The catalan industry

Romà PUJADAS I RÚBIES

Industry in Catalonia

As it is generally known, Catalonia is the main industrial area in Spain. In 1983 Catalonia generated 25.7% of the Spanish industry V.A.T. and assembled 24.5% of the employed industrial labour force[1]. None of the other industrial areas of the country reached half of the Catalan production: Madrid (12.2% of the industrial V.A.T.), Base Country (10.8% of industrial V.A.T.). If we consider it on an European scale, Catalonia appears to be a region with a solid industrial basis.

However, this Catalan industrial specialization should not be considered as an obstacle within the present international labour division tendencies. Actually, there has been lately, as it corresponds to a modern economy, an important process of terciarity. In 1983 the services sector assembled 51% of the labour force.

1. The origins of Catalan industry

It was during the XVIIIth century that the industrial increase conditions were created and, step by step, they began to differentiate Catalonia from the rest of more agricultural and traditional areas in Spain. As it happened in England, an agricultural revolution is to be found in the origins of industrialization. The passing from an agriculture of subsistance to a fully commercial agriculture, specialised mainly in wine production, made the generation of a commercial surplus possible, providing the necessary capital for a primitive accumulation. The industrialization process was made possible by the inner market growth, associated as well to the increase of the agricultural productivity and to the possibility of trade with America, breaking the past monopoly of the cities of Sevilla and Cádiz. The trade with America resulted in a very quick incorporation of the Catalan industrial production; this way the vicious circle that had condemned Spain to the role of a mere intermediary between European industrial production and American market, was broken, at least partially. At the same time, the population explosion[2] along with the agricultural revolution, provided the necessary population surplus for a proper coming into operation of the growing manufacture.

Although Catalonia had had a very important craft and commercial activity during the Middle Ages, the establishment of an acceptable connection between the old and the new manufactures is very difficult. An industrial activity reduced almost only to a local demand, had survived during the long centuries of Catalan decline, without the exterior projection of the Middle Ages. Of course, such an ancient industry was to be found scattered all over the territory and very tightly connected to agricultural activity.

The leading sector, and in fact the only one for quite a long time in Catalan industrialization process, was the cotton industry. The activities that first succeeded were the manufacture of printed calico[5] and weaving, where as the definitive introduction of spinning came some time later. In 1736 began the production of printed calico and modern factories were born with it, even though the production in them was, of course, manufacturing, without any significant mechanization. In 1758 the Trade Committee (Junta de Comerç) was created and it coordinated the new industrial groups interest. Two years earlier the Barcelona Company had been established, being the first company created in Catalonia to deal with America. A decree in 1778 declared free trade with America, and so, the Catalan industry got rid of the last institutional obstacles that interfered with its American market expansion.

The new cotton industry was located basically in the city of Barcelona or along the coast; the proximity of the ports was very important, as long as both, the raw material and a major part of the industrial production were involved with maritime trade. In 1768 there were 25 factories of printed calico in Catalonia: 22 in Barcelona, 2 in Mataró and 1 in Manresa. Such data can give an idea of the urban and coastal nature of the industry. We must say, though, that they refer only to the «regular» factories, adapted to the 1767 decree, which declared that each manufacturing settlement should have at least 12 looms. There were of course, a great number of smaller settlements, scattered all over the territory.

The rural environnement also took part in the expansion of the cotton industry as the latter so often connected to the surplus generated by farming products trade.

During the XVIIIth century, Catalan cotton industry adopted the new technological innovations from abroad rapidly. In 1780 only ten years its patent, the «spinning jenny» was introduced in Catalonia, where it was improved and called «berguedana».

2. The industrial revolution in the XIXth century

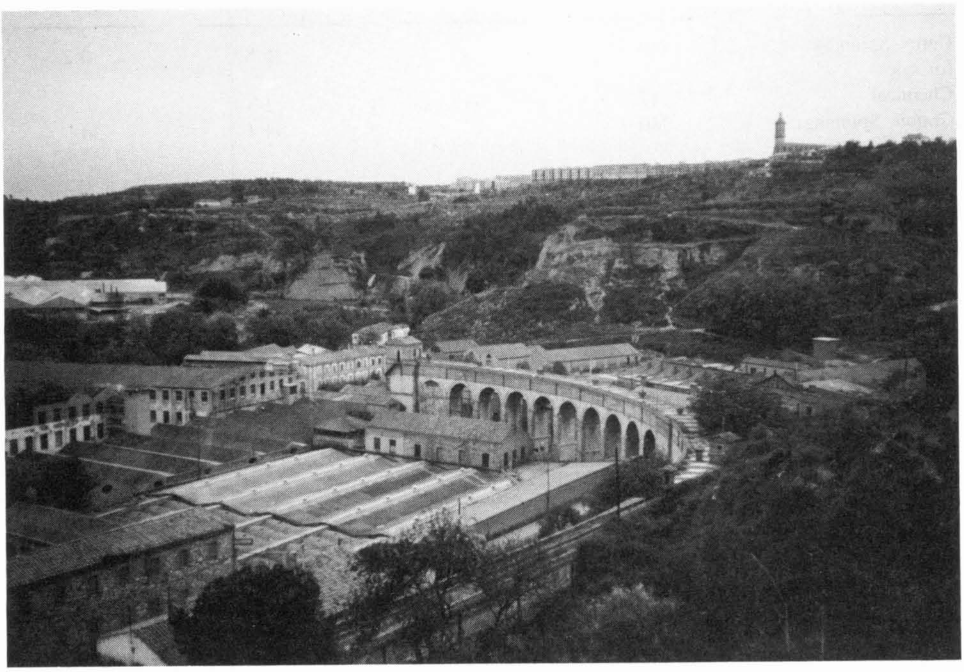
The loss of the colonial market and the war against Napoleon (1808-1814) meant a serious restraint to the industrialization process in Catalonia. Afterwards came instability created by the Carlist wars. In spite of these negative historical events, during the third part of the XIXth century, a real industrial revolution took place in Catalonia. In 1828 the first mechanic loom was installed in Sallent and in 1832 the first steam engine started working in Barcelona.

The passage of production to mechanical industry revealed a great shortage of basic natural ressources in Catalonia, specially of coal and iron. Between 1841 and 1851, 56 mining companies were created in Catalonia with very big investments but with completely negative results[6]. The lack of iron prevented the establishment of a basic siderurgical industry, but on the other hand steam engines worked without any trouble with imported coal.

Industrial mechanization also introduced new aspects in location tendencies. The rivers, which provided hydraulic energy since remote times, increased considerably in their importance. On the other hand, import of coal was always conditioned to the nearness of the ports.

The rapid growth of the railway system, first appeared in Catalonia in 1848, liberated our industry from such proximity to ports and consolidated the industrial axis along some rivers such as Llobregat, Cardener and Ter. The appearance of the textile suburbs («colònies industrials») a new model of territorial organization of industry which kept away from the cities as well as from the rural industry.

The industrial revolution initiated the enlargement of different sectors of the Catalan industry, which was at the beginning restricted only to the cotton industry. Within the same textile sector, the development of the wool sector also took place, which concentrated basically in the cities of Sabadell and Terrassa. In 1832 the first mechanic loom for wool weaving was installed in Sabadell and in 1838 the first steam engine[7]. Although a basic metallurgy was never developed, there was a considerable increase of transformation metallurgy, which devoted mainly to the production of textile machinery. Some of the old activities, such as paper manufactures and cork industry, attained a completely industrial character.



The «colònia Sedó» is a textile suburb built in 1878, beside river Llobregat and near of the towns of Esparraguera and Olesa de Montserrat; is still inhabited. The factory was built between 1847 and 1850, and until the end of the 1980 decade was working.

3. The Catalan industry at the beginning of the XXth century

According to E.Escarrà, Catalonia was an economic power at the beginning of the present century, even if instead of inventing directly it was depending on other leading industrial countries for new technological know-how. The loss of the last colonies directed the Catalan industry in a definitive way towards the Spanish market. Catalonia became the furnisher of industrial products for the rest of the country. In 1908 the Foment del Treball Nacional made a statistic of Catalan industry, considering only the industries having more than 100 workers. These statistics are a basis for knowing the sectorial distribution of the industry at the beginning of the century.

Industries	Capital Million Ptas.	Production value Million Ptas.	Employement (thousands)	Export value Million Pts.
Cotto. Spinning for sale	110	85	16.8	0.2
Chemical	17	13	1.4	
Cotton. Spinning, raw wowen material and printed	240	227	44.1	30
Cotton. Colour wowen material and others	70	75	13	7.5
Cotton knitwear	40	37.5	10	12
Wool	100	82	25	3
Linen	35	28	2.4	2.5
Silk	28	30	3	3
Paper	14	17	2.5	6.5
Metallurgy	80	72	11	0.5
Cork stoppers	35	55	12.5	30
Leather	20	22	1.5	2.3
Flour	26	40	2	-
Cement	20	11	3.2	-
Hydraulic Mosaic	5.5	4.5	2	2
Kohl	9	11	0.7	-
Totals	849.5	810	151.1	99.5

Source: RAHOLA, F.: **Comerç i indústria de Catalunya** a CARRERAS CANDI, F.: **Geografia General de Catalunya**, Vol. I, pàg. 461.

The different textils branches assembled 75% of industrial labour force in big companies. The cork stoppers sector was the second in importance. It was located in the regions of Baix Empordà and La Selva. Where employement is concerned it was followed by the metallurgic sector.

The First World War was very advantageous for the Catalan industry. It gave the opportunity of exporting a big part of its production. Afterwards came the crisis of the thirties, followed by the dramatic period of the Civil War.

4. The Catalan industry during the autarchic period

The first fifteen years of Francoism (1939-1953) were the most difficult period of autarchy. This period is distinguished by an economic stagnation with a very weak growing rhythm, so that it wasn't until 1953 that the national income levels of the period previous to the Civil War were attained. The autarchy, with an absolutely protected inner market, supports in a short term the national industry, but creates at the same time, the right conditions for uninvestment and progressive worning out of equipments.

During the autarchic period existed a certain intention of breaking up the Catalan industrial basis or, at least of limiting it to textile specialization. However, in spite of some obvious obstructions, the Spanish industrial scene doesn't suffer any substantial change and Catalonia keeps on being the most industrial area in the country. In this period takes place even a certain process of industrial diversification, supported by the autarchy policy of import substitution.

The demographic evolution shows the economic stagnation of the period. Between 1940 and 1950, the Catalan number of inhabitants rises from 2.890.974 to 3.240.313[8]. The region I goes from 55.5 to 58.2% of the total Catalan population. This slight increase concentrates basically in the city of Barcelona, which reunited in 1950 88.5% of the population of the Barcelonès area, and 66.7% of the whole metropolitan are[9].

The 1953 Spanish-North-American agreements meant an inflexion point in the autarchic tendency. The second half of the fifties decade will make clear the incompatibility between economic growth and the institutional strictness of the regime. With the stabilizer Plan from 1959-60 begins the Spanish economic growth and an insertion, although not complete, in the international economic world.

Throughout the'50s, Catalonia has already a considerable industrial growth, with also a rising of its industrial basis diversification, although the textile is still prevailing. The demographic evolution reveals brightly the economic growth: from the middle fifties onwards there is a strong inmigration flow. In 1960 the number of inhabitants reached the figure of 3.920.871.

In this period, industrial growth is general in all traditional industrial areas, but the importance of region I increases representing 63.1% of Catalan population; it consists of an urban increase rather than metropolitan. In 1960 the city of Barcelona represented 62.8% of the whole of its metropolitan area population.

5. The Catalan industry from 1960

The sectorial distribution of industrial V.A.T. in 1960 still reflectes the traditional specialization of Catalonia with a prevalence of the textile sector, followed at a short distance by metallurgy.

Starting from 1960, the Catalan industry steps into an era of deep transformations. The regime's liberalizing measures put an end to the institutional restraints which were blocking the economic growth. As never before in history, Spanish economy enters the mechanism of world economy, and a period of intense industrialization begins. This period will not be cut until the international crisis of 1973. Between 1960 and 1975, the Spanish T.N.P. expands with an annual accumulation rate of 7%, while the industrial V.A.T. increased with an annual rate of 9.6%.

Catalonia took an active role in such economic growth process. In spite of a certain decentralization policy observed in the consecutive Development Plans, the prevaling view-

	VAT	%	% C/E	Location quotient (10)
Foodstuffs	4.383	8.4	14.4	0.49
Textile	18.076	34.9	67.6	2.32
Leather, shood dressmaking	3.580	6.9	22.1	0.76
Wood, cork	2.809	5.5	20.9	0.73
Paper, graphic arts	2.304	4.5	39.2	1.02
Chemicals	6.857	13.3	25.5	0.88
Building mat.	1.703	3.3	22.7	0.78
Metallurgy	11.981	23.2	24.2	0.87
Indust. undertaking	51.694	100.0	29.0	
Total industry	60.863		24.7	

Source: Spanish National Income. Banco de Bilbao. 1960.

point was that of polarizing the industrial tradition, and Catalonia was, needless to say, the leader. The advantageous opportunity lasted until 1973, although from 1965 there was a clear stagnation in economic liberalising measures, with a negative influence on Spanish industrial structures.

The inmigration flow begun in the middle fifties was accelerated in the period 1960-1975, in which the Catalan population increased a 44%, reaching the figure of 5.660.393 inhabitants. A territorial organization based in Barcelona's human and industrial concentration and in the progressive desertification of a good part of the agricultural inland areas, was consolidated. In 1975, the population of the region I reached the 68.8% of Catalonia. In this period, the growth is mainly metropolitan: the city of Barcelona decreases to the 44.9% of the metropolitan area total population. The demographic and industrial expansion concentrates in the other towns of the Barcelonès area and grows gradually in the rest of metropolitan regions, especially in Baix Llobregat and Vallès Occidental.

6. The final diversification of Catalan industry

As we've seen beforen industrialization in 1960 has attained an important level of diversification, although the traditional specialization, textile above all, kept its supremacy. Starting from 1960 the diversification process sped up. A. Pugès defined the period between 1960 and 1973 crisis as a transition stage for traditional industrial especialization towards a new industrial structure suitable for a centralised country with a high mass-consumption.

At the beginning of that transition period, Catalan industry was still directed to the traditional specializations: textile and metallurgy; the basic industry was practically unexistent and infrastructure industries, energy and Public Works were still very underveloped. There were some transforming industries of a certain importance (paper, graphic arts, building materials) but the modern consum-goods fabrication sectors remained still behind (chemicals, metallic, foodstuff, etc.).

The qualitative passage in productive specialization leads to a modernization of industrial basis; approaching it to the one of central industrialised capitalist countries.

The industrial growth of the sixties and the early seventies takes place above all in the lasting consum-goods sectors inherent to a self-concentrated model with high productivity and elevated mass-consumption. In the period 1965-1975, the industrial branches with an increase above the Catalan industry as a whole were these: transport material (annual accumulative rate 15.6), metallic transformed (11.1), pharmaceutical industry (19.1), plastic material (16.7), paper (11.1), graphic arts (11.8), foodstuff (10.4), building material (10.9)[12].

The characterization of Catalan industry in the middle sixties, when the advantageous moment permiting a strong industrialization was over, can be done with the help of the *product-cicle theory*. This theory mades a distinction between developed countries, where due to the superior technological level, the new products appear, and intermediate countries, that can start the production of the same product when the latter has attained a proper level of standarization. The following step will consist of classifying the different industrial activities according to the specializations of the advanced or intermediate countries. This classification is based in the calculation of the different location quotients between advanced and intermediate countries. An industrial activity will be an speciality of advanced countries when its weight is superior in the advanced countries industrial profile than in that of the intermediate countries. In this case, the location quotient will be more than 1. On the contrary, an industrial branch will be an speciality of intermediate countries when its percentage weight is superior to the one of intermediate countries. In this case, the location quotient will be under 1.

In conclusion, the role of Catalonia in front of this double classification remains to be seen.

The column 2 of the following table shows the location quotient between Catalonia and the group of advanced countries. If this quotient is above 1, this will indicate that Catalonia has relative specialization in this branch, which will have, in relative terms, a superior importance here than in the group of advanced countries. The column 3 shows the location quotient between Catalonia and the group of intermediate countries: when it is over 1, it will mean that the branch that is being considered has a superior importance in Catalonia than in the group of intermediate countries.

A specific analysis of the figures permits to discover a quite atypical sectorial distribution of the Catalan industry, in which coexist fundamental sectors characteristic of advanced countries and intermediate countries. Catalonia proves a level of specialization above the lèvel of intermediate countries for the majority of industrial branches characteristic of advanced countries, and in many cases, the same or a superior level than the advanced countries (other industries, electric machinery, transport material, metallic transformed except machinery, chemical industries except final consumption products and final consumption chemical industries).

Paradoxically Catalonia has for some industrial branches, an specialization not only superior than the advanced, but even to the group of intermediate countries (textils, plastic products, paper, dressmaking).

As a conclusion, the Catalan industry includes characteristic productions of advanced countries but with still an important role played by the more traditional industrial activities present in its origin. We can say with A.Pugès that Catalonia can be described as an industrial advanced-next to the centre region.

Sectors range according to its specialization in the different kind of countries

1) Advanced countries specialization

	loc. quotient A.C./I.C.	loc. quotient C./A.C.	loc. quotient C./I.C.
professional material	4.7	0.1	0.5
no electric machinery	3.1	0.5	1.4
other industries	1.7	1.0	1.7
electric machinery	1.5	1.0	1.3
graphics arts	1.4	0.6	0.8
trasport material	1.2	1.0	1.3
metallic basic	1.1	0.4	0.4
metallic transf. exc. mach.	1.1	1.1	1.2
chem. ind. exc. final consum	1.1	1.1	1.3
chemical prod. final consum	1.0	1.1	1.1

2) Intermediate countries specialization

	loc. quotient A.C./I.C.	loc. quotient C./A.C.	loc. quotient C./I.C.
textile	0.4	3.1	1.3
leather and shoes	0.4	1.7	0.6
plastic products	0.6	4.0	2.4
foodstuff	0.7	1.0	0.7
mineral prod. no metall	0.7	0.6	0.4
furnitures	0.7	1.0	0.7
wood and cork	0.8	0.5	0.4
glass products	0.8	1.1	0.9
paper	0.9	1.2	1.1
dress making	0.9	1.2	1.1
drinks	0.9	0.5	0.4
rubber products	0.9	1.0	0.9

It would be interesting to analyse the changes in sectorial distribution of the industrial value addition tax between 1960 and 1973. In this period, the textils sector losses once and for all its predominance, being substituted by the metallic transformed sector.

1973	V.A.T.	%	% C/E	loc. quot.
foodstuff	22.448	8.2	18.9	0.67
textile	57.730	19.4	70.8	2,51
leather, shoes, dressmak	21.898	7.4	21.3	0.76
wood and cork	10.528	3.5	17.4	0.61
paper, graphic arts	21.233	7.2	30.9	1.10
chemicals	47.647	16.0	29.8	1.05
building material	14.520	4.9	21.9	0.79
basic metallurgy	5.580	1.9	6.6	0.24
metallic transformed	93.407	31.5	30.8	1.09
indust. undertaking	296.991	100.0	28.1	
total industry	355.517		25.2	

Source: Spanish National Income. 1973. Banco de Bilbao.

7. Structural changes in Catalan industry: the capital concentration and internationalization

Catalan industry has been traditionally characterized by a managerial fragmentation. The figures in 1984 don't show any important change in trends: more than 95% of industrial establishments didn't surpass the number of 50 workers that year. However, the percentage distribution of employment according to the size intervals of the industrial settlements makes evident the industrial weight of big companies. This weight is even increasing during the period 1970-84 in which the companies employing more than 500 workers passed from 14.6% to 18.2% of the total industrial labour force[13].

	1970		1984	
interval	**% number settl.**	**% occupation**	**% number settl.**	**% occupation**
1-5	55.9	8.11	62.5	9.0
6-10	16.46	7,50	14.4	7.1
11-50	22.62	29.99	18.2	26.0
51-100	3.61	15.34	2.5	11.7
101-250	1.56	14.50	1.7	16.5
251-500	0.48	9.91	0.5	11.5
+ 500	0.22	14.63	0.2	18.2

Source: 1970, INP. 1984, INSS

The concentration degree if we consider it as the weight of the 4 main companies on the whole of the labour force of the sector, is specially high in some branches: plastic material and man-made fibres (72%), transport material (54%), chemical products for agriculture (48%), rubber products (47%), electrical material and machinery (37%), various industrial undertakings (35%), basic chemical (33%), electronical (30%). The more traditional industry has, on the other hand, a concentration degree almost insignificant: spinning and textiles (4%), dressmaking (4%), metallic transformed except machinery (3%)[14].

The variable occupation, however, doesn't give a clear idea of the important process of concentration of capitals and oligopolistic organization of markets that has been given to Catalan industry since the expansive age of the sixties. This concentration can be better observed from the sales figures of big enterprises and the increasing oligopolistic organization of the majority of the important industrial branches. These tendencies are important, above all, in the most modern industrial branches, in which is mainly based the industrial growth and diversification of the expansion age.

Along with the concentration there has been a growing internationalization process of industrial capitals invested in Catalonia. It is worth reminding that the presence of foreign capital goes back to halfway through the XIXth century. At a first stage, investment concentrates in services and infrastructures activities: we find French capital in the gas street lighting (1841-1843) and in Barcelona Water-Supply Company (1867); British capital in railway network construction, initiated in 1848 with the Barcelona-Mataró line; French, British and German capitals at the origins of the Catalan electrical sector[15].

In the first decades of the present century began the fitting process of some big multinational companies: Siemens (1910), Pirelli (1917), Nestlé (1920) are some examples. The Franco's regime autarchy meant the rationalization of a good part of the foreign interests as well as the impossibility of new investments. However, from the Stabilization Plan (1959-60) and specially the Liberalizing Law of 28th December 1963, begins an intense foreign capital penetration phase in Spanish and Catalan industry. In 1973, at the beginning of the international economic crisis, the presence of foreign capital was already very important: that year, the 31.3% of big Catalan industries, that is , those with a sales volume over 500 million ptas (1973 ptas.), had presence of foreign capital; as a whole, these companies represented 39% of the total sales of big Catalan companies. The presence of foreign capital is specially important in some of the most dinamic sectors of Catalan industry. According to the data of the 1977 foreign Investment Census, the industrial branches having had more penetration of foreign capital were the following: plastic and man-made fibres, basic chemical, glass, pharmaceutic products, rubber, agricultural chemical, industrial undertakings, electrical machinery. In more traditional industrial branches, the presence of foreign capital is unsignificant.

A good part of the multinational companies introduced in the Spanish market or that use Spain as a production plant from where they can sell to a bigger European area, have settled in Catalonia because of the previous existence of a favourable industrial environment. In many cases, Catalonia has been the arriving point and from there started later a diversification of production in the whole land.

The diversity of location of multinational companies blurs the image of Catalonia as a supplier of consumption goods to the rest of the country.

8. The 1973 crisis: the consolidation of the industrial standard pattern.

As it is well known, the international economic crisis meant an enormous restraint in the industrialization process,but it didn't change the ruling tendencies of the expansive period. The process of industrial diversification has been going on, as well as the internationalization and concentration of capitals. The sectorial distribution of the V.A.T. in 1983 makes very clear this accentuation of the tendencies to diversification.

1983	V.A.T.	%	% C/E	Location quot.
foodstuff	190.175	13.5	21.5	0.83
textile & dressmaking	298.461	21.2	38.0	1.47
wood & coork	49.737	3.5	18.6	0.71
paper, graphic arts	102.961	7.3	31.2	1.21
chemical	162.268	11.5	37.9	1.47
building mat.	91.754	6.5	20.2	0.78
mineral & metalls	12.711	0.9	3.8	0.14
met. prod. & machin.	309.833	22.0	25.5	0.98
transport material	79.829	5.7	19.8	0.77
other	110.889	7.9	32.1	1.25
ind. undertakings	1.409.158		27.3	
total industry	1.790.239		23.6	

Source: Spanish National Income, 1983. Banco de Bilbao.

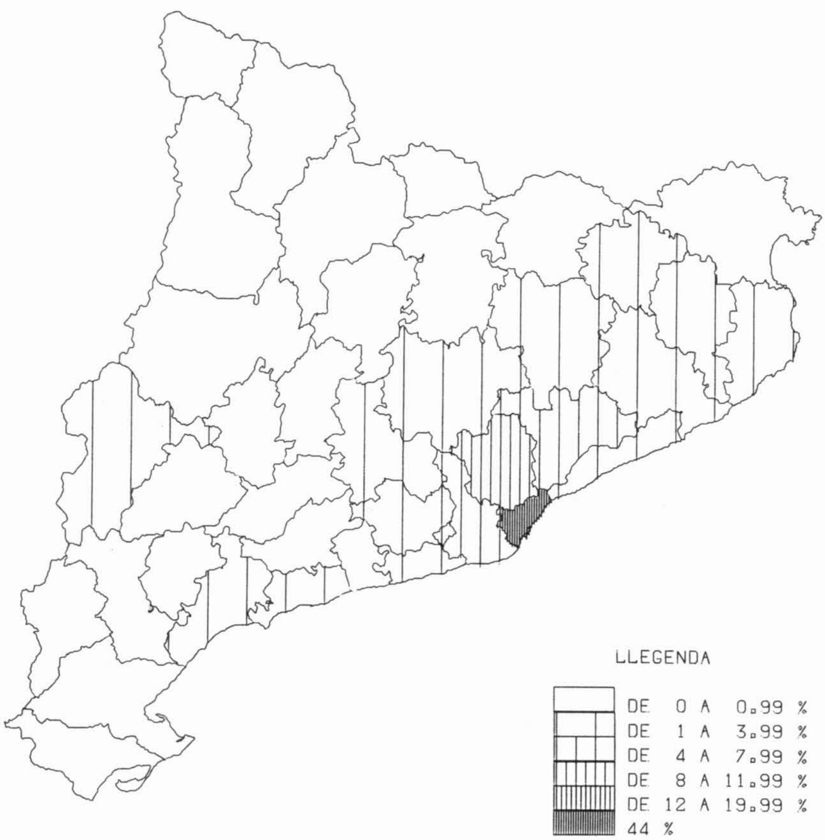
Despite the new tendencies of industrial policy proposing a pattern of industrialization based in small local initiatives, the truth is that the crisis has caused a reinforcement fo big companies and international capital. The average annual investment of foreign capital in Catalonia was, between 1974-79, 40% higher than in the period 1969-73. The economic crisis meant an almost total atony where inner investments were concerned, but it didn't affect foreign investments. They increased their hold on Catalan and Spanish industry.

9. Industrial location tendencies in the last 25 years

The sectorial diversification, the structural changes and later, the economic crisis, had a strong influence on the configuration of the industrial scene in Catalonia. If we refer to location tendencies, we must distinguish very clearly between the expansive period 1960-1973 and the crisis period starting in 1973 to the present day.

Between 1960 and 1973 there was a significant growth of the Barcelona metropolitan area role as a big Catalan industrial concentration. Excluding some cases, the industry was settled near the aglomeration economies generated by the Barcelona area. At the same time, the crisis of the textile sector meant the loss of the industrial weight of the old industrial regions, which were specialised in this sector. In this period, the characteristics of the industrial settlements in region I are totally metropolitan; the areas near the Barcelonès suffer an important growth; there are many transfers from the capital city to the outskirts metropolitan concentrations. This process of relief of industrial pressure in the city will be continued during the period of crisis. In the period 1964-75 the metropolitan area passed from 71.5 to 75.7% of the total Catalan industrial labour force. The economic crisis produced, however, a decrease of its industrial weight, reduced to a 72.1% in 1984.

REGIONAL DISTRIBUTION OF THE INDUSTRIAL WORKERS



As it's been said before, in parallel with the growth of the industrial weight in the metropolitan area, came a stagnation and lately a clear decrease of the inland industrial regions. In 1964 the regions of Berguedà, Bages and Ripollès assembled 7.5% of the Catalan industrial labour force; in 1975 such weight had reduced to 5.2%. The economic crisis only accentuated the regression of the traditionally textile regions; in 1984 the emploуement of these three regions together represented only 4.1% of the Catalan total. Short, this crisis had added problems to a group of areas with an underveloped industrial structure.

An important change in Catalan industrial scene was the foundation in the'60s of the petrochemical complex in Tarragona, a completely foreign plant where capital is concerned and where the traditional Catalan mechanisms of industrialitzation are concerned. However, the Tarragona petrochemical complex hasn't had any significant multiplying effects, and there hasn't been later any significat process of industrial diversification.

The economic crisis in the'70s introduced some new elements in the tendencies of industrial location in Catalonia but without any substantial changes in centralised pattern. Actually, in the years of crisis the industrial investments have been minimal, thus not permiting any important transformations in the territorial pattern. The economic crisis produced an important deindustrialization in both metropolitan and inland areas, with a considerable rise of industrial unemployment.

Among the new elements in territorial organisation of the Catalan industry stand out the consolidation of the coastal axis and a certain local industrialization in inland areas with a basically rural economy. The construction of the Motorway A-2 had descentralization effects. They can be observed specially in the areas of La Selva and El Gironès, with the construction of industrial estates with a rapid process of employment in spite of the coincidence, at least partially, with the years of economic crisis. The industrial weight of these two areas increased lightly in the period 1975-1984, passing from 3.1% to 4.0% of the total in Catalonia. The coastal axis becomes the descentralization element of Catalan industrial population, but agravates even more the disparity between the rich litoral and the inland areas.

The years of crisis made evident an endogenous industrialization pattern produced in some inland areas with a dinamic agricultural sector. The industrialization is based above all in the agricultural foodstuff sector, one of the most developed in the past years, despite the crisis. As a prototype of endogenous industrialization, we can take the areas of Segrià, Urgell and Segarra, which between 1975 and 1984 passed from 1.17% to 2.2% of Catalan industrial labour force.

Industrialization along the coastal axis and endogenous industrialization inland have not altered in a significant way the territorial pattern of Catalan industry, concentrated basically in the Barcelona metropolitan area. The new descentralization tendencies, however, aim at a more rational occupation of the territory in order to avoid the aglomeration deseconomies of the big industrial concentrations, and to stop, at the same time, the depopulation process of the rural areas. A significative indicator can be the relation among the new jobs created in the periods 1963-1972 and 1972-1981. Only six areas have created more jobs in the crisis years than in the expansive years; Gironès, La Selva, Segrià, Urgell, Alt Camp and Baix Camp. The six areas confirm the mentioned descentralization tendencies: coastal axis, industrialization in areas with dinamic agricultural sector[16].

10. The industrial location and the contradictions of the present Catalan territorial policy

The recovery of the autonomic institutions in Catalonia made possible to begin a territorial policy properly Catalan. In the last years, an important group of documents concerning the territorial policy has been created: Instructions and Outlines of the Territorial Plan in Catalonia (1980), Highlands Plan (1983), Territorial Policy Plan (1983). This recent legislation shows the aim of redress of the majority of the work done in territorial organization in the last times. The law of territorial policy declares in an explicit way the convenience of a new territorial pattern able to achieve a relief of pressure in industrial areas and to stop the growing dissication of the inland depressed areas. A condition to this redress is a new distribution of economic activities, that is, a more descentralised industrial location pattern.

However, that spirit in legislation defers from the actual performances carried out in the last years. In fact, the dramatic problem of unemployment in industrial areas has lead to a policy of reindustrialization in Barcelona metropolitan area.
The qualification of Area of Urgent Reindustrialization for the industrial belt around Barcelona is an example of this tendency, and another one is the creation of the Technological Park in El Vallès, by the Barcelona Metropolitan Corporation.

Despite the possible convenience of such measures, we wonder if a historical oportunity of attaining a territorially balanced country is not being wasted.

Notes

[1] Information from Spanish National Income 1983, Banco de Bilbao. It is included all the secondary activities, except building.

[2] Between 1718 and 1787, the population of Catalonia increased from 406,274 to 899,532 inhabitants. See VILAR, P.: *Catalunya dins l'Espanya moderna*, Barcelona, Ed. 62, 1966.

[3] Cheap cotton cloth. At the beginning, cloth was imported, but quickly calico was weaved in Catalonia.

[4] See GRAU, R. and LÓPEZ, M.: *Empresari i capitalista a la manufactura catalana del segle XVIII. Introducció a l'estudi de les fàbriques d'indianes*, a «Recerques», núm.4, pàgs. 19-57.

[5] See VILÀ-VALENTÍ, J.: *L'allunyament del món rural. L'inici de la indústria moderna*, a *El món rural a Catalunya*, Barcelona, Curial, 1973.

[6] See FLOS, A.; GASÒLIBA, C. i SERRA, N.: *La indústria a Catalunya*, Barcelona, ed. Vicens Vives, 1978

[7] See VILÀ-VALENTÍ, J.: op. cit. pàg. 156

[8] The population in Catalonia the year 1936 was 2.920.786 inhabitants

[9] The «Regió I» is, approximately, the metropolitan area of Barcelona. Regió I is organized by the «comarques» (countries) of Baix Llobregat, Barcelonès, Maresme, Vallès Occidental and Vallès Oriental.

[10] Location quotien is the relation

$$\frac{IAC}{IAE}$$

IAC is the percentage weight of sector A in Catalonia
IAE is the percentage weight of sector A in Spain

[11] See PUGÈS, A.: *Dinàmica de l'especialització industrial catalana*, Barcelona, Servei d'Estudis Banca Mas Sardà, 1977.

[12] BUSOM, I. et alii: *La especialización de la industria manufacturera catalana*, Barcelona, Servei d'Estudis Banco Urquijo, 1979, pàgs. 42-43.
[13] It is included all the secondary activities.
[14] BUSOM, I. et alii: op. cit. pàg. 377
[15] For the presence of multinational capital in the industry of Catalonia, see GRANELL, P.: *Les empreses multinacionals i l'economia catalana*, a AA.VV.: *L'economia catalana d'avui i demà*, Barcelona, Servei d'Estudis Banco de Bilbao, 1983.
[16] See SANTACANA, M.: *La indústria manufacturera catalana després de la crisis*, a AA.VV.: op. cit.