
Industrialization in Spain and Italy (1860-1914)

Rosa Vaccaro
University of Rome

Italy and Spain were both Mediterranean countries which became involved in the process of industrialization late in the day, and their development reveals a number of common characteristics: a relative shortage of capital which often necessitated recourse to foreign finance, a low level of domestic demand which forced industrialists to struggle to obtain from their governments protection against foreign competition, and a growing geographical concentration of their industries. Yet in terms of output, the achievements of the two countries differed considerably. By 1960, for example, Italy's national income a century after Unification was 25,285,207 million dollars, with a *per capita* income of 501.33 dollars - whereas in Spain the figures were, respectively, 8,242.72 million and 270.87 dollars¹.

As is well known, between 1945 and 1960 Italy experienced a period of rapid economic growth, marked in particular by the expansion of its industrial sectors which for the first time equalled the value added earned by agriculture. Spain did not experience a similar expansion, however, and continued to remain for some time a largely traditional economy - as the figures on national and *per capita* incomes would suggest. This might give grounds for believing that Italy's advantage over its Mediterranean neighbour derived from the economic 'miracle' and from the different policies adopted by the two governments in the post-war years. But while these were important factors which deserve closer examination, the origins of the gap had more distant roots. As we shall attempt to demonstrate, the divergencies in the develop-

¹ United Nations, *Statistical Yearbook 1962*, UN 1963, pp. 487-488.

ITALY
THE TEN LEADING COMMODITIES IN EXPORT-IMPORT TRADE

Imports			Exports		
	Values in lire	% of total		Values in lire	% of total
Cotton textiles etc.	135,746,890	16.53	Raw and dyed silks	233,571,252	48.76
Colonial Goods	110,768,023	13.49	Mineral waters, drinks, oil	65,621,318	13.69
Silk cocoons	86,780,738	10.57	Cereals, flour, pasta	30,832,250	6.43
Cereals, flour, pasta	64,756,660	7.88	Colonial goods	18,412,737	3.84
Metals	52,230,774	6.36	Timber	17,836,867	3.72
Wool textiles	47,942,253	5.83	Hardware	17,270,882	3.60
Mineral waters, drinks, oil	38,769,944	4.72	Hemp linen & manu- factures	14,594,009	3.04
Timber	36,001,511	4.38	Livestock	13,692,342	2.85
Hardware	32,265,660	3.92	Fruit, seed, vegetables	13,479,995	2.81
Wool	28,102,459	3.42	Stones, clear, fossils	7,158,035	1.49
Total imports	821,511,454		Total exports	479,167,097	

SPAIN
THE TEN LEADING IMPORT-EXPORT COMMODITIES

Imports			Exports		
	Values in reales ²	% of total		Values in reales	% of total
Colonial goods	177,988,720	8.81	Wines	334,975,490	26.39
Raw cotton	144,402,750	7.14	Flour	145,242,460	11.44
Wool textiles	75,353,026	3.73	Metals	132,536,276	10.44
Timber	56,469,414	2.79	Silver coins	95,030,541	7.48
Silk cocoons	55,413,580	2.74	Dried fruits	88,828,195	6.99
Salt cod	50,985,000	2.52	Corn, vegetables, seeds	61,207,600	4.92
Hemp	50,199,700	2.48	Olive oil	54,126,120	4.26
Cotton textiles	42,572,591	2.10	Cork (for bottles)	32,188,184	2.53
Leather	39,443,710	1.95	Washed wool	30,098,749	2.37
Iron of all kinds	38,489,321	1.90	Minerals of all kinds	25,682,901	2.02
Total imports	2,020,593,787		Total exports	1,269,500,460	

Sources: For Italy: Ministero delle Finanze, Direzione Generale delle Gabelle, *Movimento Commerciale dell'Italia nell'anno 1861*, Firenze 1863, pp. 282-283.

For Spain: Ministerio de Hacienda, Dirección de Aduanas, *Estadística General del Comercio exterior de España en 1861*, Madrid 1862, p. 352 et seq.

² The *real*, the old money of account, was equivalent to .25 *pesetas*.

ment of the two countries were already substantially evident by the time of the Giolittian era, the years of Italy's authentic Industrial Revolution.

At the time of Unification, however, the level of development of the two economies was largely comparable. Although there are no aggregate statistics available on gross national product, investment volumes etc., for Spain to demonstrate this in detail, an analysis of the structures of the foreign trade of the two countries does provide some important indications of the situation³. If we first consider the import figures, we see at once that textiles and textile fibres formed a major component (indicating the absence of manufacturing industry) as well as colonial goods, whereas those import commodities which would reveal the presence of either heavy or mechanical industries (e.g. coal, pig-iron, steel) were virtually non-existent. Turning to the exports, the preponderance of primary materials (silk cocoons, minerals and metals) and agricultural products is at once apparent⁴. These data reveal that the two economies were still essentially dependent on agriculture, with as yet only nascent textile industries which were devoted mainly to spinning cotton (in Spain) and silk (in Italy).

The development of the principal industries of the two countries after 1860 will reveal the progress made by the two economies in the period under consideration. We shall examine first the development of the cotton industry both because of the important position which this industry was to attain in both economies and because the spinning and weaving of cotton were amongst the first operations to be modernised, so creating an industry in the modern sense.

The first industrial nucleus worthy of the name in Spain was the Catalan cotton industry. It was the formation and expansion of this industry that changed the whole economic and social structure of the region, making it the most dynamic on the Iberian peninsula. Catalonia was able to retain this primacy until the founding of the Biscay steel industry. An indication of the importance of the Catalan cotton industry is given by the fact that in 1861 the share-capital of the 46 joint-stock companies operating in Spain in the secondary sector amounted to 383,943,606 *reales* — of these 14 were textile companies in Catalonia, with a share-capital of 122 million *reales*. The largest was the *España Industrial* company of Barcelona with share-capital of 50 million *reales*.⁵ The importance of the Catalan cotton industry continued throughout the period. In 1915, out of a total of 61,352 tax payers, 1,633 drew

³ The product groupings of the original series have been separated and reorganised to distinguish raw materials from manufactured goods and make the data for the two countries comparable.

⁴ Since the metals listed on the Spanish data were hardly worked, they were really only ores and minerals.

⁵ Junta General de Estadística, *Anuario Estadístico de España, 1861*, Madrid, 1863, pp. 571-78.

their income from the cotton industry and paid taxes to the value of 1,806,237 *pesetas* — which amounted to 17.71% of all tax imposed on incomes drawn from manufacturing industry raised by the Spanish state.⁶

At the time of Unification, the Italian cotton industry had hardly got under way, but the silk industry was well established. In fact, imports of cotton manufactures were high, indicating that the Italian industry was unable to meet domestic demand — for silk, on the other hand, large quantities of raw materials were imported but virtually no finished products. But in Italy, too, the cotton industry was soon to prove one of the leading sectors of the Industrial Revolution and developed rapidly, quickly overtaking the other textile industries. By 1878, the situation of textile manufacturing in Italy was as follows:

	Companies	No. employed	H.P.	Workers per company
Silk	3,929	200,393	10,902	52.33
Wool	560	24,576	7,591	43.88
Cotton	627	52,363	12,838	83.51
Others	1,156	29,315	3,335	25.36
Total	6,172	306,666	34,666	49.68

TREMELLONI, ROBERTO: *L'industria tessile italiana*, Torino 1937, p. 84.

These figures show that while the expansion of cotton manufacturing was rapid, its capacity for technical absorption was even greater — as is indicated by the ratios of numbers of employees/horse-power and the numbers of employees per factory. The rise of the cotton industry continued, and by 1912 it was employing 220,000 workers, with 116,000 looms.⁷ For a comparison of the output of the cotton industries of the two countries, the best index is the quantity of raw cotton imported.

Both the tables and the graph of cotton imports reveal that in 1860 the capacity of the Spanish textile industry was double that of Italy, but by the outbreak of the First World War the position had been reversed. Until 1880 the Spanish were in the lead, but then the Italian industry began to expand very rapidly, slowing down only during the years 1890-4 when the Italian economy suffered a heavy recession. But the gap was most clearly evident in the years 1910-1913, when Italy's imports of raw cotton rose from 147,000 to 201,900 thousand tons, whereas in Spain the figures were 72,608 to only

⁶ Ministerio de Instrucción Pública y Bellas Artes, Dirección General del Instituto Gráfico y Estadístico, *Anuario Estadístico de España, Año 11, 1915*, Madrid, 1916, p. 145. (The data do not include the Basque region which had a separate tax system).

⁷ R. TREMELLONI, *L'Industria tessile in Italia*, Torino, 1937, p. 84.

TABLE 2

IMPORTS OF SAW COTTON

Years	Italy		Spain	
	Quantity (1000 tons)	Index 1901 = 100	Quantity (1000 tons)	Index 1901 = 100
1861	12,400	9	26,570	33
1865	2,800	2	14,570	18
1870	14,700	10	26,804	34
1875	18,600	13	33,722	43
1880	47,300	35	44,778	57
1885	78,600	58	48,803	62
1890	101,700	75	49,838	63
1895	107,500	79	71,428	91
1900	122,700	90	66,200	84
1905	165,100	122	76,373	97
1910	174,600	129	72,608	92
1913	201,900	149	88,212	112

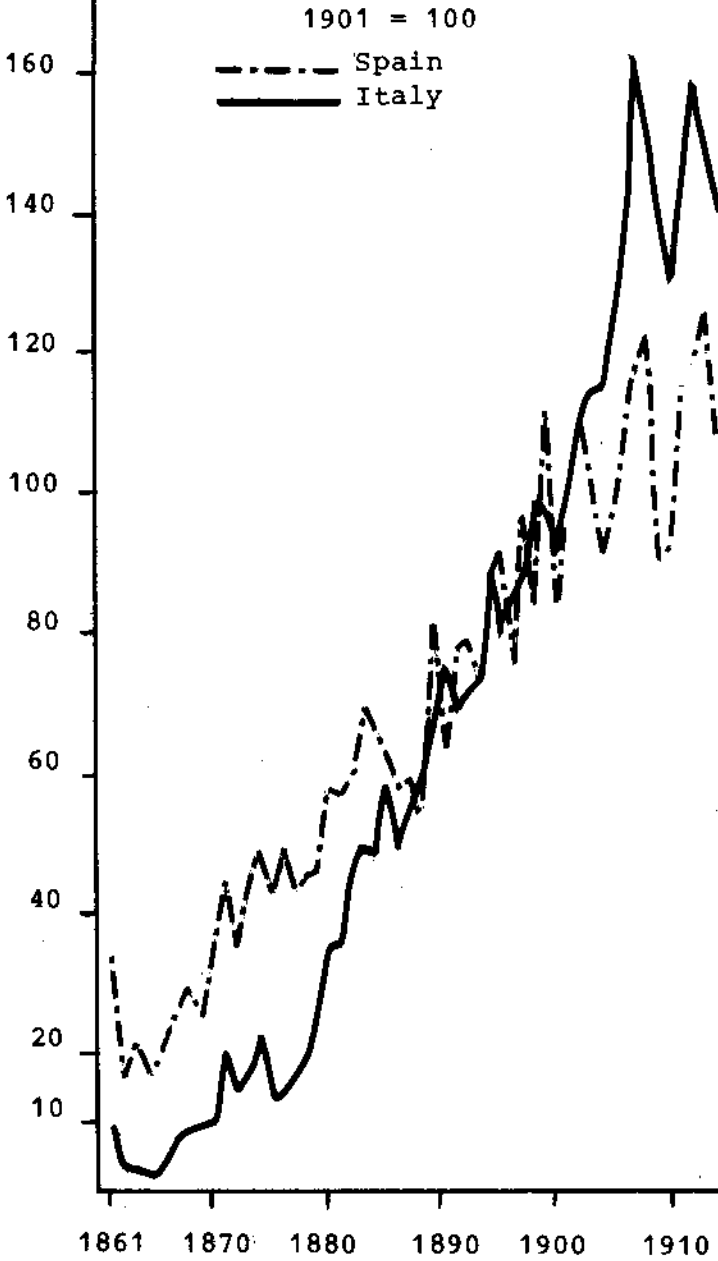
For Italy, ISTAT: *Sommario di Statistiche Storiche Italiane, 1861-1955*, Roma, 1958, p. 159.
 For Spain, NADAL JORDI, *El fracaso de la Revolución Industrial en España*, Barcelona, 1975, Apéndice 7.

88,242 thousand tons. In other words, Italian raw cotton imports rose by 49% and those of Spain by only 12%; and whereas at the beginning of the century the Italian imports were 1.7 times greater than those of Spain, by 1914 they were more than twice as much (2.28).

The iron and steel industry was another major protagonist of the Industrial Revolution, in view of its role in the development of transportation and the engineering industries. In both Spain and Italy an iron and steel industry organised along modern lines was late in appearing, since both were relatively poor and the capital required for such ventures was not available. This also meant that iron and steel in both countries missed its great historical opportunity, the construction of a railway network, which as a result had to be effected largely with imported materials. However, in both countries iron and steel began to be produced from about 1886. The Spanish industry derived its capital and incentive from the iron-ore exports of the Basque region. The bourgeoisie of the Basque region used the profits drawn from mining to create a major industrial and banking complex which soon became one of the pillars of the Spanish economy. In Italy, on the other hand, the main initiative came from the state, with capital provided both by the government and the banking system. The Italian ruling class looked on the formation of a na-

GRAPH 1

Index of raw cotton imports



tional iron and steel industry as an essential component of the country's economic and political independence. For this reason the industry was not only protected and encouraged, but the state also intervened directly in its creation — as in the case of the Terni steel works.

The progress of the industry is best revealed by the output of steel. In the two countries, the figures were as follows:

TABLE 3
STEEL PRODUCTION

Years	Italy		Spain	
	Quantity (1000 tons)	Index, 1901 = 100	Quantity (1000 tons)	Index 1901 = 100
1881	3,630	2.9	(32,639)	26.9
1885	3,382	2.6	(41,162) ^s	34
1890	107,676	81.7	63,010	52.0
1895	50,314	38.8	56,800	46.9
1900	115,887	89.7	148,460	122.6
1905	270,199	209.1	291,420	240.8
1910	732,000	566.4	269,930	223.0
1914	911,000	704.9	355,900	294.1

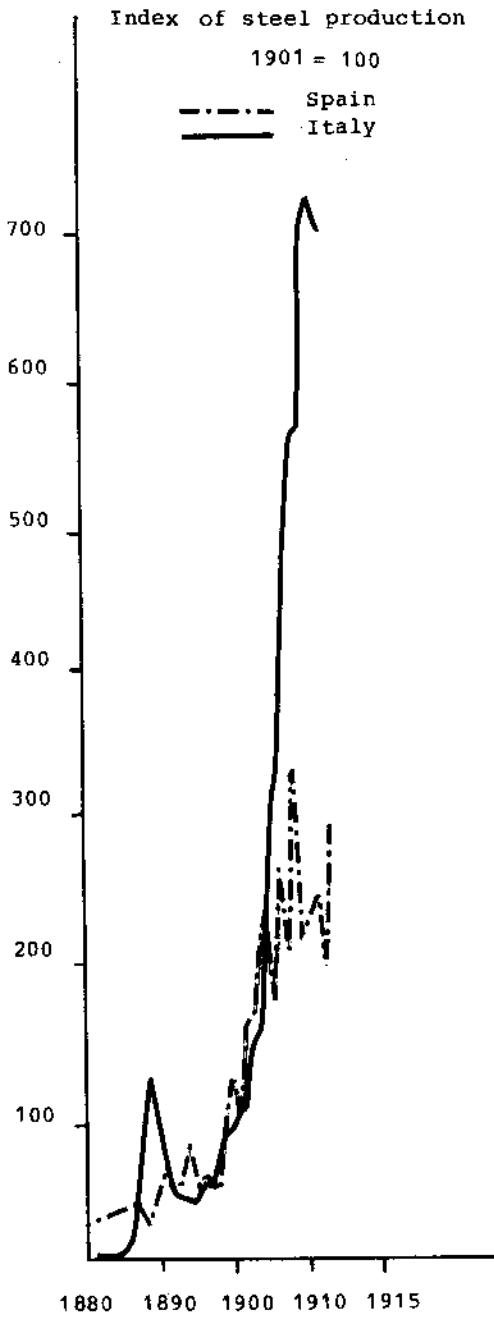
For Italy, ISTAT: *Sommario di Statistiche Storiche Italiane, 1861-1955*, Roma, 1958, p. 129.
For Spain: NADAL JORDI: "La economía española 1829-1931", in *El Banco de España: Una Historia Económica*, Madrid 1970, pp. 398-99.

A comparison points to two conclusions: during the XIXth century the volume of output in the two countries was much the same (except for the years 1887-1891 when the opening of the new Terni works in Italy affected Italian output), whereas after 1901, and more especially after 1905, there was a growing divergence between the two. This was not because Spanish steel production was undergoing recession or standing still — in fact, output increased by 30%. The cause lay in the really exceptional spurt in Italian output after the turn of the century, with production increasing by 700% — far faster than the expansion of the Spanish industry. By 1914 Italian steel output was 2.55 times greater than Spain's.

In addition to cotton and steel (the two products which best typify the type of industrial development experienced by the two countries), another

^s The values in brackets have been extrapolated.

GRAPH 2



indicator of industrial development in the period is provided by coal consumption, the primary fuel in the age of the steam engine.

COAL CONSUMPTION⁹

TABLE 3

	Italy		Spain	
	Quantity (1000 tons)	Index 1901=100	Quantity (1000 tons)	Index 1901=100
1861	273.73	5.17	725.39	15.3
1865	493.49	9.32	837.60	17.7
1870	1,006.47	18.90	1,256.33	26.56
1875	1,176.55	22.23	1,176.23	24.86
1880	1,977.07	37.35	1,763.38	37.28
1885	3,187.81	60.22	2,255.26	47.68
1890	4,773.31	90.18	2,885.96	61.01
1895	4,631.82	87.50	3,464.25	73.24
1900	5,452.22	103.00	4,506.19	93.26
1905	6,877.24	129.93	5,419.52	114.58
1910	9,940.67	187.80	5,915.94	125.07
1913	11,558.79	218.38	6,881.54	145.48

For Italy, ISTAT: *Sommario di Statistiche Storiche Italiane, 1861-1955*, Roma, 1958, pp. 123 e 160.
 For Spain, NADAL JORDI: *El fracaso de la Revolución Industrial en España*, Barcelona, 1975, Apéndice 5.

As previous data would have lead us to believe, coal consumption followed a pattern similar to that of industrial production. By 1913, Italy enjoyed a clear lead, which had first appeared in 1880 but was only to reach substantial proportions in the Giolittian period. In 1900 Italian coal consumption was 121% greater than Spain's, and by 1914 the lead had risen to 168%.

In the early years of the XXth Century another major industrial sector, the electrical industry, came into being. Large scale exploitation of electrical energy not only made possible the further development of new services and industries such as lighting and urban transport, but offered unexpected opportunities to industries hitherto rooted in the structures of the economic growth of the previous century — notably textiles, steel and engineering. For those countries like Italy which had no coal, electricity had an even greater importance, and in both Italy and Spain the production of electrical energy attracted great public interest and expanded rapidly in the first 14 years of the century.

⁹ Since exports were negligible, consumption is calculated by adding domestic production to imports.

TABLE 4

PRODUCTION OF ELECTRICAL ENERGY

Years	Italy		Spain	
	Millions of kW	Index 1901 = 100	Millions of kW	Index 1901 = 100
1901	220	100	90	100
1905	550	250	230	255
1910	1,500	681	357	397
1914	2,575	1,700	533	590

For Italy, ISTAT: *Sommario di Statistiche Storiche Italiane*, Roma, 1958, p. 155.

For Spain, Instituto Nacional de Estadística: *Síntesis Estadística*, Madrid, 1955, p. 155.

The data on the development in the output of electrical energy in the two countries once again show the same pattern as the previous series — and Italy again had the higher growth rate. In 1901 Italy's output was twice that of Spain, and although the latter increased six-fold by 1914, Italy's was now five times greater.

The other great industry of the future which expanded rapidly in the years before the First World War was engineering. In Italy the expansion was particularly pronounced in the Giolittian period, which saw the creation of an impressive structure: FIAT was founded at Turin in 1899, and Olivetti in 1908 at Ivrea. The expansion is illustrated by the fact that 2,918 motor cars were exported in 1911¹⁰. The Spanish engineering industry also benefited from the European economic boom of these years, but its output never reached that of Italy in terms either of quantity or quality. There are no detailed figures which would allow us to make a precise comparison between the development of the engineering industries of the two countries, but there can be little doubt of the superiority of the Italians. In Italy, for example, the share-capital of the companies operating in the cotton textile sector was 399 million lire, that of the companies interested in engineering 414.5 million lire,¹¹ while in Spain, the taxes paid by the cotton industry were three times greater

¹⁰ Banca Commerciale Italiana, *Cenni Statistici sul movimento economico dell'Italia*, Milan, 1911, p. 147.

¹¹ S. GOLZIO, *L'industria dei metalli in Italia*, Torino, 1942, p. 42.

¹² Ministerio de Instrucción Pública y Bellas Artes, Dirección General del Instituto Geográfico y Estadístico, *Añuario Estadístico de España*, *op. cit.*, p. 145. The figures again omit the Basque provinces because of their separate tax system. But even allowing for this, and the fact that in the years a major ship-building industry was developing around Bilbao, the results would not be very different.

than from engineering industries,¹² which illustrates the scant influence of engineering in the Spanish economy, and hence also its inferiority to the Italian engineering sector.¹³

Chemical industries also expanded rapidly in the 15 years before the Great War. Although there are no available figures on chemical output for Spain, there is no reason to believe that a more detailed comparison would alter the general conclusion that in neither country did the chemical industry have any significant role. In 1911 the value of the total output of the chemical industry was only 0.81% of Italy's national income¹⁴, and in 1915 the Spanish chemical industries contributed only 6.7% of the total tax revenue from manufacturing industry.¹⁵

After comparing the outputs of the principal industries of the two countries, let us now turn to their foreign trade structures. Overall import-export volumes developed as follows:

TABLE 5
TOTAL FOREIGN TRADE—IMPORTS + EXPORTS

Years	Italy		Spain	
	Millions of lire	Index 1901 = 100	Millions of pesetas	Index 1901 = 100
1861	1299	42	822.4	49
1865	1523	49	728	43
1870	1640	53	921	55
1875	2229	72	1022	61
1880	2291	74	1362	81
1885	2411	77	1762	105
1890	2215	71	1879	112
1895	2225	71	1643	98
1900	3038	98	1738	104
1905	3710	119	2013	120
1910	5311	171	1970	118
1913	6143	198	2388	143

For Italy, ISTAT: *Sommario di Statistiche Storiche Italiane*, 1861-1955, Roma, 1958, p. 158.

For Spain, SARDÀ, JOAN: *La política monetaria y las fluctuaciones de la economía española en el siglo XIX*, Barcelona 1970, p. 343.

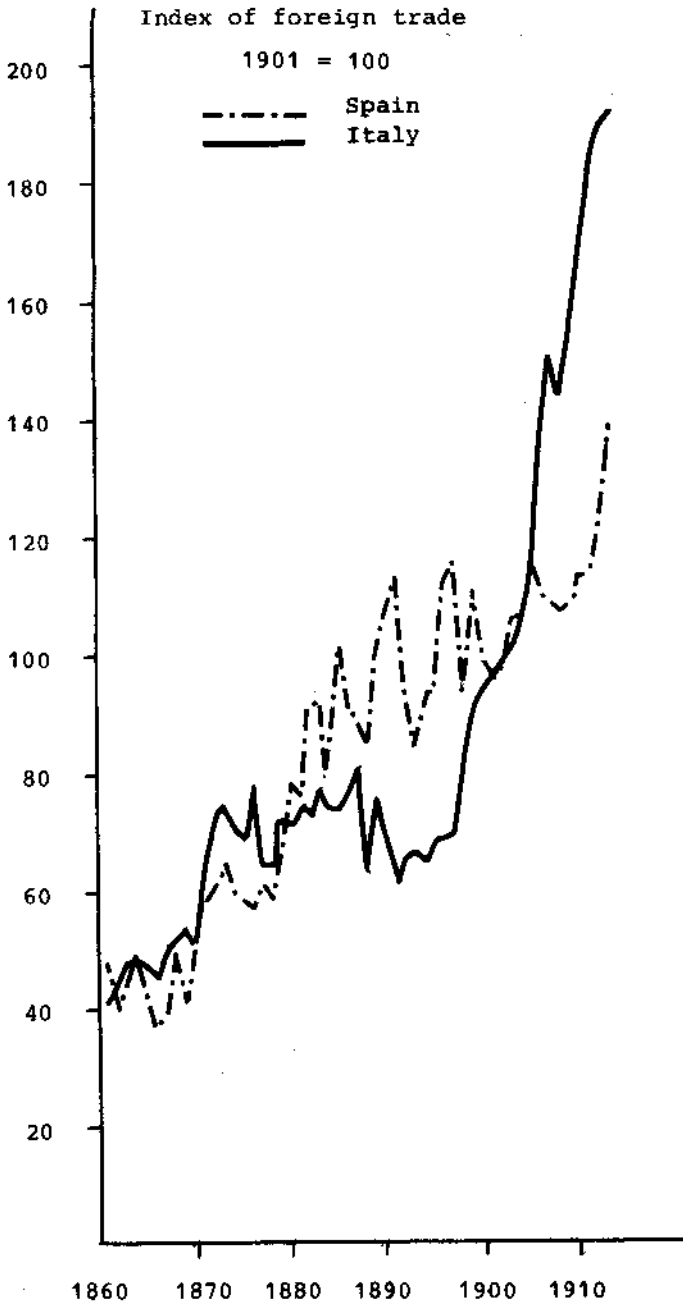
Once again, the more rapid development of the Italian economy is evident. After the difficult years of 1884-94 when the volume of Italian imports and

¹³ In 1914 the productive capacity of Italy's cotton industry was much greater than that of Spain.

¹⁴ Banca Commerciale Italiana, *op. cit.*, p. 143.

¹⁵ *Anuario Estadístico de España* (Madrid, 1916) *cit.*, p. 145.

GRAPH 3



exports even fell slightly (from 2,411 million lire in 1884 to 2,122 millions in 1894) the volume of foreign trade increased considerably — between 1900 and 1914 by as much as 98%. Spain's foreign trade also expanded, but at a much slower rate: 43%.

But if, as before, we look at the structure of this trade the same picture emerges:

TABLE 6
THE TEN LEADING PRODUCTS (BY VALUE)
IN IMPORT-EXPORT TRADE (1914)

ITALY					
	Imports			Exports	
	Values in lire	% of total		Values in lire	= of total
Coal	366,681,256	12.73	Raw spun silk	283,562,400	12.79
Raw Cotton	316,512,200	10.98	Cotton textiles	153,895,283	6.94
Corn	224,939,035	7.80	Silk textiles	108,536,512	4.89
Machinery	112,276,643	3.89	Citrus fruits	86,606,257	3.90
Timber	109,435,664	3.80	Wines	85,813,917	3.87
Raw and spun silk	71,195,200	2.47	Raw hemp	67,370,835	3.03
Fish	55,496,722	1.92	Cheese	66,265,950	2.98
Wool	55,390,904	1.92	Dried fruit	65,647,492	2.96
Wool textiles	50,189,435	1.74	Rubber products	61,334,830	2.76
Hides	49,582,858	1.72	Eggs	52,529,880	2.37
Total imports	2,882,050,150		Total exports	2,217,800,726	

SPAIN					
	Imports			Exports	
	Values in pesetas	% of total		Values in pesetas	% of total
Raw Cotton	126,483,276	11.3	Metals ¹⁶	112,513,183	11.93
Wheat	92,974,957	8.3	Minerals	106,838,394	11.24
Machinery	97,403,835	7.1	Wines	79,848,028	8.46
Coal	78,106,507	7	Fresh fruit	73,667,259	7.81
Chemical products	50,290,689	4.5	Cosk	45,389,425	4.82
Timber	48,406,512	4.3	Oil	44,810,733	4.75
Salt Cod	37,078,202	3.3	Cotton textiles	42,957,169	4.55
Iron and Steel	34,102,643	3	Dried fruits	41,662,669	4.42
Cereals	34,064,263	3	Wool textiles	34,518,852	3.66
Coffee	26,784,467	2.4	Food Reserves	33,523,170	3.55
Total imports	1,110,865,919		Total exports	943,090,553	

For Italy, Ministero delle Finanze: *Statistica del Commercio speciale di importazione ed esportazione*, volume IV, Roma, dicembre 1914, pp. 285 et seq.

For Spain, Ministerio de Hacienda: *Dirección General de Aduanas, Estadística General del Comercio exterior de España en 1914*, Madrid 1915, pp. XVI et seq.

¹⁶ Again these were mainly ores and minerals.

For Italy, coal had become the principal import item, followed by raw cotton, while silk imports had fallen down the ladder and cotton manufactures had vanished: in Spain, however, cotton imports retained first place, with coal still only in fourth position.¹⁷ For exports, cotton and silk now held second and third place in Italy, but in Spain cotton and woollen textiles held only seventh and ninth places. In general, then, the comparison of the structures of the foreign trade of the two countries between 1860 and 1914 reveals that Italy had expanded and diversified her industries on a much greater scale than Spain. To summarise what has been said so far we can conclude that: a) Although in 1860 the Italian and Spanish economies were at very comparable stages of development, with Spain even enjoying the lead in certain sectors, by 1914 the Italian economy had attained a much higher level of development than the Spanish; b) Italy's lead began to increase rapidly in the years 1900-1914, in the Giolittian period. The reason for this was not that the Spanish economy was stagnating or suffering from recession, but rather because the Italian economy in this period experienced a very rapid growth rate which allowed her to draw closer to the other European countries and break away from the constraints that still held back her Mediterranean neighbour.¹⁸

2.

The analysis of the causes which lay behind this divergence proves more difficult than the first part of this study. The concrete eloquence of the figures has to give way to less certain conjecture. The economic and social progress of a nation is affected by a vast range of factors and circumstances with the result that it is never easy to identify which had the greatest impact. In attempting to compare the progress of two great nations all these problems are doubled. But allowing for the limits imposed by such difficulties, it still appears possible to relate the different social and economic development of the two countries to the following causes: first, the different structure of the market in Spain and Italy; second, the different economic policies adopted by the two countries (especially the different attitudes of the ruling classes towards industrial expansion); thirdly, the role of the banks, which in Italy were agents of a powerful 'macro-impulse' but not in Spain.

¹⁷ It might be argued that machine imports were relatively higher in Spain, but this is irrelevant since the total quantity of machine imports in Italy was much higher (respectively 768,343 and 502,786 Qm).

¹⁸ We have not taken account of the aggregate values (i.e. national incomes, consumption and investments) for two reasons: for Spain there are no such statistics before 1900, and once they do appear it is unclear whether they were based on comparable criteria. We therefore decided to use the more specific and comparable figures.

Looking first at market structures, we are again confronted by the difficulty of finding homogenous data for the two countries on which to base detailed comparison. This has led us to use data which are not always the most suitable, but which still enable us to illustrate factors which typify particular situations. It is also difficult to give any precise meaning to the term 'market structure', or to establish its determining parameters and components. We have therefore decided for the purposes of the present analysis to examine the respective capacities of the two economies for absorbing and stimulating a process of sustained industrial expansion. To do this we have drawn primarily on demographic data and on an analysis of agricultural productivity in different areas of the two countries. Both of these factors have a determining influence on the development of demand in an almost exclusively agricultural economy — as was the case for both countries in 1860.

Population increase played a major role in the Industrial Revolution, and it is generally agreed that the first stages of industrialization were accompanied by a marked growth in population, which was in turn consolidated by improvements in productivity. The first fact to establish is that in 1860 Italy had a larger population than Spain: whereas Spain had a population density of 31.03 inhabitants per km²,¹⁹ Italy had 83.97 per km² — nearly three times greater.²⁰

During the XIXth Century the populations of Italy and Spain expanded as follows:

TABLE 7

Years	Italy		Year	Spain	
	No. inhabitants	Index 1861 = 100		No. inhabitants	Index 1860 = 100
1801	18,500,000	72.2	1797	10,541,000	67.4
1811	18,700,000	72.9	—	—	—
1821	19,500,000	76.0	1822	11,661,865	74.5
1831	21,250,000	82.9	1833	11,962,767	76.4
1841	22,900,000	89.3	—	—	—
1851	24,700,000	96.3	1857	15,454,000	98.7
1861	25,633,000	100	1860	15,645,000	100
1871	27,437,000	107	1877	16,622,000	106.2
1881	29,116,000	113.5	1887	17,549,600	112.1
1891	31,144,000	121.5	1897	18,108,610	115.7
1901	33,172,000	129.4	1900	18,549,000	118.6

For Italy, SVIMEZ: *Un secolo di statistiche italiane: Nord e Sud 1861-1961*, Roma, 1961, p. 11.
For Spain, VICENS VIVES, JAIME: *Historia de España*, Barcelona, 1967, p. 561.

¹⁹ Min. Instrucción Pub. y Bellas Artes, Dir. Gen. Ist. Geográfico y Estadístico, *Censo de la Población de España. Diciembre 1878*, op. cit., p. xviii.

²⁰ Ministero dell'Agricoltura, Industria e Commercio, Censimento della popolazione del Regno d'Italia al 31 dicembre 1861, Firenze, p. xxxi.

There is a further difference to take note of: in Italy the population increased by 27.8% between 1801 and 1860, equivalent to 0.463% per annum. In Spain, on the other hand, the increase between 1797 and 1860 was 32.6%, or 0.517% per annum — a figure considerably higher than in Italy. But after 1860 the situation was reversed, and in Italy the population had increased by 29.4% by 1900 (0.735% per annum), whereas in Spain the expansion was now only 18.6%, or 0.465% per annum.

These figures are important in their own right, but in the context of our analysis have a more particular significance, since they indicate that economic conditions in Italy were progressing more rapidly than in Spain, especially towards the close of the century. We know that the first years of the XXth Century witnessed the rapid expansion of Italian industry, and there are good reasons for believing that this expansion was sustained by the considerable widening of the domestic market which resulted from demographic expansion. The Catalan cotton industry, on the other hand, was faced at the end of the XIXth Century by a major crisis brought on by overproduction,²¹ to which the declining rate of demographic growth may well have contributed.

In the geographic distribution of the population we find, especially in the case of Spain, that there were great variations. The provinces of Pontevedra, Guipuzcoa, Biscay and Barcelona had high rates of population density (between 73.06% and 95.217 inhabitants per km²). The other peripheral areas were between 70 and 40 per km² (except Murcia and Huelva with particularly low figures), while the provinces of the interior had extremely low levels of density varying from 35 to 12 per km².²² If we wish to make a comparison with Italy, it is sufficient to point out that the whole of the interior together with Murcia and Huelva (which amounted to 72.06% of the national territory) had a population density of only 21.84 per km² — a figure considerably lower even than that for Sardinia (24.24 per km²), which was in turn about half the figure for Umbria, the least populated region on the Italian peninsula (53.26 per km²).²³

In 1860 there were also important regional variations in population distribution in Italy as well. According to the SVIMEZ figures, population density in the North was 91 inhabitants per km² (the highest being Liguria with 144 per km²) and in the South 77 per km² — but these variations were much less than in Spain.²⁴

Another aspect of the population distribution in the two countries was

²¹ J. NADAL, *La economía española 1829-1931*, in *El Banco de España: Una Historia económica*, Madrid, 1970, p. 411.

²² Min. de Instrucción Pub. y B. Artes, Dir. Gen. Est. Geóg. y Estadístico: *Censo de la Población de España*, Dic. 1878, *op. cit.*, p. xviii.

²³ Min. Agric. Ind. Comm., *Censimento etc.* (1861), *op. cit.*, p. xxii.

²⁴ SVIMEZ, *op. cit.*, p. 17.

the much greater concentration of population in small settlements in Spain. Although there are no figures for Spain in 1860, we can use those for the end of the century on the assumption that they are comparable with the situation in Italy at the time of Unification.

TABLE 8

CLASSIFICATION OF TOWNS AND VILLAGES
BY NUMBERS OF INHABITANTS

Italy (1881)			Spain (1878)		
No. of towns	% of total		No. of towns	% of total	
less than 1000	2038	24.67	less than 1000	5662	60.79
1000-2000	2270	27.48	1000-2000	1771	19.01
2000-5000	2761	33.43	2000-5000	1278	13.72
5000-10,000	795	9.62	5000-10,000	417	4.47
10,000-40,000	362	4.38	10,000-40,000	169	1.8
40,000-80,000	21	0.25	40,000-100,000	12	0.12
above 80,000	12	0.14	above 100,000	5	0.05

For Italy: Ministero dell'Agricoltura Industria e Commercio, *Censimento della popolazione del Regno d'Italia, anno 1881*, Roma, 1882, p. XIX.

For Spain: Ministerio de Instrucción Pública y Bellas Artes, Dirección General de Instituto Geográfico y Estadístico, *Censo de la Población de España, Diciembre 1878*, Madrid, 1879, p. XXI.

In Spain the number of settlements with less than 1000 inhabitants was both absolutely and relatively much greater than in Italy — nearly twice the number. The Italian population tended to be grouped more in small urban settlements and there were far more towns with over 10,000 inhabitants in Italy than in Spain (respectively 395 and 186).

The state of agricultural development and its productivity is another of the factors which are considered determinant in industrial expansion. According to Bairoch: "The low level of agricultural productivity in fact constituted an obstacle to any significant expansion of the industrial sector"²⁵. At the beginning of this period, about 70% of the active population in both Italy and Spain was engaged in agriculture²⁶. In the first stages of its development industry had to rely on the rural masses both as potential consumers of its products and as its labour-force.

Even a superficial comparison of Italian and Spanish agriculture in 1860

²⁵ P. BAIROCH, 'Agriculture and the Industrial Revolution', in *The Fontana Economic History of Europe*, Vol. 3, London, 1973, p. 474.

²⁶ To be exact, in Italy the percentage was 64% in 1871 and in Spain 72% in 1860: cf. P. BAIROCH, *op. cit.*, p. 468.

would go far beyond the limits of this study. But if we accept the limits imposed by the accuracy of these statistics, a useful comparison of the values of certain basic products can be attempted:

ITALY (1870-1874)

TABLE 9

	Area Cultivated (ha)	% of geographic area	Quantity produced (1000 Quintals)	Yields per ha
Wheat	4,176,485	14.09	40,396,203	8.63 Qm./ha
Vines	1,870,109	6.31	27,136,534	14.51 Qm./ha
Oil	900,311	3.04	5,385,591	3.76 Qm./ha

SPAIN (1860)

	Area cultivated (ha)	% of geographic area	Quantity produced (1000 Quintals)	Yield per ha
Wheat	5,100,000	10.19	29,600,000	5.8 Qm./ha
Vines	1,200,000	2.39	10,800,000	9 Qm./ha
Oil	859,000	1.71	1,440,000	1.67 Qm./ha

For Italy: Ministero dell'Agricoltura, Industria e Commercio, *Anuario Statistico 1881*, Roma, 1882, p. 89.

For Spain: VICENS VIVES, JAIME, *Historia Económica de España*, Barcelona 1967, pp. 585-586.

These figures only cover a very small section of the total agricultural economies of the two countries. They omit a number of crops which were of major importance — such as mulberries (of considerable importance in Italy) and citrus fruits. But even within these limits they do illustrate that Italian agriculture was more advanced both in terms of total output and in productivity per hectare. This lead was all the more important given that the three products considered were amongst the leading export commodities. In 1860 wines made up 26.8% of the total value of exports in Spain, flour 11.4% and olive oil 4.26%. In Italy the percentages were lower, but still important — exports of 'mineral waters, drinks and olive oil' accounted for 14% of total export values, while 'cereals, flour and pasta' equalled 7% of the totale²⁷.

In the Spanish case, however, the average national figures conceal the huge variations between the different regions. In fact, in 1860 Spain contained a

²⁷ Min. delle Finanze, Dir. Gen. delle Gabelle, *Movimento Commerciale dell'Italia nell'anno 1861*, Florence, 1863.

zone of highly advanced agriculture along the Catalan littoral²⁸, and in Valencia, whereas in the interior there were still vast expanses of largely unproductive land which yielded very scant harvests that hardly reached subsistence levels. This was a situation often decried by contemporaries, one of whom wrote: "Travelling attentively through the provinces of Spain, the skilled observer who seeks to form an impartial judgement on our agriculture will note that it has greatly improved in the course of the present century and that it has many brilliant features which deserve to be studied and copied; but beside these honourable exceptions, it must be acknowledged that we are generally backward compared with more civilised countries which often do not enjoy the natural bounties of our own land"²⁹.

The agricultural productivity of the different regions is not known, but there is information on the taxes paid by the villages on 'immoveable goods, crops and livestock'. This tax was not raised only on agriculture, since it was applied to assets in general, but it does provide a useful indicator of the economic conditions of the time.

TABLE 10
TAXES ON 'IMMOVEABLE GOADS, CROPS AND LIVESTOCK'

Region	Reales	% of national total	Area of region (km ²)	Reales/km ²
Cataluña	280,710,826	8.06	32,106.60	8,743
Paese Basco ³⁰	—	—	—	—
Galicia	234,733,706	6.74	29,153.36	8,051
Valencia	239,319,475	6.87	23,222.08	10,305
Andalusia	626,503,684	17.97	87,275.61	7,178
Navarra ³⁰	—	—	—	—
Asturias	60,329,203	1.73	10,894.50	5,537
Extremadura	142,395,044	4.09	41,607.76	3,422
Murcia	96,870,652	2.78	26,180.39	3,700
Castilla la Nueva y Cast. la Vieja	847,953,685	24.34	177,398.17	4,779
Aragón	182,434,081	5.24	47,391.08	3,894
Canarias	31,184,478	0.89	7,272.60	4,288
Baleares	44,534,080	1.28	5,014.11	8,881

Junta General de Estadística, Anuario Estadístico de España, 1860-61, Madrid 1862, pp. 742-743.

²⁸ The changes which occurred in Catalonia during the XIXth Century have been exhaustively studied by P. VILAR, *La Catalogne dans l'Espagne Moderne. Recherches sur les fondaments économiques des structures nationales*, Paris, SEVPEN, 1962.

²⁹ C. FERMIN, *Fomento de la Población rural*, Madrid, 1864, p. 1.

³⁰ We do not have the data for the Basque region and Navarre: see n. 6 above.

The final column illustrates clearly enough what was said earlier — against 10.35 reales per km² in the Valencia region we find 3.422 in Extremadura: a difference of two-thirds.

At a national level two zones can be distinguished: the first covers Western Catalonia ³¹ (Gerona, Barcelona and Tarragona), Galicia, Valencia and three of the Andalusian provinces (Seville, Cadiz and Malaga) ³² with tax contributions varying between 8,000 and 10,005 reales per km²; the second includes Extremadura, Murcia, the two Castiles, Aragon and Eastern Catalonia (Lerida).

This picture is strengthened if we also examine the regional distribution of taxes on 'industry and commerce'

TABLE 11

TAXES FROM INDUSTRY AND COMMERCE

Region	Reales	% of total
Cataluña	12,436,161	14.26
Paise Basco	—	—
Galicia	2,930,688	3.36
Valencia	6,019,873	6.90
Andalucía	15,390,678	17.65
Navarra	—	—
Asturias	860,317	0.99
Extremadura	2,207,593	2.53
Murcia	1,980,947	2.27
Castilla la Vieja y Castilla la Nueva	24,859,767 ³³	28.51
Aragón	4,306,679	4.95
Canarias	424,200	0.49
Baleares	1,259,960	1.45

Junta General de Estadística, Anuario Estadístico de España, 1860-61, Madrid 1862, pp. 742-743

Following what has already been said, the first general conclusion to be drawn is that the zones with highest population densities were also the richest. This is no accident, since it is quite reasonable in economic terms that the most

³¹ The figure for the province of Lerida was only 3,963 *reales*/km², while for Barcelona it was 16,610 and for Tarragona and Gerona 8,983 and 8,576 *reales*/km² respectively.

³² There were two areas in Andalusia: the first included Almeria, Cordova, Granada, Huelva and Jaen with rateable values averaging 5,243 *reales*/km²; the other included Cadiz, Malaga and Seville and averaged 11,270 *reales*/km².

³³ The figure for Castile was very high, as the region included Madrid. The province of Madrid alone contributed 9,445,375 reales since most of the country's businesses were based there.

advanced economic regions should be capable of sustaining higher rates of demographic expansion. But in the Spanish case what is most striking is the size of the contrast.

It can also be seen that both the highest population densities and the highest tax ratings for both agriculture, landed assets, industry and commerce were in Eastern Catalonia, in the provinces of Gerona, Barcelona and Tarragona. All these figures indicate that the region enjoyed a relatively advanced stage of economic development. To a lesser degree, the same was true of the Andalusian provinces of Cadiz, Malaga and Seville. Yet these latter provinces never succeeded in industrialising, even though a number of efforts were made, especially in Malaga. Their relative prosperity was based mainly on vineyards, the wine trade, and their advantageous position for trade with the American continent.

In Valencia and Galicia population density was relatively high and agriculture was prosperous, yet there was little industrial or commercial wealth. Again we are faced with two regions which were predominantly agricultural, even though this was modern and advanced. The figures probably conceal the greater prosperity of Valencia since this region had succeeded in specialising in the production of citrus fruits which were an important export item. In Galicia not only were the crops more traditional, but the distribution of property was also highly complex, typified by innumerable tiny parcels of land.

Apart from these regions for which there is evidence of relative development, the rest of the country was extremely poor and thinly populated. In so far as the prosperity of a region depends on its ability to sell and exchange its products, it is clear that the desperate poverty of central Spain must have acted as an effective mill-stone on the development of those nuclei of more advanced economic development which were beginning to appear around the periphery, and particularly in Catalonia.

The data available do not indicate that Italy was subject to these massive regional variations. Although the population density in the South was less than in the North it was still considerable. Agricultural yields also proved similar in the different zones.

There is one factor, however, which would suggest that greater progress had been made in the North — and this is the level of schooling. The following table shows that in 1881 the level of education in Piedmont, Liguria and Lombardy was far higher than in the other regions of Italy.

Piedmont and Lombardy were the only regions in which those able to read and write outnumbered the illiterate. In Liguria the percentage of illiterates was slightly over 50%, while in central Italy it rose to 70%. In the provinces of the former Kingdom of Naples and in Sardinia it rose to 83%.

Even though these figures cannot represent the differing economic situations in their entirety, they reveal the greater degree of progress achieved in the North, especially in Piedmont and Lombardy. Since this progress was

TABLE 12

YIELDS OF PRINCIPAL CROPS
VALUES FOR THE QUINQUENNium 1870-1874

	Area (ha)	Production (hl)	Yields (hl/ha)
<i>Vines</i>			
North	545,401	7,804,787	14.31
Centre	577,258	7,431,777	12.87
South	511,810	7,202,780	14.08
Islands	235,640	4,697,190	19.93
<i>Olives</i>			
North	93,056	358,903	3.85
Centre	241,910	591,256	2.44
South	409,388	1,494,189	3.64
Islands	155,955	941,243	6.03
<i>Wheat</i>			
North	696,388	7,873,641	11.30
Centre	996,584	10,556,463	10.59
South	1,817,488	19,932,954	8.54

Ministero dell'Agricoltura, Industria e Commercio, *Annuario Statistico 1881*, Roma, 1881, pp. 230 e segg.

TABLE 13

LEVELS OF EDUCATION AS PERCENTAGE

	Able to read only	Able to read and write	Illiterate
Piemonte	3.2	54.84	41.89
Liguria	1.85	46.39	51.75
Lombardia	3.82	49.85	46.31
Veneto	3.30	35.80	60.88
Emilia	2.48	29.21	68.41
Umbria	1.31	21.74	76.93
Marche	1.30	21.31	77.37
Toscana	3.35	29.66	66.97
Roma	2.30	36.90	63.09
Abruzzi e Molise	0.53	16.13	83.32
Campania	0.59	20.99	76.04
Puglia	1.09	15.86	83.84
Basilicata	0.37	12.26	87.37
Calabria	0.54	12.41	87.03
Sicilia	0.36	15.63	84.00
Sardegna	0.76	16.53	83.68

Ministero dell'Agricoltura, Industria e Commercio, *Censimento della popolazione del Regno d'Italia, 1881*, Roma 1882, p. 599.

evident not only in the economic field, but also and especially in social terms, it can perhaps be traced to the greater cultural and commercial ties with central Europe enjoyed by these regions and to the different political systems existing in the pre-unification Italian states.

* * *

It was against these two contrasting social and demographic contexts that the influences of the different economic policies adopted by the two governments were to be felt.

Gershenkron has argued that one of the characteristics of Italian industrialization was the absence of any ideological propulsion: 'In studying the periods of rapid industrialization of the major countries in Europe, one does not find it too difficult to discern some specific industrialising ideologies under the auspices of which the development proceeded: economic liberalism in England, Saint-Simonism in France, Nationalism in Germany, Marxism in Russia of the nineties, all seem to have performed a function in the process and to have performed it well. What strikes the observer of the comparable Italian development is the absence of any strong ideological stimulus to industrialization'³⁴. We would argue, however, that such a stimulus was present and played an important role (albeit one that is difficult to quantify), and that it derived from the nationalist sentiments of those whom the Risorgimento brought to power. Their driving concern was that Italy should acquire a primary position in the international political system and they understood that this could not be done unless the Italian economy reached the same levels of development as the most advanced European states.

In the first two decades after Unification, government attention was directed mainly towards creating the infrastructures needed for the normal functioning of the new nation state. To this end, the government devoted a large share of its budget towards public works and also strongly encouraged foreign capital investment (especially from France and Belgium) which played a major role, especially in financing railway construction. The effort made in these years was very considerable, and produced notable results in the field of transportation and public works generally. For example: between 1861 and 1881 the railway network grew from 2,743 to 9,326 km; the number of schools rose from 221 to 352, and those attending them from 15,848 to 35,390 (or from 0.6 to 1.2 school-attenders per 1000 inhabitants)³⁵.

In addition, one must also remember the administrative innovations designed to extend the organisation of the old Piedmontese state to the peninsula as

³⁴ A. GERSHENKRON, *Economic Backwardness in Historical Perspective*, New York, 1965, p. 86.

³⁵ ISTAT, *op. cit.*, pp. 76 & 136.

a whole — and even if these structures were far from ideal, they were considerably more advanced than the often archaic systems still existing in the pre-Unification states which now needed to be dismantled.

These innovations and the stimulus provided by all this activity on public works helped reactivate the Italian economy and led it to take the first steps along the road of economic and industrial development. Between 1861 and 1871 national income rose from 7,346 to 8,462 million lire, reaching 10,561 million in 1881. Also significant is the increase in exports, which in these two decades rose from 577 to 1,484 million lire ³⁶.

Although state intervention in administrative reconstruction and in the public works programme is important, even more interesting is its direct intervention to encourage industrial development, and the government's role in the creation of the steel and ship-building industries which were considered to be the essential pre-requisite for the country's economic independence and political strength. In both cases the state played a fundamental role, since their capital-intensive nature made them unattractive to private investors. The political measures which brought them into being date from 1880 onwards.

Inspired by historical tradition, the politicians of the new Italy believed that they must create a large merchant navy to obtain economic prosperity and so realize the ideals of the Risorgimento. This made them ready to offer whatever resources might be needed to encourage ship-building, and not only did they immediately reconfirm all contracts made with the governments of the previous states but they also rushed to offer interest-free loans and financial incentives to the ship-builders and the shipping lines. But the introduction of the use of steel in ship-building made the task the more difficult, since Italian industry suffered from a major technological lag in comparison with the other European nations and produced only very small quantities of steel. The Boselli law was passed in 1885 in an attempt to overcome this. The law offered large bounties to the ship-builders and lowered the import tariffs on the materials needed for ship-building, as well as providing heavy subsidies for the shipping lines that used vessels built in Italian yards. These subsidies and incentives were maintained throughout the period in question, although their total values varied. From the calculations made by S. B. Clough, in the period before 1914 the government subsidies to the maritime transport industry amounted to 500 million lire in the form of contracts and 166,789,000 lire in the form of direct subsidies ³⁷. But although these investments permitted the introduction of new technologies in the Italian shipyards and so facilitated the passage from timber to steel construction, they did not succeed in creating a merchant fleet

³⁶ ISTAT, *op. cit.*, p. 210.

³⁷ E. CORBINO, *Il protezionismo marittimo* - cited by S.B. CLOUGH-L. DE ROSA, *Storia dell'economia italiana dal 1861 ad oggi*, Bologna 1971, p. 110; L. DE ROSA, *Iniziativa e capitale straniero nell'industria metalmeccanica italiana (1840-1904)*, Napoli, Giannini, 1968.

comparable with that of France let alone Britain. In fact, by 1914 the Italian merchant fleet held a lower position in the world ranking than it had in 1860.

Iron and steel was the other industry that received particular attention from the Italian government. Many of the measures for promoting the ship-building industry contained clauses which directly favoured the expansion of a national steel industry, since the incentives were made dependent on the use of materials produced in Italy. But in addition to such indirect assistance and to the stimulus provided by direct subsidies and government contracts, the government also took a more direct role in creating this industry. In 1884 the Terni steel works were founded, and the government made a major contribution through the contracts agreed for the merchant navy.

A similar strategy can be detected in the measures taken to encourage greater use of the country's mineral resources by manufacturing industry. To stimulate the production of cast iron, which was previously negligible, the government in 1899 gave the Elba company a franchise for mining 200,000 tons of iron-ore per annum on the island of Elba, and the same company also built the first coke blast-furnace for pig-iron production.³⁸ 1905 saw the formation of ILVA, a trust formed from the merger of the most powerful iron and steel companies which had previously worked the Elba ore mines and which was granted major fiscal incentives and subsidies on production, so that the Elba ore deposits were entirely devoted to the national steel industry. These measures played a major part in creating a nationally based steel industry, and once the Terni works began operating steel production rose from 3,382 metric tons in 1885 to 23,760 metric tons in 1885 and by 1889 had reached 157,899 metric tons.³⁹

But state intervention in industrial development was not enough to enable the Italian economy to compete freely on the international market. There was increasing pressure, backed especially by the industrialists, to abandon the traditional free-trade policies in favour of protectionism. In the late 1880s this line also found support from the agricultural sector, since the Transport Revolution meant that American and Asiatic agricultural products were being sold on European markets at very low prices, causing immense damage. The new alliance of industrial and agricultural interests succeeded in bringing about commercial protectionism, and in 1887 the new customs tariff was approved in parliament. Thenceforth, protectionism provided the basis of Italian economic policy, and although this was strongly condemned by some economists⁴⁰

³⁸ R. ROMEO BREVE, *Storia della Grande Industria in Italia*, Bologna, 1972, p. 77. L. DE ROSA, *La Rivoluzione industriale in Italia*, Bari, Laterza, 1980.

³⁹ ISTAT, *op. cit.*, p. 129.

⁴⁰ F.S. Nitti, for example, wrote in the following terms: 'If there is a country which ought to be a free trader, both by geographical position and by economic constitution, that country was and is, peculiarly and distinctly, Italy. Yet we see her, by the customs tariff which came into force in 1887 and which was the outcome of in-

historical experience suggests that some degree of protection has always been necessary — especially in the first stages of industrial growth — for all the countries which were 'late-comers' in the process of industrialization.

In Spain, on the other hand, government intervention played a less important role than in Italy. Because of the political instability of the peninsula throughout the XIXth Century, and because of the lack of interest of the ruling classes, Spanish industry never received the support from the state which might have enabled it to take off in those areas where it had already developed (in Catalonia and in the Basque provinces) or would have created the structures necessary for the development of the regions worst afflicted by poverty and scarcity of resources. The only field in which the government did intervene was railway building. There was tremendous confidence in the opportunities offered by a railway system which was seen as the solution to the country's economic backwardness. As in Italy, large subsidies were given to the construction companies, as well as concessions for importing the raw materials required. But, as we shall see shortly, government intervention was also accompanied in this case by massive investments of French capital, and by means of their *Credit Mobilier* banks (*Credito Mobiliario Español*, *Sociedad General de Crédito*, *Sociedad Española Mercantil y Industrial*) the greater part of the Spanish railway network was built and controlled by French financiers. But apart from railway building, the Spanish government played little or no role in industrial development until the very end of the XIXth Century.

As we have seen, the economic backwardness of vast areas of Spain was enormous, and the capital needed to bring even the most elementary forms of economic development to these regions was lacking. In such a situation, government economic policy could have played a major role, yet the Spanish state was never in a position to devote either its attention or its resources to overcoming these problems. As has often been pointed out, the major economic problem facing successive Spanish governments throughout the XIXth Century was that of finding revenues to meet the state budget.⁴¹ Having for centuries enjoyed huge resources in its American colonies, when these were lost in the 1830s the state was deprived of one of its principal sources of revenue. Clearly what was then needed was a fiscal reform and a reorganization of the tax system so that the state would acquire the resources required for its normal functioning. But such a reform never took place, and the Spanish government became

terested political agitation, abandoning herself at one stroke to a most dangerous system of protection, for which the nature of her industries and production did not fit her in any way whatever' (from 'The Financial Situation in Italy' in the *Edizione Nazionale delle Opere di F.S. Nitti*, Vol. 11, *Scritti di Economia e Finanza*, Bari, 1960, p. 222.

⁴¹ J. SARDÁ, J. NADAL and J. FONTANA all agree in attributing major importance to this factor.

dependent on debts contracted both at home and abroad. The problem became particularly acute after the revolution of 1868, and with its finances in a desperate plight successive governments were forced to contract foreign loans on disastrous terms. In 1869, for example, the Rothschild bank loaned the Spanish government 100 million pesetas in return for government stock carrying a nominal value of 320 million pesetas. In the same year the *Banque de Paris* purchased 147 million of Treasury bonds issued at 66. Between 1868 and 1878 Spain's foreign debt rose from 1,434 to 4,379 million pesetas.⁴²

The economic problems facing the Spanish Treasury had a damaging effect on industrial development. Because of the hopeless state of its finances and the impossibility of further recourse to loans,⁴³ the state began to sell its own property. In 1869 appeared the 'Basic Provision for New Legislation on Mining' which permitted private companies to work the state's mines for indefinite periods in return for annual leases. The result was that the greater part of the country's mineral resources quickly became to all effects the private property of the mining companies. French, English and Belgian capital was quickly attracted by the enormous opportunities provided by the 'Basic Provision', and by 1913 of the 1.22 billion pesetas invested in Spanish mines at least 0.6 billion was foreign capital.⁴⁴ Although the more intensive exploitation of the mines did have some beneficial consequences for the Spanish economy, from the time of the new law the greater part of its ores and minerals were exported and used by the manufacturing and heavy industries of other countries. In this fashion, Spain's mineral wealth was turned mainly to the advantage of foreign industries which were able to operate on a semi-colonial basis in the peninsula.

In the case of mining, then, the policy of the Spanish government led to an expansion in expanding exports of raw materials and was quite the reverse of that of the Italian government, which was attempting to ensure that the products of its sub-soil would be used by national industries. As one Spanish economic historian bitterly noted: "French law reserved the exploitation of the subsoil to its own nationals, the English and the French limited it to the landowner; in Italy the ores of Elba were subject to very high export duties and England also levied a duty on the export of its coal, but in Spain huge quantities of iron and copper were exported mainly by leading foreign companies, without any effort being made to establish on the Peninsula the prin-

⁴² J. SARDÁ, *La política monetaria y las fluctuaciones de la economía española en el siglo XIX*, Barcelona, 1970, p. 165.

⁴³ The deficit was 622.6 million pesetas, and between 1860 and 1868 the National Debt rose by 50% and interest rates by 130%: see J. NADAL, *El fracaso de la Revolución Industrial en España*, *op. cit.*, p. 87.

⁴⁴ J. NADAL, *ibid.*, p. 92.

cial industries for transforming these metals".⁴⁵ This critique of Spanish mining policy is fully borne out by the following statistics:

TABLE 14

	Italy (Production in 1000 tons)			Spain (Production in 1000 tons)		
	Iron ore	Cast Iron	Steel	Iron ore	Cast Iron	Steel
1861	82,719	26,551	—	130,259	—	—
1870	89,248	19,914	—	436,586	—	—
1880	298,058	17,336	—	3,565,338	—	—
1890	220,702	14,346	107,676	6,546,000	179,430	126,940
1900	247,278	23,990	115,887	8,675,000	310,000	202,760
1910	551,259	353,239	732,000	8,667,000	408,460	260,930
1914	706,246	386,340	911,000	6,820,000	431,280	355,900

For Italy: ISTAT, *Sommario di Statistiche Storiche Italiane, 1860-1955*, Roma 1958, p. 129.

For Spain: NADAL, JORDI, "La economía española (1829-1931)", in *El Banco de España, Una Historia Económica*, Servicio de Estudios del Banco de España, Madrid, pp. 398-399.

Over the period in question, Italian iron-ore production was much lower than Spain's (about 10% in 1914), yet Italian steel production grew much more rapidly and by 1913 was nearly three times greater than that of Spain.

After the Bourbon Restoration, in 1876, industrial interests in Spain received greater attention. Despite the difficulties, Spanish industry had continued to expand and had attained a considerable importance in the country's economy. On the other hand, the new conservative orientation which accompanied the Restoration made the government more prepared to take account of the interests of private capital. One of the first symptoms of this changed economic climate was the introduction of commercial protectionism. As in Italy, the agricultural crisis brought about an alliance between the agrarian and the industrial interests, and raised demands for higher tariffs. These demands were met, and in 1891 a new line of economic policy was established which was to be strengthened in the following years.

The government began to take an interest in other aspects of industrial development. In 1896 import duties on railway building materials were raised in an effort to encourage demand for Spanish produced steel products. The 'Ley de construcción de la Escuadra' of 1887 offered important opportunities for expanding the ship-building industry. This policy was reinforced in 1908 and 1909 with further ship-building programmes and legislation to protect the industry and marine transport⁴⁶.

But both the resources and the political energy devoted by the Spanish

⁴⁵ F. SANCHEZ RAMOS, *La economía siderúrgica española*, Madrid 1945, p. 272.

⁴⁶ J. NADAL, *op. cit.*, p. 184.

ruling classes to industrial development were much less than in Italy. It is not possible to quantify these resources, but certain aspects of the national budgets of the two countries point to interesting contrasts:

TABLE 15
PERCENTAGES OF TOTAL GOVERNMENT EXPENDITURE DEVOTED TO
a) PUBLIC DEBT

	Italy		Spain
1862-66	21.3%	1861-65	15.89%
1882-86	35.4%	1881-85	31.86%
1912-13	20.9%	1911-15	33.49%

b) PUBLIC WORKS

	Italy		Spain
1862-66	10.0%	1861-65	2.11%
1882-86	20.6%	1881-85	7.11%
1912-13	14.1%	1911-15	9.95% ⁴⁷

For Italy: Repaci, F.A., *La finanza pubblica italiana nel secolo 1861-1960*, Bologna, 1962, p. 44.
For Spain: Junta General de Estadística, *Anuario Estadístico Español, 1861*, pp. 734 et seq., Ministerio de Instrucción Pública y Bellas Artes, Dirección General del Instituto Geográfico y Estadístico: *Reseña Geográfica y Estadística 1886*, Madrid, 1887, p. 944 et seq.; Ministerio de Instrucción Pública y Bellas Artes, Dirección General del Instituto Geográfico y Estadístico, *Anuario Estadístico de España, 1915*, Madrid, 1916, pp. 292 et seq.

In both countries the sums devoted to the Public Debt were high, showing that both had to fall back on foreign loans to meet their financial commitments. But expenditure on public works was much higher (in percentage terms) in Italy, indicating that despite its financial problems the Italian state was still able to provide greater resources for the country's economic expansion.

The difference is, of course, largely explained by the greater financial problems facing the Spanish governments, which resulted from the failure to implement the fiscal reform programme. As a result, the Spanish government was never able to find the revenues needed to keep it functioning, and this in turn gravely limited its capacity for taking a direct part in the country's economic and social development. Here again the attitudes of the Italian politicians were different, and the fiscal reforms introduced in Italy were dictated

⁴⁷ This figure is not entirely accurate and is slightly exaggerated because it is equal to the total expenditure of the *Ministerio de Fomento*, but as a very high proportion of the expenditure of this ministry in the years 1881-5 went on Public Works it is still a useful approximate value.

by the needs of the state, even though their social consequences were far from equitable. The formation and organisation of the new unified state had given rise to enormous expenditure, and was accompanied by a heavy increase in taxation. This had many damaging consequences, and the burden was borne most heavily by the lowest and poorest strata of society.

Repaci calculated that the tax burden (expressed in gold lire) rose from 13.55 lire per inhabitant in 1861 to 44.23 lire in 1882-86, and to 65.81 lire by 1912-13. In other words, taxation nearly tripled in Italy between 1861 and 1913.⁴⁸ In Spain, however, there was no comparable increase, and between 1861 and 1914 the tax burden per individual rose from 33.75 to 66.5 pesetas — less than double in real terms.⁴⁹

One can conclude, then, that in Italy the state did succeed in intervening in the economic life of the country, that it did provide an important 'macro-impulse' for industrial development, even though the costs of this were often borne by the population who contributed to the process through their own forced savings. But in the case of Spain there was no such 'macro-impulse', in part because the state was unable to create a modern tax structure.

* * *

In both Spain and Italy, the general financial situation of the governments affected both the development of the banking system and its capacity for stimulating industrial expansion. In a national banking system it is the Central Bank which is responsible for putting into effect the financial aspects of the government's economic policy. At the beginning of our period, neither Italy nor Spain had authentic Central Banks. There were two institutions responsible for the issue of currency — the *Banca Nazionale degli Stati Sardi* in Italy, and the *Banco de España* in Spain — and because of their importance in the national banking systems and because of their close links with the respective government Treasuries, they began to assume the role of a Central Bank — a role legally recognised in Spain in 1874 and in Italy in 1926.

As we have said, the activities of these two banks was very closely tied to the budget policies of the two countries. But their capacity for becoming involved in national economic and industrial growth depended very much on the nature of their commitments to their respective governments and by the general attitudes of the ruling classes.

From the very start of the unified state, Italian politicians had been aware of the need for a major bank of issue which acted as the principal bank for all others and would at any moment be able to meet the financial needs of the state. But regional economic interests prevented the creation of such

⁴⁸ F.A. REPACI, *La finanza pubblica italiana nel secolo 1861-1960*, Bologna, 1962, p. 33.

⁴⁹ Junta General de Estadística: *Anuario Estadístico Español 1861*, cit., p. 734; *Anuario Estadístico de España, 1915*, cit., p. 291.

a bank, and many of the issuing banks of the former states were preserved. These included: the *Banca Nazionale del Regno di Sardegna*, the *Banco di Napoli*, the *Banco di Sicilia*, the *Banca Nazionale Toscana* and the *Banca Toscana di Credito* to which was later added the Bank of the Papal States (which in 1870 became the *Banca Romana*). But from the start very close ties were established between the Treasury and the National Bank of the Kingdom of Sardinia, which later became the National Bank in the Kingdom of Italy. In 1866, on account of heavy budget deficits and the prospects of imminent war with Austria, the financial situation became highly critical and the government began to borrow heavily from the banks. When it applied to the *Banca Nazionale* for a credit of 250 million lire at 1.5%,⁵⁰ the Bank in exchange requested the suspension of convertibility on the bank-notes it issued, giving its notes fiat circulation throughout the Kingdom. Certain other banks also had their issue recognised as legal tender, but were obliged to exchange their own notes for these of the *Banca Nazionale* when so requested by the latter.

The government's demands for credit rose steeply as time passed. Between 1865 and 1870 the state incurred debts of 550 million lire to the *Banca Nazionale*, and the Bank in turn issued inconvertible notes to the same value. One result of this policy was that there was a rapid expansion in the circulation of bank-notes. In 1871 the ceiling on issue was raised to 1 billion lire, and two-thirds of this was issued against advances made to the state⁵¹.

The new predominance gained in this manner by the *Banca Nazionale* was strongly criticised at the time by many theoreticians, as well as being opposed by the other banks of issue. In 1874 a new law was introduced which attempted to reduce the monopolistic position acquired by the *Banca Nazionale*, and the inconvertible notes were now to be issued not by the Bank itself but by a consortium composed of the six banks of issue. Nonetheless, the *Banca Nazionale* retained its own position, since the number of its notes in circulation was far greater than those of the other banks.

Towards the end of the 1870s the economic situation began to improve and the state managed to overcome its earlier financial difficulties. The result in 1883 was the abolition of inconvertible circulation.

Shortly after Unification, a number of *credit mobilier* banks had been formed in Italy (the *Società Generale di Credito Mobiliare*, the *Banca Generale*) and were to play an important role in the creation and development of many industries. Following the resumption of convertibility there was an expansion of banking and economic activity in general, to which foreign capital investments made no small contribution. But these older banks were now joined by a new group founded in the 1880s — the *Banco Sconto e Sete* in Turin, the *Banca Tiberina*

⁵⁰ G. LANZARONE, *Il sistema bancario italiano*, Turin, 1948, p. 7; L. DE ROSA, *Il Banco di Napoli nella vita economica nazionale (1863-1883)*, Napoli, L'Arte Tipografica, 1964.

⁵¹ M. FANNO, *Lezioni di economia e legislazione bancaria*, Padova, 1937, p. 214.

and the *Società dell'Esquilino* in Rome. But this new expansion of credit operations was not always based on the most rational criteria, and by 1888 various adverse effects of the speculative boom were beginning to be felt; in 1889 the *Società dell'Esquilino* folded and was quickly followed by the *Banca Tiberina*, even though the *Banca Nazionale* had stepped in with a loan of 50 million lire.⁵²

The issuing banks were no less affected than the ordinary banks. The parliamentary inquiry of 1889 revealed notable irregularities in the operations of the former, and the *Banca Romana* had to be wound up. The problems of the *Banca Romana* accelerated the collapse of two of the major *credit mobiliers*, the *Credito Mobiliare* and the *Banca Generale*. The resulting chaos which engulfed the entire Italian banking system brought demands for a radical reform of the whole sector, and for the need for greater centralisation of the issue of paper currency. This was the object of the law of 1893 which merged the *Banca Nazionale*, the *Banca Nazionale Toscana* and the *Banca Toscana di Credito* to provide the basis for a new Bank of Italy. The *Banco di Napoli* and the *Banco di Sicilia* still retained the right of issue, but they were now firmly subordinated to the Bank of Italy as is evident from the ceilings imposed on their issues: 800 million lire for the Bank of Italy, 242 millions and 55 millions for those of Naples and Sicily respectively. In 1895 the ties between the Bank of Italy and the state became even closer when the Bank was authorised to act as the state's treasurer in all regions of the country.⁵³

The major consequence of this reorganisation was that after 1893 the Bank of Italy began to assume fully the functions of a Central Bank, both as banker to the banks and as banker to the state. And due to the improved economic conditions, the government no longer needed to raise loans from the banks — this meant that circulation ceased to expand, the currency could in fact be purged (the quantity of uncovered notes in circulation fell by 34%)⁵⁴ and inflation was greatly reduced. And the Bank of Italy, now no longer committed to lending to the government, could begin to play a more active role in the country's economic and industrial development.

Between 1900 and 1907, years of great prosperity and growth, the Bank of Italy was able to provide important credit support for both already established and new undertakings. This was to be crucially important, especially after the stock-market crisis of 1907 when it came to the assistance of a number of finance houses, such as the *Società Bancaria Milanese*. It also assisted in the salvage operation for the steel trust, which had been heavily damaged by speculative manoeuvres, and which received a credit of 96 million lire from a banking consortium headed by the Bank of Italy.⁵⁵ In 1911, the Bank again came to

⁵² G. LANZARONE, *op. cit.*, p. 11.

⁵³ *Ibid.*, p. 65.

⁵⁴ T. CANOVAI, *Le banche di emissione in Italia*, Rome, 1912, p. 236.

⁵⁵ G. LANZARONE, *op. cit.*, p. 69.

the aid of the steel industry, and took the lead in the creation of a cartel including all the principal steel producers headed by ILVA. For our comparison with Spain, the Bank's role in the Consortium set up in 1914 to subsidise industrial stocks because of the problems created by the outbreak of war is of particular interest. Even though it takes us a little beyond our chronological limits, the example is sufficiently important to warrant closer examination, for it clearly shows how the government, through the intermediary of the Bank of Italy, was determined to save both the industries and banking institutions which had been driven into difficulties by excessive capital expenditure in the industrial sector. Eventually, the commitments initially undertaken by the banks were taken over by the state and ultimately borne by the nation as a whole.

After the outbreak of war, the stock-markets were closed to avoid an excessive drop in share values. To meet the demands for credit and to assist the banks to unfreeze their portfolios, a Consortium was set up with a capital fund of 25 million lire provided by the three banks of issue, by the savings banks and by the ordinary credit institutions. The Consortium was authorised to make loans up to three times the value of its capital fund for bills carrying two or three signatures, or even a single signature, provided that they were guaranteed with public securities. The Consortium was permitted to discount these bills with the banks of issue at a rate 1.5% below that of the market. In order to meet these demands, the banks of issue were in turn authorised to issue bank-notes and were not subject to the emergency tax on paper bills.⁵⁶

This meant that the money supply, which had been stable since the beginning of the century and was in large part covered by metal reserves, now began to swell rapidly due to the bills issued by the government and those issued by the Consortium. These increased issues led to a rapid decline in the exchange rate of the lira and to a dizzy rise in prices. Between 1919 and 1920 alone, when the war-time restrictions on prices were removed and market forces again began to act freely, the price index rose from 1,669 to 4,027.⁵⁷ The hidden tax mechanism contained in this price rise hardly needs to be elaborated, and it meant that ultimately the burden assumed by the Consortium was paid by the nation as a whole. In the words of a contemporary economist: 'The government's loans were in fact made with the money of the tax-payers, because when the government instructed the issuing banks to discount the bills of the Consortium on industrial stocks, it not only had to enable them to meet these contracts through the issue of more bank-notes, but also had to guarantee the banks against the almost certain losses they were likely to incur by setting aside

⁵⁶ A. KURETT, 'L'attività del consorzio per sovvenzioni sopra valori industriali', in *Economia*, May-Dec. 1925, p. 108.

⁵⁷ ISTAT, *op. cit.*, p. 172.

three-quarters of the tax raised on the circulation of bank-notes. This in fact meant bank-note tax was, at least in part, remitted, with the consequence that the state's revenues were diminished — and these could only be replaced by raising taxes even higher'.⁵⁸

After the war the Consortium on industrial stocks was not wound up, and indeed in the post-war years its operations expanded rapidly in order to meet the problems facing many banks. Its capital was increased from 25 to 40 millions, then to 100 and even 200, and in 1923 — after the formation of the so-called 'Independent Section' of the Consortium — the rebate on bills not due rose to a billion lire.⁵⁹ And its liquidation was repeatedly deferred until 1932, when, with the creation of the *Institute for Industrial Reconstruction*, the government finally took over all the industrial stocks and credits accumulated by the Consortium over the years and which it had not been able to disinvest.

And although the operation encountered many difficulties and brought about a very exacting form of forced savings which the nation had to support in the form of inflation, it must be said that the joint action taken by the government and the Central Bank played a major part in ensuring that Italy's industrial system did not collapse in the difficult years of the war and its aftermath, so also allowing the structures which had developed in the more prosperous Giolittian era to become consolidated.

In Spain as well, for the greater part of the XIXth Century, the operations of the bank of issue were largely devoted to overcoming the economic difficulties facing the Treasury which, as we have already mentioned, were to have major repercussions on the country's economic progress. The Bank of Spain came into being in 1856 (originating from the former *Banco Español de San Fernando*) as a bank of issue with its own commercial banking section, and was authorised to make advances to the Treasury equal to its own nominal capital. The Bank was closely tied to the government, and its director was appointed by the King. As the circumstances of its origin would indicate, its main activity was as financier to the Treasury. Although the decade 1856-66 was one of notable prosperity, the Bank played virtually no part in the economic and industrial development of the country. Except in 1862, loans to the government were increasingly greater than those to the private sector — in 1864, for example, the former amounted to 81.7% of the total, the latter to only 6.3%.⁶⁰

Following the Revolution of 1868, the situation of the Treasury deteriorated even further. The government had already contracted very heavy foreign debts, and no further sales of public lands or increases in taxation were possible,

⁵⁸ A. KURETT, *art. cit.*, p. 117.

⁵⁹ *Ibid.*, p. 110.

⁶⁰ R. ANES, 'El Banco de España, un banco nacional', in *La Banca Española en la Restauración*, Vol. 1, Madrid, 1974, p. 119.

since most of the former were already in private hands,⁶¹ while the democratic colours of the revolution ruled out the latter. It therefore became necessary to create a credit institution with resources sufficient to meet any demands that the government might need to make. This role was conferred on the Bank of Spain, which in return was granted a monopoly over the issue of paper money. In 1874 the Bank took on the double function of sole bank of issue and sole state bank. Its capital endowment was increased from 45 to 100 million pesetas, and the ceiling for bank-note issue set at five times its capital fund. Almost at once the Bank had to advance 125 millions to the Treasury.

From then on, and for the rest of the century, the Bank lent enormous sums to the Treasury, which were met by equally massive issues of paper money. The result was that the amount of paper money in circulation expanded beyond all measure, as the following figures reveal:

BANKNOTES IN CIRCULATION

TABLE 16

Year	Millions of pesetas	Year	Millions of pesetas
1874	71.7	1890	734.1
1880	243.1	1895	994.4
1885	469.0	1900	1,591.6

ANES RAFAEL: "El Banco de España, un banco nacional", in *La Banca española en la Restauración*, vol. I, Servicio de Estudios del Banco de España, Madrid, 1974, p. 165.

To meet the government's incessant demands for advances, the ceiling on issue was raised on various occasions. In 1898, for example, it was raised to 2,500 million *pesetas*, even though there was already over 1,500 millions in circulation. In addition, a large part of this resulted from the monetization of the national debt, on the security of which the Bank issued fiduciary currency. Sardà quotes one observer as saying that: '...in the recent balance sheet of the Bank of Spain — for 1890 — there are 299 million *pesetas* advanced to the Treasury and 441 millions of redeemable Debt stock in the portfolio, which shows that the greater part of the increase in fiduciary bills has been brought about by pressure from the Treasury'.⁶² This, of course, was highly damaging both for the economy in general and for the stability of the currency. The massive

⁶¹ The mortmain lands had been sold in the first part of the XIXth Century and in the same period, as we mentioned above, the mines also passed into private hands.

⁶² J. SARDÀ, *op. cit.*, p. 198.

rise in currency without any parallel increase in metallic reserves led to the heavy depreciation of the *peseta*, and the exchange rate with the French *franc* fell from 0.9906 in 1877 to 1.541 in 1898.⁶³

In 1898 the plight of the *peseta* became even more serious. The steady depreciation of the previous years was now aggravated by the emergency caused by the war with the United States. The financial crisis, together with the disastrous defeat that ended the war and led to the loss of Spain's remaining colonies, reinforced the need to reorganise the financial structure and restore the monetary system. This was the object of the law of 1902, which set out to reduce the National Debt and the amount of fiduciary currency in circulation, as well as to encourage the Bank to invest in the private sector, where the demand for credit had increased considerably.

The legislation had very beneficial results, and with the assistance of the Bank of Spain the government was able to reorganise the National Debt in a way that reduced its drag on the national budget. In the first years of the century the currency circulation not only ceased to grow but even diminished, falling from 1,638.8 million pesetas in 1901 to 1,500 millions in 1905, but thereafter it began to grow again and on the eve of the First World War had reached 1973.6 millions.⁶⁴ Another important result of the Villaverde reform was the increase in credit available for the private sector. For the first time in its history the Bank of Spain began to take an active part in economic expansion, yet despite this change its operations in support of industry and commerce were on a very much smaller scale than those of the Bank of Italy.

The same can be said of its role as the banks' bank. As we have seen, the Bank of Italy had already at the time of the banking crisis of the 1890s and again in the difficult wartime years assumed this role, but the Bank of Spain was unable to come to the aid of two leading Spanish banks, which as a result had to request suspension of payments. In 1913 the *Banco Hispano Americano* asked for a loan of 60 million pesetas, and received only 12 million; and in 1914 the *Credito de la Union Minera* was unable to obtain any help from the central bank.⁶⁵

Taken as a whole, the role of the Bank of Spain in the country's economic development was very small. Its primary function remained that of assisting the Treasury, and throughout the XIXth Century its contribution to the private sector was virtually nil and remained very slight even after 1900. The percentages of the Bank's budget devoted to loans to the private and the public sector clearly reveal the situation, and in the following table are compared with those of the Italian issuing banks:

⁶³ R. ANES, *op. cit.*, p. 165.

⁶⁴ *Ibid.*, p. 193.

⁶⁵ *Ibid.*, pp. 204 ff.

TABLE 17

Year	Loans to the private sector			Loans to the public sector		
	Spain Banco de España	Italy Banca di Italia	Total of issuing banks	Spain Banco de España	Italy Banca di Italia	Other issuing banks
1861	—	58.42	54.01	—	12.59	12.06
1870	—	17.40	22.58	—	40.00	33.82
1880	17.3	29.90	33.34	40.6	24.52	20.03
1890	30.1	45.20	42.72	61.9	5.97	6.03
1910	29.5	16.61	18.38	38.9	5.05	6.34
1914	29.9	15.36	16.59	44.7	12.61	13.69

For Italy: Banca d'Italia, *I bilanci degli istituti di emissione italiani, 1845-1953*, Roma, 1967, pp. 353-354.

For Spain: ANES, RAFAEL, "Balances sectorizados del Banco de España, 1874-1915", in *La Banca Española en el Restauración*, vol. II, Servicio de Estudios del Banco de España, Madrid, 1974, p. 156.

As we have already said, in Spain loans to the government occupied a much higher place than in Italy. Except for the years 1900 and 1914, when the effects of the Villaverde reform were felt, private sector loans were much higher in Italy. But even more important was the fact that throughout the period the loans made by the Bank of Spain to the government were much higher than those to private industry, while in Italy the situation (except in 1870) was the reverse. One can then conclude that the excessive credit demands of the Spanish government effectively limited the Bank of Spain's ability to assist the country's economic development.

As well as the issuing banks, there were in Italy at the time of Unification a number of private banks, some of which were of considerable importance. Around 1863, however, the conditions of social and economic revival and the influx of foreign capital led to the founding of a range of new commercial credit banks, which were to have an important role in the country's economic development. Many of them had purely speculative objectives and were fairly short-lived, like the *Cassa Mobiliare* founded in Turin in 1863 or the Florentine *Banca del Commercio e dell'Industria* of 1866.⁶⁶ But others, like the *Credito Mobiliare* and the *Banca Generale* were to assume major importance.

These banks all dealt in short and medium term commercial credit, as well as investing in public works and private industry and lending to the government. They played an important part in financing the railway network, since

⁶⁶ G. LUZZATTO, *L'economia italiana dal 1860 al 1914*, Turin, 1969, p. 51.

the need for railways was widely supported and the government had shown itself willing to subsidise the railway companies. These companies expanded rapidly in the early years after Unification, and the *Società Generale di Credito Mobiliare* quickly increased its capital from 50 to 70 million lire. It invested in the Adriatic lines of the Southern Railway Company, in the Terni steel works, in the Neapolitan Slum Clearance Company, in the sugar refining industry, and in shipping lines such as the *Navigazione Generale*, the *Lloyd Sabauda* and the *Veloce*. The *Banca Generale* was a leading investor in the Mediterranean Railway Company and many other lines.

As we have mentioned, the 1880s were a decade of intense economic activity, much of which was directed towards speculative objectives, as Lanzarone demonstrated in the case of the *Società Generale*: "...the company's director, Balduino, understood that a commercial credit house could only operate on the basis of its own capital and not with the deposits made by savers, and he set the Bank off on the right lines: but when others took over the management they fell back in the bad old ways worse than ever"⁶⁷. Excessive speculation gave rise to the banking crisis of 1893, one of the most dramatic episodes in Italy's economic development, the most serious consequence of which was the collapse of the two leading commercial credit banks, the *Credito Mobiliare* and the *Banca Generale*. The reorganisation of the issuing banks in 1893 was accompanied by major changes in the commercial banking sector which were to have important results for the country's economic future.

To fill the gaps left by the banks which had crashed during the crisis, a number of new institutions were founded, or reorganised, with the assistance of German capital and management, like the *Banca Commerciale Italiana* and the *Credito Italiano*. The German example was emulated by many other banks which were run along similar lines, such as the Italian-financed *Banco di Roma* or the Italo-French *Società Bancaria Italiana* and the *Società Italiana di Credito*. These banks quickly assumed a major position and their activities spread to cover the entire Kingdom, so becoming truly national in character. They were modelled on the German mixed bank, operating both in the field of short-term commercial lending and in medium and long-term investment loans. By drawing together capital from small and middling savers they were able to take on huge industrial investments. From 1893 onwards, therefore, the banks began to exercise a much greater influence over Italian industry than hitherto, since they were no longer providing only short-term loans but were also directly involved in the provision of risk capital and even, on occasions, were share-holders and were able to influence the development of the industries by participating in their management.

The operations of these banks, of which the most important was the *Banca Commerciale*, extended to every sector of industry. It was strongest in the most

⁶⁷ G. LANZARONE, *op. cit.*, p. 15.

advanced industries, electricity and chemicals, where they achieved a controlling position. Through the Edison Company — in which the *Banca Commerciale* showed immense interest from the moment of its foundation — and the Company for Developing Electrical Energy (founded by the *Commerciale* in 1911 with the aim of providing investment capital for newly formed electrical companies), the *Banca Commerciale* came to control the greater part of Italy's electrical industry. There was similar interest in the chemical industry, especially the production of artificial fertilizers, and the *Banca Commerciale* was a major backer of the largest company in this sector, the *Unione Italiana Concimi*.

The legacies inherited respectively from the *Banca Generale* and the *Credito Mobiliare* also led the *Banca Commerciale* and the *Credito Italiano* to take an active interest in the steel and ship-building industries. Aware that excessive competition would be damaging to both the industries and the banks, they worked to bring about a series of mergers and agreements between the different steel manufacturers, and this in 1905 led to the formation of ILVA, which was largely controlled by the two banks through the shares they owned in the member companies of the trust.

The *Banca Commerciale* also acquired control of a number of shipyards, which in 1906 were merged to form the *Cantieri Navali Riuniti*, the largest group in the sector. In 1902 the *Banca Commerciale* also bought a large packet of shares in the General Navigation Company, and further purchases of share stock subsequently gave it a controlling voice in three other major shipping companies: the *Veloce*, the *Italia*, and *Lloyd Adriatico*.⁶⁸

The activities of these banks aroused much criticism and concern among contemporaries. Many economists argued that the trust of the savers had been betrayed, and that the capital which they had trustingly put on deposit had been invested in often highly risky ventures. The control which these banks exercised even over the industries which were their clients also worried many industrialists who saw them as a threat to independent management. Their rapid rise, their economic power and their close links with German industrial capital sowed doubts amongst economists and businessmen, as is revealed in the terms used by Preziosi: 'The more one studies the events of recent years the more one is left horror-struck by the damage which the German bank has done to our country. How can people forget that its name was on everyone's lips... when notorious speculations of painful memory were forced on the attention of Italy; when blocks of industrial shares were thrown on the market at five and six times their original value, and which, when they collapsed several months later, brought about incalculable losses and economic catastrophes? Whoever carefully examines the policy of the German Bank in Italy can do no other than conclude that it is an attack on our national safety, since its operat-

⁶⁸ J.S. COHEN, 'Financing Industrialization in Italy', *Journal of Economic History*, 1967, n. 3, pp. 375 ff.

ions both in the past and in the present have the sole aim of making Italy a mere instrument of German policy'.⁶⁹

The investments which these banks held in Italian industry was considerable throughout the period in question. But the stock-exchange collapse of 1907 and the outbreak of the war led them to disinvest and reduce their industrial involvement. Both the Consortium to protect industrial stock and the later Institute for Industrial Reconstruction came into being to solve the problems which resulted. By emancipating the commercial credit houses and by creating a distinction between short and middle-term commercial credit and longer term investment banking, which was entrusted to the institutions newly created for this purpose, it was possible to avoid the earlier difficulties.

Looking at the activities of these banks in historical terms, however, it is difficult to escape the conclusion that in a country such as Italy then was, and whose economic development had been limited and hampered by the lack of capital, their operations were highly beneficial. They made it possible for sectors such as the electrical industry to come into being, and the high levels of capital intensity of such industries would otherwise have rendered them unfeasible. Most modern scholars, from Gerschenkron to Romeo to Luigi de Rosa, would now agree that this was the case.

The years between 1856 and 1866 also saw the founding of many commercial credit houses in Spain. The economic expansion of the previous decade and the more liberal legislation introduced in 1854 led to the founding of *Credit Mobilier* companies in various points of the peninsula. And, just as occurred in Italy, it was those founded with French backing and finance which gained the greatest importance, led by the Pereire brothers *Credito Mobiliario Español*.

From the start these companies were mainly interested in railway building, on account of the profits which were expected from running the railways, and of the generous government subsidies given to the franchise companies. The greater part of the financial resources of the companies were then invested in this sector, forming 60% of the investments of the *Sociedad General de Credito* in 1857,⁷⁰ and the loans made by the *Credito Mobiliario Español* to the *Compañia de Ferrocarriles del Norte de España* in the same year were of the same magnitude.⁷¹ The third of the great French companies, the *Sociedad Español Mercantil y Industrial*⁷² was almost exclusively concerned with the building of the line between Madrid, Zaragoza and Alicante.⁷³ Great interest was shown in railway building throughout the peninsula, and even the Catalan banks, despite the

⁶⁹ G. FREZZON, *La Germania alla conquista dell'Italia*, Florence, 1916, p. 83.

⁷⁰ Founded by the Rothschilds.

⁷¹ Founded by the Pereire brothers.

⁷² Founded by Alfred Prost.

⁷³ G. TORIELLA, *Los orígenes del capitalismo en España*, Madrid, 1973, pp. 48 ff.

fact that they were sited in the most industrial region of the country, invested heavily in railways although they were not inclined to do so in local industries.

But this was the result less of the supply than the demand structure. Spanish industries were still at an embryonic stage, except for the Catalan textile industries, and otherwise the general backwardness of the country meant that there were few opportunities for investment. This was the conclusion drawn by Baron Rothschild soon after the *Sociedad General de Credito* began operating, and this would explain why the sole activity of these companies other than investment in the railways was lending to the government.

The stock-exchange crisis of 1866 brought earlier financial and credit expansion to a halt, and the hopes placed in the railways soon proved illusory. Once the phase of construction was over, the profits from running the lines proved to be much lower than had been expected, causing the railway stock to collapse on the Madrid and Barcelona exchanges. The situation was aggravated by the insolvency of the government which proved unable to meet its commitments to the banks, and by the bank failures in London. The result was an authentic financial cataclysm which totally destroyed the financial system built up in the previous years. By 1866 only 22 of the credit companies founded after 1856 were still in existence, and only 4 of these survived through to the end of the revolutionary period in 1874 — the *Credito Mercantil*, the *Catalana Generale de Credito* of Barcelona, the *Credito Mobiliario Español* of Madrid, and the *Credito Navarro*.⁷⁴

1874, as we have already mentioned, saw an important development in the Spanish banking system when the Bank of Spain was granted monopoly rights over the issue of paper currency. As a result, all the other issuing banks were transformed into agencies of the Bank of Spain, or else became ordinary commercial credit houses. The Banco de Bilbao, for example, took the second alternative and soon achieved a major role in the field of commercial credit.

The banking system was greatly simplified at the start of the Restoration period. On one hand, there was the Bank of Spain and its agencies which were present in almost every major provincial town. On the other, there were the commercial banks. The events of the years 1866-78 also brought about a considerable concentration of the banks, so that by 1876 rather than a banking system Spain had three major financial centres: Madrid, Barcelona and Bilbao. Each of these followed different policies and different lines of development, and helped to preserve a financial structure that was very poorly integrated.

Between 1876 and 1900 the Barcelona banks, despite the numerous crises which hit them, managed to maintain a primary role in Spanish finances. But their activities were devoted entirely to trade and them never undertook industrial investment. The same was true of the Bank of Madrid, which operated

⁷⁴ P. TEDDE DE LORCA, 'La Banca privada española durante la Restauracion' in *La Banca Española en la Restauración*, cit., p. 235.

mainly in the field of government loans. But in the Basque region the banks' activities were very different. At the start of the Restoration the Basque banks held a modest position in the national hierarchy (compared with a turn-over of 113.3 million pesetas for the Madrid bank and 87 millions for that of Barcelona, the dealings of the Basque banks only amounted to 13.6 million pesetas⁷⁵) but they expanded rapidly and by the start of the new century had reached the size of the others. But the banks in the Basque region also gave considerable support to local industries, and used a high percentage of their resources to help found and develop various enterprises — especially in iron and steel, which were expanding rapidly, the food industry, ship-building, marine and railway transport. But it was the electrical industry which proved most attractive both for the *Banco de Bilbao* and the *Banco de Vizcaya*, and its rapid development in the Basque region and elsewhere on the peninsula was largely the result of the support provided by these two banks. Some idea of their role in the industry is given by the fact that their investment portfolio grew by a factor of 25 between 1874 and 1913.⁷⁶

At the start of the XXth Century, the Spanish finance market began to grow quickly. In the Basque region the iron-ore exports provided the capital which lay behind the creation of the complex industrial and financial enterprises which appeared in the 1890s. The close of the American war and the repatriation of capital from Cuba encouraged the founding of new banks, including the *Hispano Americano Bank* of 1901. And by this time the predominance of the four banks which had attained an authentic national structure became established — these were the two Basque banks, and the *Banco Español de Crédito* and the newly founded *Hispano Americano Bank*, both of Madrid. The Catalan banks, on the other hand, proved unable to expand their operations beyond their province of origin, and their relative importance began to decline. The growth of these four banks also saw an increase in industrial investment. The model of the Basque banks began to be copied in other parts of the peninsula and was taken up by the two Madrid banks as well.

The role of these four banks became similar in some ways to that of the Italian mixed banks after 1894. Yet during the whole of the period in question, the activities of the Italian banks were on a much wider scale and with greater consequences for the economy. For example, by 1913 the four Spanish banks controlled 40.22% of current bank deposits, and 42.9% of overdraft credits,⁷⁷ whereas in Italy by 1910 the *Banca Commerciale* alone dealt with over 40% of the total consolidated turnover of the commercial credit banks.⁷⁸ And the

⁷⁵ P. TEDDE DE LORCA, 'Agregacion regional de las principales magnitudes bancarias', in *Ibid.*, Vol. 11, pp. 491 et seq.

⁷⁶ P. TEDDE DE LORCA, 'La banca privada...', *art. cit.*, p. 356.

⁷⁷ *Ibid.*, p. 417.

⁷⁸ J.S. COHEN, *art. cit.*, p. 367.

investment policies of the Italian mixed banks were much more ambitious and effective than those of their Spanish equivalents.

As we have earlier noted, however, the development of the financial system was dependent not only on the structure of supply but also of demand. In Spain's case, the development of the banking system was to be strongly influenced by the excessive credit demands of the state and also by the low level of economic and industrial activity, which meant that there was little room for credit operations to expand. This is well illustrated by a comparison of the securities issued by both the state and the private sector in both Italy and Spain; between 1897 and 1908:

TABLE 18

	Securities issued millions	% issued by the State (including local government)	% issued by banks industry & railway
ITALY	1,195	13%	87%
SPAIN	3,550	58%	42%

Source: T. CANOVAI, *Le Banche di Emissione in Italia*, Rome, 1912, p. 246.

Whereas in Italy the demand for credit from the state and the public sector was one-fifth of that generated in the private sector, in Spain it was the public sector that drew the higher share. It is no surprise, then, that the supply of credit should have developed in both countries along lines that were closely moulded to the structure of demand and the nature of the market.

