in adapting their production to war demand. Smallest firms were not subject to collectivization or state intervention. However, they were less capable of readapting their activity to the new context. Because of this, they were more damaged than medium ones. During the 1970s and 1980s medium size enterprises are those which achieved to overcome better the crisis. An important percentage of these medium enterprises were family firms. As Fernández and Puig<sup>8</sup> notice large family firms have some characteristics that allowed them to adapt and survive in different economic contexts. Large family firms are specialized in some market niches where they have built long

<sup>&</sup>lt;sup>8</sup> FERNÁNDEZ and PUIG (2007)

term intangible assets. They also enjoyed a protected market and were benefited by a general labor and fiscal advantages. The tradition of personal relationships with family firms of other countries made possible knowledge transfer. Their innovative and flexible character also allowed their survival in a crisis context.

The impact of the war on employment shaped human capital during the next period. The basis of human capital which conditioned the restructuring of the industrial landscape is being established in this moment. More damaged sectors (capital goods) had more problems to recover the prewar levels of production. This fact, together with the lack of raw materials and energy sources, could explain the difficulties to satisfy the demand of some products essential for the reconstruction. On the other hand, new enterprises who took advantage of an environment of limited competition proliferated in these sectors. By contrast, sectors less affected (consumption goods) conserved the qualified labor force. In these sectors private initiative had a more important role than in the other ones. The impact of the war on human capital resources could help to understand why food and chemical familiar firms are the more long-lived.<sup>9</sup>

Chemical family firms have been between the more dynamic during all the 20<sup>th</sup> Century. Specifically, some small family firms were particularly innovative during the interwar period and grew considerably until they became leader of the sector. By contrast, metal firms, the other important sector of the Second Technological Revolution, were not as dynamic as the chemical ones.

This period is crucial for the Second Technological Revolution. Internationally is a moment of a great transformation in these sectors and is in theses years when important firms are creating their development paths and are reshaping their activities. Some Catalan firms are assuming the technological advances developed abroad. During the interwar period, some of the firms which leaded their sectors are being created or are growing significantly. This is especially true for the chemical firms.

<sup>&</sup>lt;sup>9</sup> FERNÁNDEZ and PUIG (2007).

Figure 4: Energy consumption per worker in metal firms
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	Consumption of energy per worker (TCE)	Number of enterprises
less than 50 workers	11,53137891	49
between 50 and 100 workers	19,08054665	10
more than 100 workers	11,82125234	8
TOTAL	13,50826977	67

Source: Own elaboration from the "Production and raw materials statistic" of the Commission for the Industrial and Trade Incorporation n° 2.

Figure 5: Energy consumption per worker in chemical firms
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	Consumption of energy per worker (TCE)	Number of enterprises
less than 50 workers	84,20883821	67
between 50 and 100 workers	19,92034615	11
more than 100 workers	7,475516854	6
TOTAL	39,71180013	84

Source: Own elaboration from the "Production and raw materials statistic" of the Commission for the Industrial and Trade Incorporation n° 2.

Although these data have some important problems<sup>10</sup>, they show interesting results. Using energy consumption intensity as an indicator of modernity, we can appreciate that metal enterprises situation was quite different from chemical ones. In general metal enterprises had lower levels of energy consumption per worker than chemical ones. Among metal firms, medium ones were the most modern. Probably the biggest ones were over dimensioned while the smallest were not capable to introduce production techniques intensive in energy use. However, the most interesting comparison is with the chemical firms.

<sup>&</sup>lt;sup>10</sup> Data of energy consumption are from 1940 and data of occupation are from 1936. Although most of the enterprises suffered reductions on the energy consumption after the war, we can assume that the reduction was similar in all of them (in spite it was probably not). As we are interested in the comparison between the kinds of enterprise and not in the absolute values it's useful to use these data.

In total, chemical firms had higher levels of energy consumption than metal ones. These are the two sectors of the Second Technological Revolution, which were in an expansive path during the interwar period. However, according to these data, Catalan chemical firms were much more dynamic and innovative then metal ones. This is consistent with different testimonies and with the subsequent evolution of some of the enterprises of the sample.

Among chemical enterprises, it's important to notice that the smallest were the ones that had higher levels of energetic intensity. Some of these small chemical firms were really innovative and were introducing the new advances developed abroad; later grew significantly until they became leaders and placed between the biggest Spanish firms.

A minor impact of the war in chemical firms than in metal ones, with the consequent minor loss of human capital, could accentuate different tendencies in these two sectors, although paths in both chemical and metal were defined before. In fact, the problem of the quality deficiency in metal supply was stated in 1917 by the Statistic Commission.

## **IV. Conclusions**

The Spanish Civil War and the revolutionary process in Catalonia entailed a huge rupture in the productive system. The reduction in the employment between 1936 and 1939 proves this fact. Fall in occupation was higher in those sectors which were collectivized or nationalized to a larger extent, as a consequence of the breaking-off in labor relationships and the depuration process after the war. As sectors with strategic or military interest were more likely to be intervened, this is construction, metal and electric equipment, these sectors turned out to be more damaged by the war in terms of employment.

The war also affected differently firms depending on their dimensions. Biggest ones suffered major employment reductions, as they were more intervened than smaller ones. Medium-size firms were the least damaged. They were not militarized, had certain economic power and operated mostly in consumption goods sectors. They didn't suffer as much disturbs in their management (during and after the war) and they had a critic size that allowed them to keep on working. They were versatile enough as to overcome the difficulties in getting raw materials and energy and in adapting their production to war demand. It's interesting to notice that during the 70s and 80s, the enterprises which dealt better with the crisis were also the medium-size ones, especially large family firms.

The different impact of the war in terms of occupation by sectors and enterprise size shaped human capital in the next period. It was in these years that the basis of human capital which conditioned the restructuring of the industrial landscape was being established. Capital goods industries had larger human capital loses. This can explain why these sectors had more problems to recover prewar production. This fact, together with the lack of raw materials and energy sources, could explain the difficulties to meet the demand of some essential products for the reconstruction.

The Spanish Civil War took place in a period crucial for the Second Technological Revolution. It was a moment of great transformation in these sectors. Some important firms were defining their paths of development and adopting innovations coming from abroad. Before the war, Catalan chemical firms were especially dynamic, in comparison to metal, the other important sector of the II TR. Among chemical enterprises, the most innovative were the smallest ones. These firms were investing in new technology and growing considerably. During the war, minor loss of human capital in chemical firms (in the smallest ones in particular) than in metal ones could contribute to accentuate this tendency. Nowadays, Catalan chemical firms are much more competitive than metal ones and this path could be set up in the interwar period.

#### V. Bibliography

ARACIL, R., SEGURA, A., OLIVA, J. and PONT, M. (1999): Els empresaris de la postguerra. La Comisión de Incorporación Industrial y Mercantil nº 2, 1938-1942, Barcelona: Cambra Oficial de Comerç, Indústria i Navegació de Barcelona.

AUBANELL, A.M. (1994): "La gran empresa en España (1917-1974). Una nota crítica", *Revista de Historia Industrial*, 5.

BRICALL, J. M. (1978): *Política econòmica de la Generalitat (1936-1939), Evolució i formes de la producció industrial,* Barcelona: Edicions 62.

CARRERAS, A. (2003): "La gran empresa durante el primer franquismo: un momento fundamental en la historia del capitalismo español" in G. SÁNCHEZ RECIO and J. TASCÓN FERNÁNDEZ (eds.), *Los empresarios de Franco. Política y economía en España, 1936-1957*, Barcelona: Critica.

CARRERAS, A. and TAFUNELL, X. (1994): "La gran empresa en España (1917-1974). Réplica a una nota crítica, *Revista de Historia Industrial*, 6.

CATALAN, J. (1995): La economía española en la segunda guerra mundial, Barcelona: Ariel

CATALAN, J. (2006): "Guerra e industria en las dos Españas, 1936-1939", in P. MARTÍN ACEÑA and E. MARTÍNEZ RUIZ (eds.), *La economía de la guerra civil*, Madrid: Marcial Pons Historia.

CHANDLER, A. (2005): Shaping the Industrial Century. The Remarkable Story of the Evolution of the Modern Chemical and Pharmaceutical Industries, Harvard University Press.

FERNÁNDEZ, P. and PUIG, N. (2004): "Knowledge and Training in Family Firms of the European Periphery", *Business History*, 41.

FERNÁNDEZ, P. and PUIG, N. (2007) "Bonsais in a wild forest? A historical interpretation of the longevity of large Spanish family firms", *Revista de Historia Económica-Journal of Iberian and Latin American Economic History*, 3.

PUIG, N. (2006): "La empresa en Cataluña: identidad, supervivencia y competitividad en la primera región industrial de España" in J.L. GARCÍA RUIZ and C. MANERA ERBINA (dirs.), *Historia empresarial de España. Un enfoque regional en profundidad,* Madrid: LID.

TORRES VILLANUEVA, E. (2003): "Comportamientos empresariales en una economía intervenida: España, 1936-1957", in G. SÁNCHEZ RECIO and J. TASCÓN FERNÁNDEZ (eds.), *Los empresarios de Franco. Política y economía en España, 1936-1957*, Barcelona: Critica.

YSÀS, P. (2003): "Los empresarios catalanes en el primer franquismo" in G. SÁNCHEZ RECIO and J. TASCÓN FERNÁNDEZ (eds.), *Los empresarios de Franco. Política y economía en España, 1936-1957*, Barcelona: Critica.