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Spanish Economy

XIX & XX century.

**Does the past explain
the present?**

ABSTRACT

This thesis is an economic trip to the Spain of the XIX and XX century. We will analyze how the industrial revolution was in Spain, how it developed during these important centuries, and always taking in account Europe. We will compare the different economic sectors between all the European countries and its evolution during those centuries. It finally will give as a picture of how the past influences in our nowadays economic situation. After this analysis will get into an important answer to the next question: **is the European current situation concerning to Spain a totally new state? It is a pattern that rules European history? Have ever happened before?**

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***To my dad & mum without them
this thesis would never happened.***

1. INTRODUCTION

The Spanish economical development is clearly divided in two moments: XIX Century and XX Century. On one hand, the XIX Century was characterized by slow growth and lagging behind the rest of Europe, on the other hand the XX Century was characterized by fast growth and recovery from the rest of Europe.

We can see the next graphs to get a better view of how big the differences are between these two periods:

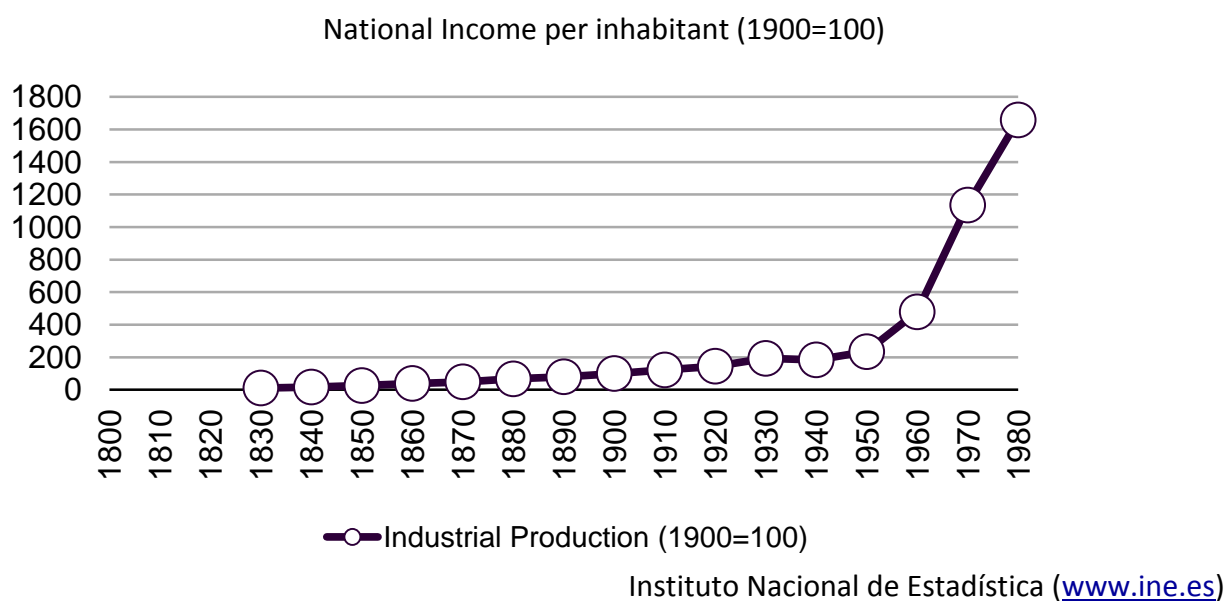


Chart 1

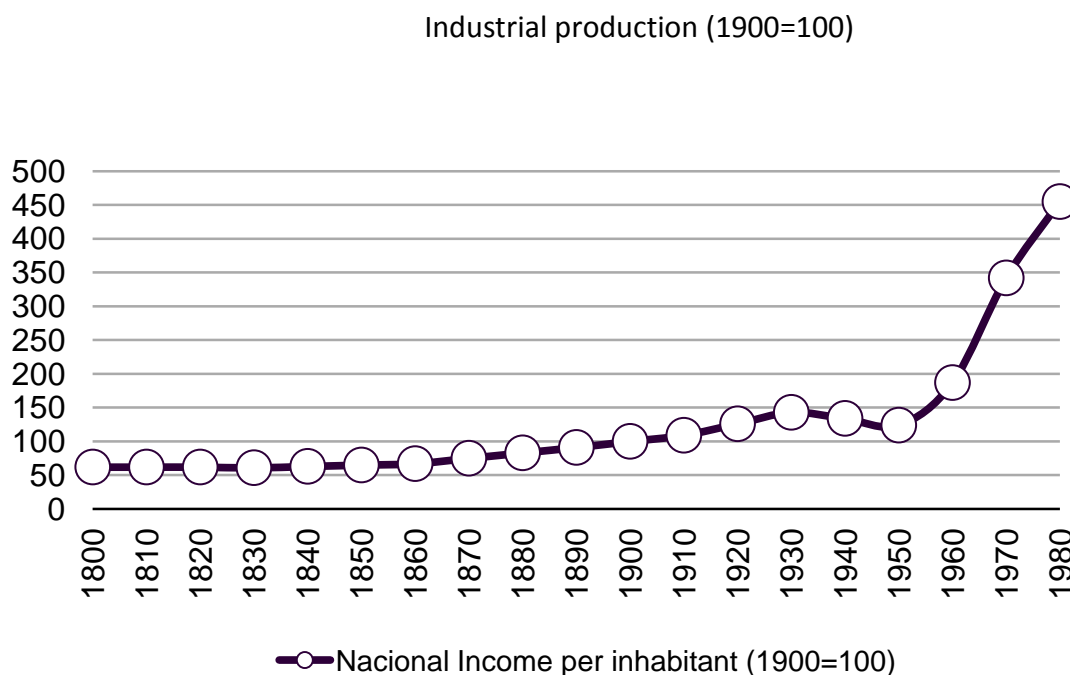


Chart 2

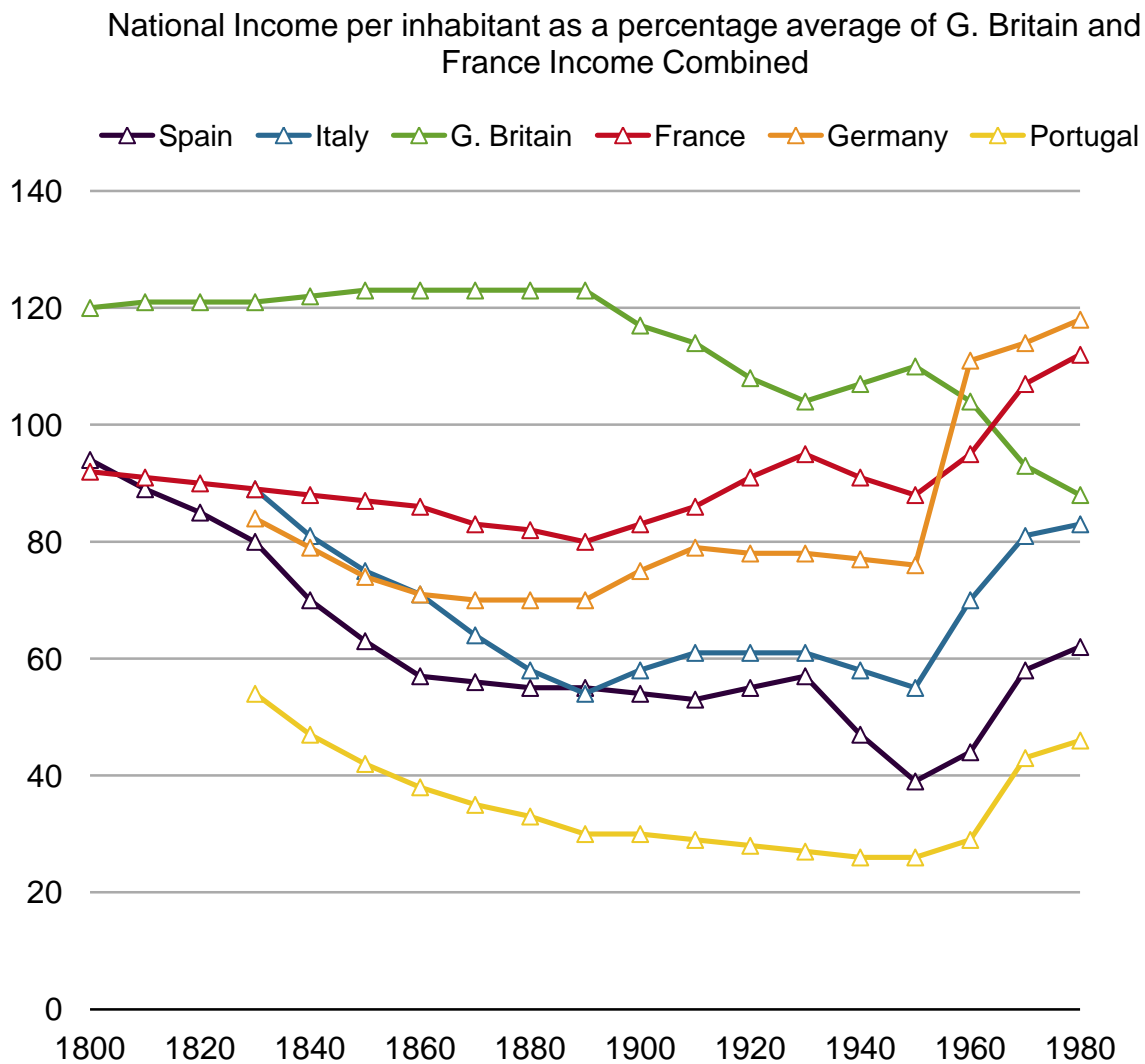


Chart 3

Instituto Nacional de Estadística (www.ine.es)

As we can see in the graphs there is an incredible acceleration in the economic indicators that show us how different were these two periods.

Furthermore is very useful to see some graphs related with the rest of Europe to see where the Spanish place was and how it developed during these two periods.

(Tortella,1985).

In conclusion the Spanish economy was stagnant at the beginning of the XIX Century and it started a slow recovery during the second half of this Century. After that, during the XX Century, the slow recovery turned into an accelerated growth.

Looking to the graphs we can think that the growth of Spain was sustainable after 1840 to 1980, but the truth is that there is a huge change between the centuries because Spain as an economy was traditional, agricultural and backward with respect to the rest of Europe until the XX Century came. As

we will see the XIX Century was useful just to remove all the barriers that were necessary for the industrialization of the XX Century.

The aim of this part of the work is to explain why Spain did behave in this way? There are two main factors that we should get briefly into them.

1.1 Agriculture

Spain is the second highest country of Europe (20% of the land is more than 1.000 meters over the sea, 40% of the land between 500 and 1.000 meters and the last 40% less than 500 meters over the sea level, (Tamames, 2005) after Switzerland, which gives to Spain a bad geography for agricultural activities.

The first sector, which principal activity is agriculture, held active Spanish population (2/3 approximately) in rural issues, which means that there was not people enough in the Spanish towns to make an Industrialization of the country.

The rural areas were deserted in the rest of Europe because of the “Agricultural Revolution”. This revolution gave to the population tools to work the land more efficiently, so the work force was ready to move for another work, so that is the beginning of the Industrial revolution, a lot of human cheap resources ready to work anytime, anywhere.

Revolutionary methods to work the land that came from north Europe were a problem for Spain because these methods were for heavy lands with a high rate of humidity, and were unadoptable for the South European Regions (in this case we talk about regions instead of countries to be in line with Sidney Pollard (1973 and 1982) who said that the best way to understand the Industrial revolution in Europe is talking about regions). That was one of the most important causes that Spain and the South European Regions were delayed in economical terms.

1.2 Education and Literacy

There are two lines of thought in this topic, the first one thinks that the education and the literacy of the population to work is not really important and more if you compare it with other factors. The second one says that the literacy of the population of a country is crucial to follow a sustainable growth in the long term (Sandberg, 1982).

If we take a look to the figures, from my point of view there is no doubt that Literacy and Education are totally related to the growth of a country in the long term. There are three main economic contributions of literacy (Núñez, 1992):

- It gives to the worker a better communication capacity. The worker could, for example, read instructions of new machines, read a manual of behavior to be more productive, etc.

- The capacity to read and understand gives to the workers the tool to change more efficiently with the changes of the labor market. And making the economy more flexible.

Illiteracy percentage of the population of each country

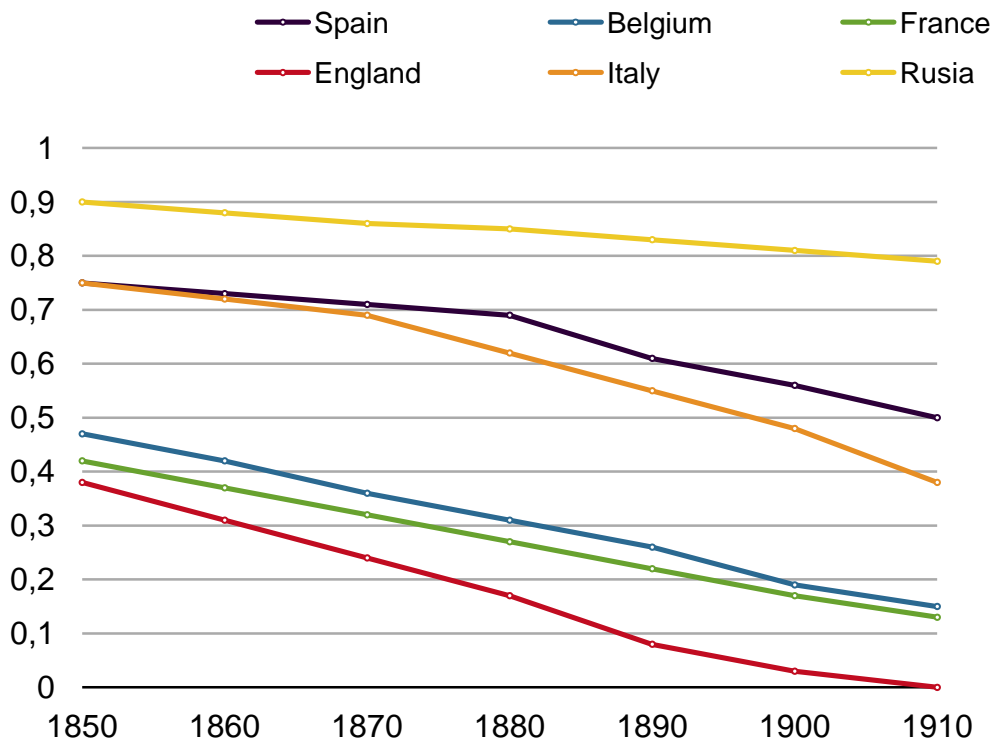


Chart 4

Instituto Nacional de Estadística (www.ine.es)

- The learning of grammar and the alphabet improves reason abilities and the capacity to learn new things.

If we take a look to some figures we will see, empirically, how literacy influences the economic development:

(Instituto Nacional de Estadística (www.ine.es))

These two general aspects are among the most important explanations of Spanish development during these two Centuries, but we should take a deeper look into this period to understand it far better.

Furthermore, although is not the thesis purpose, the **Spanish political situation** in the nineteenth and the first half of the twentieth century is so complicated and convoluted and that it is a major cause of economic problems which I will detail in the development of this work.

Worth a summary of Spanish political development during these centuries to understand the economic decisions that were spread out. Mainly the enormous difficulties of continuity of the measures taken as a result of the changing political environment full of disputes, military proclamations, civil wars throughout the nineteenth century and the great Spanish Civil War in 1936.

The entry of Spain in the eighteenth century is marked by some international relations which are crucial in its historical evolution. The outline of Spanish foreign policy started in the difficult situation created by the Treaty of Utrecht. Spanish foreign policy had, in these times, the following objectives: to regain Gibraltar and Menorca, Spanish territories in British hands, and get set to the Bourbon family Italian territories lost. For this, the Spanish foreign policy was based on the alliance with France, specifically in several family covenants, and the clash with England in the Atlantic Ocean to the British threat to the Indies Spanish possessions.

Carlos IV (1788-1808), from the moment that started the revolution in France sought to avoid any "contagion" from the neighboring country revolutionaries. Tight control at customs and strict media censorship were used to isolate Spain from the French crowd. After several disputes Spain came back to the traditional alliance with France against England with a growing dependence on French foreign policy and Napoleon Bonaparte.

After the naval disaster of the Franco-Spanish fleet against the British Admiral Nelson at Trafalgar in 1805, Spain authorized the entry and establishment of French troops in Spain with the purpose to invade Portugal, but it soon became obvious that the consented entry of Napoleon's troops had become an occupation of Spain.

Thus, the XIX century in Spain begins with the first war, known as "The War of Independence" or "The Spanish people and the Spanish army rise above the Napoleon's troop's invasion". Napoleon forced the Spanish kings to cede their rights to abdicate in his brother Joseph Bonaparte, prompting the Spanish popular uprising against French domination. For six years, fought the French army, with the support of the "Afrancesados" (Spanish people who supported the French invasion) against the "Spanish guerrilla" (defensive-offensive system of the Spanish peasantry, who knew the rugged terrain with maximum mobility, formed by former Spanish soldiers and peasants) aided by the British army sent to Spain

The war had harsh consequences for Spain, hunger, epidemics, mortality and the destruction of agriculture and livestock, which also marked the cessation of trade (Francisco Olmos, 2001).

After "The War of Independence", the political instability can be summarized schematically in the following points (Francisco Olmos, 2001).

You can find Annex II as a part of the thesis that you can come to clarify what was the exact political situation for the different economic states and evolutions that we will see through the this work (It was made in this structure to not spend too much time explaining the political history of Spain because it is not the aim of the Thesis which should be predominant in economics).

So, at the end, this Thesis topic is about the actual economic situation in Spain and how Europe is managing it; it will be seen how everything fits and how history always explains the present. The financial crises has hit Spain very strong and is important to know what Spain have done in the past and to know if this kind of problems have happened in Spain in other sectors. Nowadays Spain has:

- 25% unemployment (50% under 25 years old unemployment).
- Risk premium is around 500 points which means that to get capital is five times more expensive for Spain than for Germany (we will see that Spain had always a scarcity of capital problem).
- Our debt GDP deficit is around 8% when it would never pass 3%.
- Financial sector health is not clear enough, we are suffering the legislation for “cajas de ahorros”, what were little banks managed by politicians (Spanish politicians ineptitude for economics is also something that we will discover is a constant century by century).
- Madrid Stock exchange is in 2003 levels.
- Our companies are closing because banks don't give loans, and they have to close because of cash scarcity.
- Spanish consumption is getting negative in 2012 (last lecture was -0,1%).

Furthermore Europe and U.S. are not much better...

And from my point of view, getting a trip about all the data and its evolution, we will see that the part that makes this crises the worst that Spain have never face up is that either Europe and U.S. are not in a good situation and can't bring the economic factors that we need.

It doesn't mean that Europe have always be our “economic angel”, not when Spanish economy have gone well, but when it has been in crises... We will see...

So, DOES SPANISH ECONOMIC PAST EXPLAIN THE PRESENT?

2. XIX CENTURY

The end of “Ancient Regime” (“Antiguo Régimen”) was especially turbulent for Spain and it has been suffered along the XIX Century.

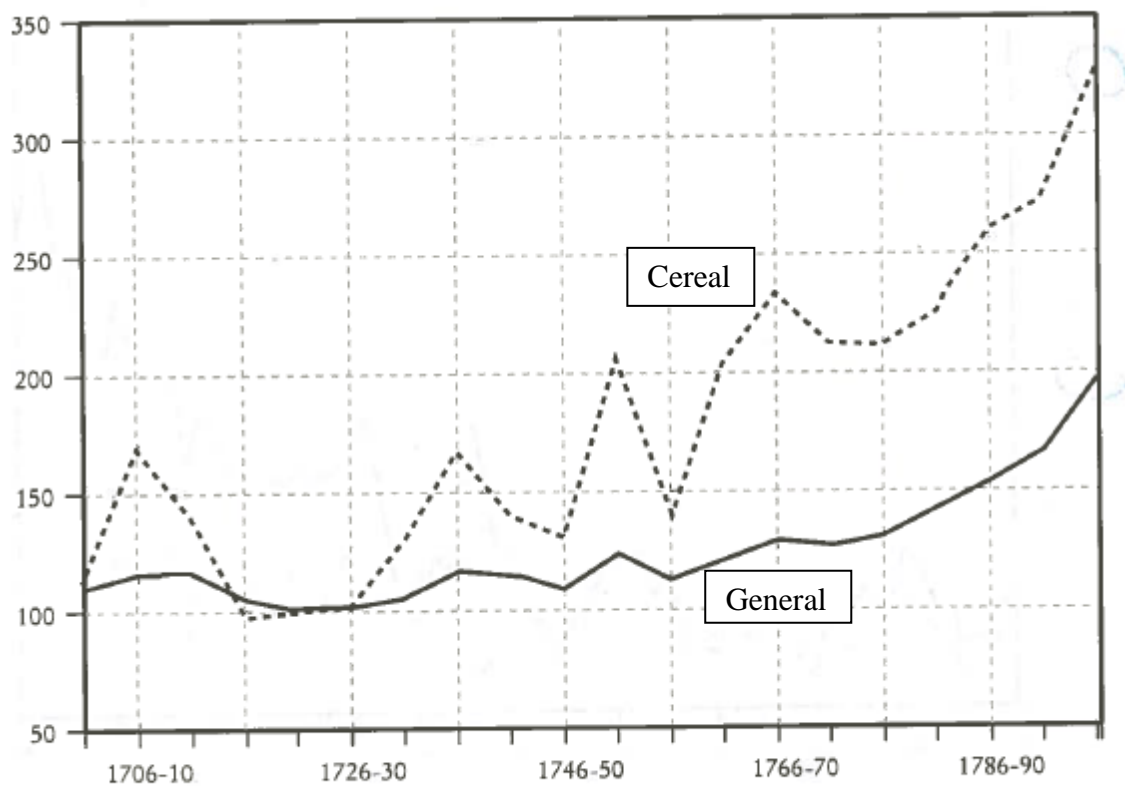
From the American independence war (1776) to the Spanish’s colony army defeat in Ayacucho (1824), Spain was an ally of France in the North American Independence war, this war was too costly, caused many commercial lacks and it seriously unbalanced Spanish finance. Spain started in this period a national debt long process which affected all the development possibilities during the XIX Century (Hamilton, 1970).

The North American Independence War was not the only war where Spain was involved, some examples are: Portugal invasion in 1801, Trafalgar naval battle in 1805, Spanish Independence War from 1808 to 1813, Independence Hispano American War from 1808 to 1824, etc. Now we can get a better picture of how big was Spanish debt problem during the XIX Century.

There were a lot of consequences of Spanish huge debt problem. It weakened its political and military power and it forced Spain to a desperate situation. Spain sold its national assets underpriced to satisfy its pay obligations, increased fiscal pressure and recapitalized careless its colonies and it made the start of more colonies revolutions and colonies lost.

Furthermore the economy was too inelastic (institutions and culture), the most inelastic sector was agriculture, it means that if the demand grows the offer is not able to raise its production so the prices rise (Hamilton, 1947). The Spanish demand structure during the 1700 and 1850 explains prices rise during the XIX Century.

Cereal and General Price indexes in "Castilla la Nueva" (1721-1730=100)

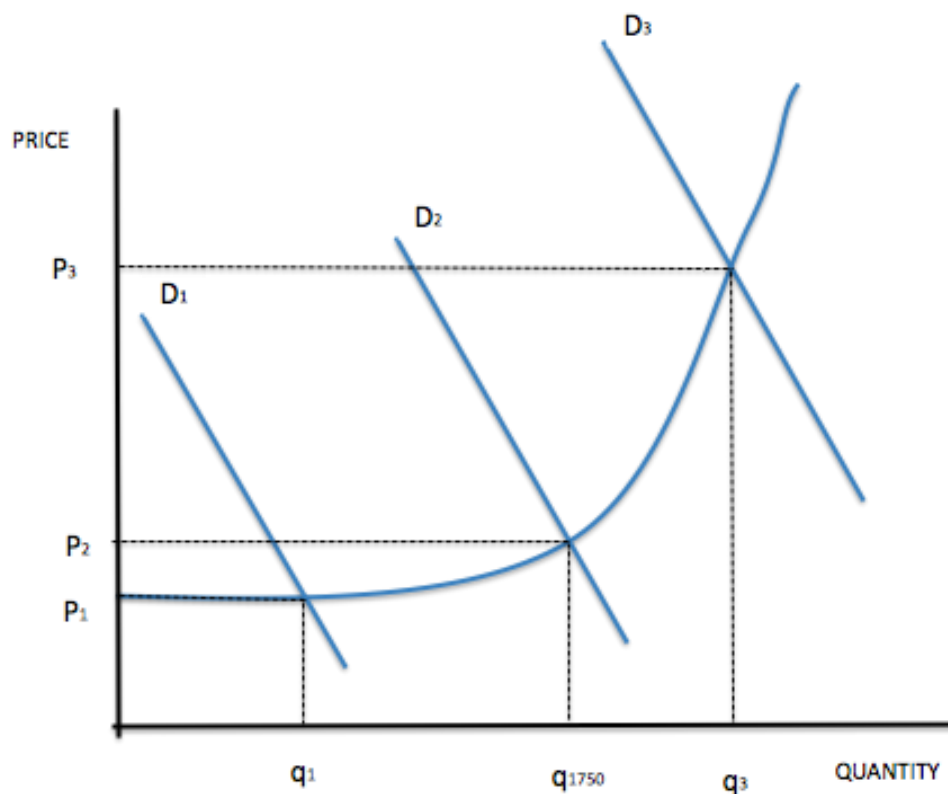


Hamilton, 1947

Chart 5

Taking in account that the Spanish population had a constant growth during the XVIII Century we can achieve to a broken supply curve structure for the Spanish market, where before 1750 there was an elastic supply and after 1750 there was an inelastic supply. The inelastic part made the prices rise; we can get a better view of this process in the next graph.

1750 Spanish inelastic Supply



(Blanchard, 2005 and Hamilton, 1947).

Chart 6

There are several explications of the inelastic supply of Spanish agriculture sector. Between them are technology stagnation and limited arable land, but let's get deeper inside it with an analysis of this sector, its importance and its repercussions in the XIX Century.

2.1 Agriculture

2.1.1 Introduction

Agriculture was the most important economic activity for Spain in XIX century, because at the end of XIX Century two thirds of the active Spanish population used to work in agriculture and more than half of the national income was generated by this sector (Simpson, 1985 and 1989).

Economic evolution in the agriculture sector was very important to reach the industrial revolution (France, England, Germany,... see Tortella, 1987 and Lains, 1988) and economic modernization.

First of all without agriculture change is more difficult to achieve social and economic change. Secondly there are five important issues that the agriculture sector needs to reach to achieve economic modernization (Tortella, 1994):

Food production surplus to provide a rising urban population of food.

Market for industrial goods. It means a growth in exchange between agricultural and industrial goods.

Make savings and transfer them, through bank system (Capital Markets) and fiscal system, to Industrial sector.

Emigration to Industrial sector. A productivity and life level rise (Landes, 1998. Chapter 15).

Food exports to get capital imports to industrialize the country (Landes, 1998. Chapter 17).

We will make an analysis of how well Spain reached those points in the conclusion of this section, first we need to get more through Spanish agriculture during XIX Century.

2.1.2 “La desamortización”

“La desamortización” is to Spain as the French Revolution Agrarian Reform to France or as The Dissolution of the Monasteries to England. “La desamortización” is the most important arrangement or movement in XIX Century (Segura, 1973).

This arrangement is not important just because of money or land matters, it is connected to every social or economic aspect of Spain in XIX Century. “La desamortización” followed France’s agrarian reform steps and it was a government appropriation (paying for them) of clergy’s and municipalities’ goods, those goods were sold by public auction and they were an important part of national’s GDP during XIX Century.

During XVIII Century end and the beginning of XIX Century, when Carlos IV was the King and Godoy was the actual governor of the country, Spain made some appropriations of clergy’s and municipalities’ lands in order to pay the huge national debt of the country previously commented. They expropriated, during this period, 12% of all XIX Century’s appropriated land (Herr, 1974).

There was an attempt to make a huge “Desamortización” in 1813, but it was stopped when Fernando VII got the country power by a coup d’état. By this time the “Desamortización” was viewed all ready as a tax arrangement, not as a redistribution of the Spanish land to empower the peasants and make more egalitarian country.

It was in 1836 (February 19th), when Juan Álvarez Mendizábal was the prime minister, Spain made the nationalization of clergy goods and sold by bidding. At this time the aim of this “Desamortización” was, in Mendizábal’s words, ‘to finance the war against the Carlista party, to solve part of Spanish debt problem and to create a relevant family of owners interested in liberal ideas’. Mendizábal expropriated, during this period (5 years), 15% of all XIX Century’s appropriated land (Fontana, 1973). In 1841 (September 2nd), the “Desamortización” law was extended to the secular clergy goods (arrangement made by General Espartero), so until 1844 there was sold a huge part of regular and secular clergy heritage.

The most important and last “Desamortización” was the Madoz Law. Pascual Madoz was the finance minister of the progressive party, in 1855 (May 1st) he started the General Demartización. It was directed not just to the clergy this “Desamortización” was also directed to the public ownership. So it was the final arrangement to be a private ownership country. From 1855 to 1867 was expropriated and sold the 40% of the century expropriated land (Herr, 1974).

The final question related to this process is, how this process (“Desamortización”) affected the Spanish property structure. The most extended opinion between the Historians is that it was an arrangement that maximized the income and its aim was not the ownership redistribution, so the property structure and the population structure changed but less than was expected before the starting of the process by some population sectors (Tamames, 2005).

2.1.3 Production and productivity

In the “Desamortización” process were sold and changed the property 100.000 Km², 20% of the Spanish extension, or 50% of the agricultural land (Simón Segura, 1973). As Jovellanos said in the XVIII century, private ownership is more efficient than public or religious ownership because to the second owners had a lack of capital, ambition and entrepreneurship. There were more changes than “desamortización”, communications, law, etc. also were important improves that contributed to the Spanish productivity and production.

Simpson 1985 and 1989 made a production study of Spain and the conclusions were that Spanish production grew during the whole Century (XIX) but too slowly. It was at the end of the century when the external competence could enter in the country when the production started to grew faster. The structure was typical Mediterranean, with cereal as the main produced raw material, specifically inside cereals the main produced materials were wheat, olives and vine, in 1890 those three materials occupied the 90% of the agricultural land and made the 80% of the agricultural production value (“Grupo de estudios de Historia Rural”, 1983).

The extension of private land property looked with favor on livestock, because during the previous years there was a constant fight between the two sectors (Herr, 1958) about the proper use of the land because of the lack of it, after “desamortización” process these two sectors could complement each other.

If we take a look and compare Spain inside Europe (see the next table), we see how low was the efficiency of the Spanish agricultural sector in comparison with the European economic leaders, that leads us to an important conclusion; The Spanish production growth was, in a huge part, because of the agricultural land growth and not because an improvement of the efficiency or the production methods.

Agricultural performance in a some European countries from 1890 to 1910 (Kg/Km²)

Country/year	Wheat	Barley	Rye	Oat	Potato
SPAIN					
1891-1900	7,6	9,2	6,9	7,9	No data
1901-1910	9,0	11,5	7,9	7,7	No data
ITALY					
1890-1896	7,9	6,5	7,8	7,1	61,1
1901-1910	9,5	9,0	14,1	9,3	95,0
PORTUGAL					
1901-1910	5,9	No data	No data	No data	70,0
FRANCE					
1892	12,7	11,9	11	10,8	105,0
1902	13,6	13,7	8,7	12,8	76,7
GREAT BRITAIN					
1891-1900	25,3	20,9	No data	17,4	146,2
1901-1910	22,1	21,1	No data	19,0	141,1
GERMANY					
1892	17,1	17	14,2	14,4	111,7
1902	19,7	18,9	15,4	18,0	134,1

Chart 7

Tortella, 1987 and Lains, 1988.

The Spanish agriculture future was to produce citrus, vine, olives and get as far as possible from cereal,

but it was not done until mid XX Century. They were the future because Spain had a comparative advantage (weather, land structure, etc.) producing those fruits above its European competence. Why Spanish agricultural sector growth was that slow? It has an easy answer: Because of the tariff protection policy that Spain used to have during the XIX Century. Wheat tariffs have been high at least since 1820 (Sánchez-Albornoz, 1963). High tariffs on wheat policy, was a huge mistake and more when transportations started to be faster, because the Spanish comparative advantage was on perishable goods (fruits, vegetables, potatoes, corn, etc.) so if this kind of goods could get to other countries faster it would be better to sell those goods than sell cereals, in special wheat. If Spain would unlock this protection, the least efficient cereal producers would go to the more efficient sectors previously commented. If the tariffs would unlocked sooner in the Spanish history, all the reallocation process of the country would been much earlier.

On the other hand tariffs were useful to contain the social equality and politic peace.

2.1.4 Conclusion

To conclude and after all we have commented above we should analyze how Spain developed the five issues that the agriculture sector needs to reach to achieve economic modernization (Tortella, 1994) commented in the introduction:

Food production surplus to provide a rising urban population of food. Spain had a low productivity, slow economic growth and a low consumption level as we have seen above, so it didn't make a substantial surplus of production to provide other sectors of its goods.

Market for industrial goods. It means a growth in exchange between agricultural and industrial goods. This issue is probably the least achieved issue to become a modern economy by the Spanish agriculture sector in the XIX century. Spain had, during this century, a clear production surplus problem because of the low consumption level that Spain had. Spain developed a textile industry (cotton) in Barcelona from 1830 to 1855, the reason of its development were more the tariffs around cotton in Spain than the manufacturer production power or the Spanish consumption power (Prados, 1983). The textile consumption in Spain was lower than in England or France, furthermore it had a slower growth.

Make savings and transfer them, trough bank system (Capital Markets) and fiscal system, to Industrial sector. Spanish core connector of savings and industrial investment was the fiscal system, but it was not perfect at all. Tax evasion was general for big landowners, and less powerful landowners paid more taxes than they must pay. Furthermore taxes were used to finance wars, military issues and other unprofitable investments (Tortella, 1978).

Emigration to Industrial sector. Because a rise of productivity and life level, Spanish population proportion that was focus on agriculture didn't change substantially during the whole XIX Century (Pérez Moreda, 1983). Since 1880 agricultural work force started to emigrate, but they started to emigrate abroad instead of Spanish industrial sector, so the Spanish problem was a lack of demand in the towns (see **2.4**).

Food exports to get capital imports to industrialize the country. They were too slow produced and made with the wrong materials because of the Tariffs. Spain focused its production in cereals because there was no competition, instead of a real focus in comparative advantage goods like vine, fruits, cork, etc.

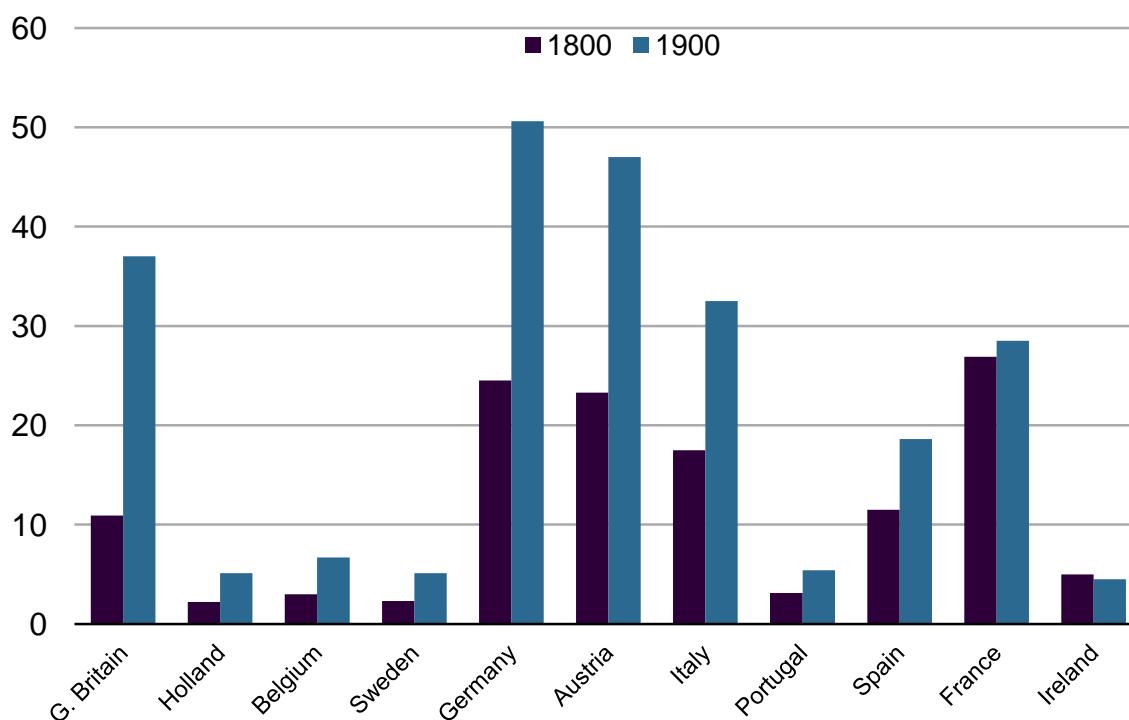
Then that reaffirms the sentence said in the thesis introduction, that the XIX Century was useful just to unlock and delete all the organization inefficiencies that Spain used to have, and this made Spain able to grow in the XX century. So it was not an important century for economic growth or development the most of the things were late and wrong done.

Agricultural stagnation is a cause of the relative backwardness of the Spanish economy in the nineteenth century.

2.2 Demography

In comparison with the rest of Europe, Spain was too slow (see next graph and table).

European countries population (million of inhabitants).



Armengaud, 1973 and Mitchell, 1976.

Chart 8

Average population growth (1800-1900)

Great Britain	Holland	Belgium	Sweden	Germany	Austria	Italy	Portugal	Spain	France	Ireland
1,23%	0,84%	0,81%	0,80%	0,73%	0,70%	0,64%	0,56%	0,48%	0,34%	-0,11%

Armengaud, 1973 and Mitchell, 1976.

Chart 9

This graph and table show an incredible connection between population growth and economic modernization, except France which is an example of dual economy.

Spain had a slow growth during the XIX Century because of its mortality high level; it was well above the European average. Life expectation of in 1900 was 35 years, figure that was reached by the Scandinavian countries century and a half before (Taylor & Francis, 1999). The factor that explains this mortality level is economic backwardness: bad sanitary conditions, lack of dwelling, expensive and insufficient transport services, widespread ignorance, etc. During XIX century there is a strong connection between hunger and mortality in Spain (Sánchez-Albornoz, 1963, 1964 and 1977).

One of the reasons of Spanish hunger during this century was the climatic fluctuation, but it was not the most important one. Social organization and economic development level were the most important reasons, if the production was that connected to weather was because agricultural techniques in Spain were obsolete and its yields were too low.

John Hajnal study shows another important reason that explains the low European population growth. Occidental Europe have had always a very high celibacy rate and when the married the do it much later than in the rest of the world (XIX century). If we focus on Spain, we see a positive evolution of the population growth during the period, it is explained by the fall of clerics and monks and law modernization.

The reader can be thinking about emigration as another factor of Spanish low population growth rate, but in Spain emigration expansion didn't start until the end of the XIX century. Spain got its highest population grow rate at the beginning of the XX century, fifteen first years. Let's take a look to the next table to get a compared idea of the Spanish situation in Europe in this aspect.

Population growth Vs Emigration Rate %

	Spain	G. Britain	Portugal	Sweden	Italy	Germany	France
Population growth* 1830-1900	7.849	29.240	3.078	3.564	14.592	33.487	6.189
Emigration rate % **	17,7	29,1	22,9	21,7	19	12,8	4,8

Mitchell, 1976 and Woodruff, 1966.

Chart 10

* Population growth is defined as 1900 population absolute number plus 1900 emigration, minus 1830 population absolute number plus 1830 emigration. (In thousands).

** Emigration rate is defined as emigration (1830-1900) divided by Population growth*. (%).

So Spain was during the XIX century well under the European migration average, which is reasonable knowing how low population growth in Spain during this century was. Then it was not a determinant factor to explain Spanish low population growth.

2.3 Human Capital

Human capital growth can be defined as quality growth of the population instead growth as a number of people. It could be measured with an education rate (Population percentage who knows how to write, read and have received some kind of education), and it has been defined as a determinant for production efficiency by diverse economists like Adam Smith.

Spain divided the education in three levels: Primary school, “bachillerato” or secondary school and university. Manuel J. Quintana was the deviser of this educational organization; he wrote a book (“El Informe Quintana”) to organize the concepts that should be taught in each level, to define why education should be free and why should be directly connected to technological innovation.

General Principals were fast installed in Spain by “El Informe Quintana”, but education reform was more difficult to implement. It was when liberal party was in the power when it used to make important changes, but the transition was irregular and unequal (Nuñez, 1992). Village councils were empower to install the new education in Spain and it made so difficult to have a standard of education as a country. This problem is still nowadays in Spain, when governments want to install an important arrangement for the country the order is lost in bureaucracy and in all political charges. Spain had and has a very big institutional power that made and makes very difficult to be fast and efficient in politics.

To conclude I would like to translate a Manuel J. Quintana sentence “En el diccionario de la razón ignorante y esclavo son sinónimos” (in the dictionary of reason ignorant and slave are synonymous). This means that Spain was still inside a ‘feudal system’ in the XIX century.

2.4 Industry

In the Spanish economic history, industrial development has been assessed as a failure by many authors (Maluquer de Motes, 1988), differences with other European countries increased during the XIX century. The failure was not only relative compared to other countries, it was a failure of all attempts (public and private) of lead Spain to the economic modernization path, and in the XIX century economic modernization was industrialization.

Part of the failure can be explained by the already analyzed agriculture problems and will remain as an exception Cataluña who, after the “desamortización”, managed to develop a network of infrastructures, reform the education system, etc. which led this area to develop a small manufacturing industry.

2.4.1 Textile Industry

Already touches on page 21st and 22nd. Its main points were:

1. Spain developed a textile industry (cotton) in Barcelona from 1830 to 1855.
2. Tariffs around cotton in Spain were the main reason to develop a manufacturer production.
3. The textile consumption in Spain was lower than in England or France.
4. It had a lower growth than in Europe, because of capital scarcity.

2.4.2 Iron and steel industry

The steel making process is divided into two parts (Bilbao, 1985):

1. The iron ores are loaded in successive layers, it goes to a blast furnace where coal combustion assisted by blowing air and the presence of limestone melts the iron in the ore. It becomes liquid iron with high carbon content, the process is called “The benefit”, and it does a product called pig iron, hard and brittle.
2. The second process, called “The refinement”, heats the ingot and mechanically reduces strange resources until it gives the desired output. Thus a pro carbon reduction below 0.2% produce almost pure iron, between 0.2% and 1.5% produce steel and between 1.5% and 4.5% gives cast iron, the cheapest and hardest, but fragile.

Steel, elastic and hard, is the most desirable quality, but its achievement involves great technical difficulties were not solved until industrial methods were improved to produce good quality steel in mass quantities.

Moreover, the Spanish difference, unlike England, Belgium and Germany is that coal does not produce good coke (When coal is heated off gases that are very industrially useful in, the resulting solid is coking coal, which is lightweight and porous).

Spain, rich in iron ore, steel mills were not located near the coal sources as would be logical, and they place them far from these sources, such as Malaga. The first major Spanish steel industry at the time of the Industrial Revolution was "La Constancia" (1826 and 1834), with two factories in Marbella, having British workers in charge. The problem with this industrial focus was the use of charcoal, with technical advantages but high price and very serious environmental problems (deforestation). The decline in activity was visible since 1860.

The "logical localization" was imposed by geological factors and transportation: a great advantage was its proximity to the coal basin of Asturias, which had Mieres factory (1848, English, bought in 1852 by the Compagnie Minière et des Asturies Métallurgique) and La Felguera factory. Those factories had some push but they finally succumbed.

Interestingly, the area managed to become a symbol of the Spanish steel industry was Vizcaya, rich in iron ore for export to England in exchange of coal. This, confirmed a development that was never significant in comparison with the major European producers, Germany and England

A second key factor, in addition to coking coal abundance, was industry products demand, which also happened in Spain. The two events together, led to Spain with Sweden to become large exporters of iron ore in Europe (see paragraph Mining development).

Thus, technical and educational backwardness, lack of agricultural and industrial demand and the shortage of coal in part explain the paradox of plenty of iron ore and metallurgical underdevelopment. (Bilbao, 1985).

2.4.3 Mining

Spain has good mineral resources, and its quality is not only in the existence of large reserves of mercury, iron, copper, lead, zinc, tungsten, etc. But also in the vicinity of the sites to the ports, which made transportation and, especially, export possible. In the iron case (especially Vizcaya, Santander and Malaga) the cost of transport was critical, which explains why coast's field deposits were exploited, while inland were barely touched.

However, for various reasons, it was not until the end of the century when mining reached full development, but among other reasons could be cited:

1. On the supply side, lack of capital and expertise hampered production at the appropriate scale.
2. On the demand side, the underdevelopment of the country deprived the industry in market power to justify its development.

3. With regard to legislation, although eager to spur development, was too royalist. The Mining Act of 1825 established the principle of eminent domain of the Crown over the mines, which placed the private concessionaires in a precarious situation (Chastagnaret, 1972). Throughout the century there were other mining laws giving fewer gifts and more favorable to private enterprise, such as 1849 and 1859, but apparently was the law and policy of the revolution of 1868 that triggered the mining fever last quarter century.

From 1868 legislative reforms that arise are a takeoff of the sector:

1. The 29th of December 1868, following the liberal and free-market ideology of the revolutionaries of 1868, was published a Basic Law on Mines which simplified the award of concessions and gave security to private dealers for mine exploitation. An example is the 19th of October 1869 Law on Industrial Corporations freedom of creation, mining corporations included. This legislation, together with another series of complementary measures, and with the general policy of the revolutionary governments favored the mining boom.

“La Gloriosa” (the glorious) Revolution in 1868.



Picture 1

2. The demand factors: the mines came into operation not only because the state wanted to, but because there was a growing international demand for mining products, which were not necessarily waiting for the most favorable legislation to be enacted.

In conclusion:

The demand for Spanish metallurgy presupposed an Industry that one could not improvise.

Furthermore Spain hadn't the capital and the operating techniques that were required to a proper mining exploitation. So ore mines were exploded by foreign capital help and for export, or mines would remain inactive for long. This alternative was well aware by "La Gloriosa" (the Glorious) revolution men (Picture 1), who launched the mining legislation that they considered as an extension "desamortización" principle.

2.4.3.1 Iron

A special case is Iron mining, as we have seen in previous paragraphs; it became a key asset for the European heavy industry.

Slow development of the domestic steel industry was a lack of incentive to large-scale exploitation of the abundant iron ore in Spain. English (and German) iron mining development was the major determinant for the exponential growth of iron mining in Spain. Steel technologies also suffer a rapid expansion, starting with the Bessemer converter, which stimulated demand for Spanish iron. The converter, invented by Henry Bessemer, allowed mass production of good quality steel from an iron ingot. But to make the Bessemer steel out in a desired quality, the ingot was used as raw material should be free of phosphorus. There was this kind of iron (no phosphorus) in England, but not in amounts that increased steel demand required. The best position was the "vizcaíno-santanderina" (north of Spain) basin, and British steel interests were focused on this Spanish area.

Within a few years after 1871 more than 20 British companies active in iron mines exploitation were founded in Spain. There were also numerous Spanish mining companies founded who were benefited by this situation (especially in Vizcaya, Santander and Andalucia).

The operation required a minimum scale, but close to the sea, the ore had to be extracted and transported in large quantities to be profitable. Mining railways were built, loading docks and washing/concentration facilities. Without demand stimulus and foreign capital it would have been impossible to make this infrastructure (Bilbao, 1985).

Most of the ore produced was exported, on average 90% (Prados de la Escosura, 1985). In 1900, while Spain was exporting 7823 tons, Norway was exporting 27 tons. (Mitchell, 1976). Most of this iron was exported from Bilbao to England. Export's rapid growth during these decades in the late nineteenth century, turned Spain into the largest iron ore exporter in Europe, with a difference on the second,

Sweden, which in 1900 exported a fifth of the Spanish volume (Mitchell, 1976). However, Spain was not the first mineral producer. So, what draws the attention of the Spanish case is the huge imbalance between production and exports. Spain exported almost everything produced at that time, and instead of developed its steel industry or take advantage of its benefits; everything went abroad minerals and capital because it was earned by foreigners. The Spanish economy had no choice: either export the ore with foreign capital help, or leave it underground. The sale of the Spanish iron was made in the best possible time, when the Bessemer process was rising, and it made its trading value reach peak values. Later, with the diffusion of other processes that did not require non-phosphoric ore, the discovery of new deposits and the decline in freight rates, the Spanish ore prices fell (Vicens Vives, 1959). Iron ore bulk export on the Spanish economy had special dynamic effects. All authors (Bilbao, Vicens Vives, Tamames and Tortella among others) acknowledge that the development of Vizcaya's steel was made possible by the strong capitalization gave by ore export benefits.

In addition there were other issues such as (Bilbao, 1985):

- Labor demand.
- National mining technology development was stimulated.
- Industrial equipment and explosives industries development.
- It caused considerable investments in infrastructure, such as railways and ports, which came to fill the gap in the balance of payments (the period of maximum mineral exports coincides with the maximum import of capital, from 1870 onwards).
- A considerable increase in Bilbao population and its region, employment in industry and commerce also increased during this period, because of the founding of companies, the banking system growth and the savings deposits.
- Also had negative effects to Vizcaya's region, from increasing mortality rates to the export of labor and the growing disparity in income distribution and wealth.

2.4.3.2 Lead

Lead surpassed the total value exported of iron throughout the century, because their exploitation and large-scale exports were much older and it was exported in bars, therefore with more added value.

Unlike iron, lead has a relatively low melting point and its refining is quite simple. Usually it is refined in facilities near the mine.

Spanish lead was abundant in the south (Granada, Almeria, Murcia, Jaén and Córdoba, in particular) was exploited with relatively modern methods in 1830 (Tuñón de Lara, 2000). Until the mid-nineteenth century, lead mining was in Spanish hands and essentially local. From here foreign capital became

interested in this activity. During the 2nd part of the century, British and French capital lead Cordoba and Jaen mines exploitation. This influx of foreign capital and technology, along with the railway network extension and the depletion of some fields, made inland lead gradually overcame the coastal production.

2.4.3.3 Copper

Such exploitation occurs in the Iberian peninsula's southwest and back to Tartessos' time. Copper farms were spread in a strip parallel to the coast, north of Huelva, between Guadalquivir and Guadiana rivers. The most important deposits were among Tinto and Ordial rivers. Most famous Spanish deposits were in Tinto and Tharsis rivers.

More than the copper ore, Huelva pyrites provided raw material for production of caustic soda and sulfuric acid to meet the demand of the British chemical industry. The British company "Tharsis Sulphur and Copper Company" in 1855 proceeded to do the work needed to begin large-scale operation: filling works for surface mining, railway construction to the Huelva's Bay, and a modern dock for ore shipments. The company refined a part of the ore to obtain copper "in situ", and the other part was exported without manipulation, in pyrite form, for the British chemical industries. Production remained at high levels during the century.

Most of nineteenth century Rio Tinto mines were operated inefficiently and through fraudulent dealers, with little benefits to the state. Determined to get a tangible performance, and pressed by the debt, the government decided to pay back Rio Tinto mines in 1870. Despite the quality of these mines, the price asked by the Spanish government and the capital investment needed to exploit the mines made difficult to find a buyer. In 1873 appeared an international consortium led by a banker in London with the participation of a German bank, and even Spanish money. Most of the capital was used for infrastructural investments, and a small but substantial part for founders rewards. Railroad construction Rio Tinto mine-Huelva, the docks, and the mine preparation for exportation were the infrastructure needed. When the company started it was a success even greater than Tharsis mine, in produced volume, exported volume and profits. These two companies were the largest in the pyrites copper exploitation.

2.4.3.4 Mercury

In the case of mercury foreign capital was not as necessary as with iron or copper. The collection of mercury from cinnabar is a simple procedure that requires neither sophisticated technology nor large capital investments or mineral export (mines' location so far from the sea would have made it

uneconomic), as well as extraction. However, most of its trading benefits were placed in the Rothschild family hands during the nineteenth century.

Almaden mercury mines, the richest in the world, known and exploited since Roman times, and are owned by the state since the fifteenth century, frequently used by the state as collateral to secure loans. This is why Rothschild was allowed to benefit from its trading benefits.

Fuggers tried to exploit the slowness of the Austrians to monopolize world global mercury, and the same happened again in the nineteenth century, when the Rothschilds attempted a coup over the Spanish government taking advantage of its bad economic situation, coming to perceive a usurious interest over 200%.

Mercury has been used in metallurgy and chemical intensively, especially from the sixteenth century, when is discovered the amalgam method and its curative values. It was also used in mirrors' manufacture. With the Industrial Revolution, its uses grew up, from photography and electricity to explosives and tools manufacture; since then its market has been in London, and the 88% of Spanish production was exported to London during the XIX century, on average (Nadal, 1975).

Rothschild's role during times that held the lease on the sale of Almaden mine was the sales agent of Spanish mercury, by buying at auction (often rigged) or selling it in London on behalf of the Spanish state. Either way they took many of the benefits and especially after 1868 when, as a result of a loan, the Spanish government agreed to link money returns to mercury sales, giving the sale's exclusive to the bankers. Thus, Rothschild family controlled, at least for a few years, most of the mercury's world global supply as owned Italian Idria mine and they could influence over U.S. production. Prices rose at first, and also the benefits but ultimately the monopoly didn't hold. Spanish government has renewed its relationship with the Rothschild house in the early decades of the twentieth century, improving benefit distribution terms, which turned the state's sale's share into a 90% (Barela López, Carreras & Tarufunell, 2005).

Unlike the case of other metals, foreign capital played no role related to mercury, and would have been perfectly possible to do without him. Mercury's trading would have been made advantageously by Spanish government agents. In this case were government's budget problems what allowed Rothschild to enter in the healthy business healthy of mercury sale.

In summary, the contribution of mining to the Spanish economy of the XIX century has positive aspects as:

1. This sector contributed to improve the balance of payments, attracting capital flows and exports.

Mining exports worth up to a third of total exports in the balance of payments.

2. Mining have been a very important role on foreign economies and almost no impact on the Spanish economy, which seems characteristic of mining in some underdeveloped countries. But it was not so complete as might have been in other cases, although much of the profits were exported, some of them were reinvested, typically in steel (iron ore mining was the economic modernization engine of the Basque Country).
3. Although foreign companies (and even Spanish companies) employed foreign technicians and senior staff, in the long run the trend was to use an increasing proportion of domestic labor force, mining engineering was probably one of the areas where Spanish science and technology rose in the XIX century.
4. An activity of this magnitude gave employment to many thousands of people and created a demand for a wide variety of goods and services, from banking and commercial to housing and food, to transportation, public works and machinery.
5. Mining demand stimulus exerted a very strong influence over Spanish industry, especially chemistry, metallurgy, construction and transport.

And some negative aspects:

1. The price that Spain paid for its resources. Mineral resources have the property of not being reproducible: deposit will eventually be depleted, often forever. That makes justifiable to speak about looting and pillaging, when referring to the mineral exports (Prados de la Escosura, 1985).
2. Companies' benefits were very high and most of them were re-exported, as well as low taxes were paid. But this was the price that Spain paid for his lack of physical and human capital, and the poor management of his property.

(Nadal, 1975 and Tortella, 1987).

2.4.4 Other Industries

1. Milling: Water and wind mills located in cereal areas gave way to modern milling industry.
2. Olive oil: Oil consumption changed from industrial usage to food consumption, which was a major relief for southern Spanish economies, were attempts for industrial, textile and steel usage had failed.
3. Wine: Production of high alcoholic and low quality wines, which were exported to "coupage" (French word for wine mixture) in France, where they joined high alcohol Spanish wines with soft French wines. A thriving industry started producing "Jerez wines" (Sherry wines) for the English market and in most cases operated by large British and French families who have perpetuated their names to the present in Spain (Domecq, Byass, Garvey, Terry, Osborne, etc.).

In the late nineteenth century, phylloxera (insect from the Eastern United States, who killed the

contaminated vine in three years) affected France with the destruction of all its wine industry, which accounted for Spain a period of flowering. Eventually, the disease also affected Spain, which coincided with the recovery of the French vineyard.

Associated with the wine industry a cork cover's industry flourished as the cork oak tree is very abundant in the Mediterranean.

4. Chemistry: Chemical fertilizer industry was not developed because of the long agricultural business delay. Explosives industry, in demand for mining, were where Chemistry industry strongly emerged, reaching that several powerful industries were constituted with foreign capital.

Alcohol industry, despite the abundance of raw materials, failed to develop an industrial scale.

5. Mechanical: It was mostly located in Cataluña and Vizcaya (north and north-east of Spain); it presented great difficulties in the nineteenth century, many business initiatives with little development and low production levels emerged in this century. Mechanical industry is a derived demand industry; it depends on other developed sectors that demand their products, agriculture, steel or textiles.

The first metal processing companies in Cataluña was "La Maquinista Terrestre y Marítima" 1855 ("The Land and Maritime Machinist") and in the Basque country at the end of the century (related to shipbuilding).

The industry was in a late but great potential situation to explode with force in the twentieth century.

(Gómez Mendoza, 1982 & 1989).

2.5 Energy

The hallmark of the 1st Industrial Revolution was the replacement of animals and men's energy by hydropower and, above all, coal power. In Spain during the nineteenth century, this transition started, but was not completed.

During the first half of the nineteenth century energy sources used in Spain were still traditional, mostly human and animal, marginally hydropower and wind energy (wind and water mills, sailboats), main domestic fuel was wood. Coal consumption grew during the 2nd half of the nineteenth century because railway extension, steam navigation extension and industrial development. Consumption was equally fed by domestic production and imports.

The Spanish coal problem was that compared with large European coalfields, it was small, expensive and naughty. Furthermore it had irregular and thin layers which made its exploitation inadapted to mechanization and it required high costs and infrastructure. So, Asturian coal FOB (Free On Board) price was nearly double English coal. (Nadal, 1975).

Bad quality coal consequences for the Spanish industry were disastrous; it has been an obstacle to economic growth in the country during the analyzed period. A non-competitive industry that has survived thanks to the protection, recharging the cost of consuming activities, which were the opposite attributes needed for the 1st Industrial Revolution process. Spanish coal protection was becoming an increasingly heavy burden, even more when country's industrial structure was modernized and it increased their consumption. Also, extraction and transportation technology developed which cheapened the international coal markets and made Spanish Coal comparatively more expensive. Spanish protected coal kept the economy totally seized, missing the opportunity offered by low international prices.

In 1865 the producing cost of a steam horse in Catalonia was 3 times the cost in England. The high coal cost pushed the cotton manufacturers to seek alternative energy sources; they found it in the streams, many of them in Pyrenees hills. The rise and high utilization of water power in a country as dry as Spain itself is a telling measure of the coal problem. (Carreras, 1983)

The case of the gas industry was that it was caught between weak demand and a high coal prices. This product, distilled from coal, was used for most of the century for street lighting and domestic consumption (town gas), the level of gas consumption in Spain remained low compared with other European countries, so production tended to stagnate.

In summary, the Spanish industrialization of the XIX century did not stagnate, but proceeded at so slow pace, that at the end of the period, in 1919, levels of industrialization were among the lowest in Europe.

Industrialization level per inhabitant, 1800-1910 (US\$ of 1970, adjusted to purchasing power parity)

Country	1800	1830	1860	1890	1910
G. Britain	89	139	257	391	458
France	59	92	164	250	356
Germany	-	-	102	134	391
Sweden	-	-	46	97	198
Italy	-	-	35	63	145
Hungary	-	-	-	-	157
Spain	34	29	50	93	122

Prados, 1988.

Chart 11

2.6 Transport and trade

2.6.1 Transport

The Iberian Peninsula is solid, rugged and mountainous, with a central plateau separated from the periphery by faults or mountain ranges. It is the second highest country in Europe after Switzerland, these difficulties do, for example, that, on average, one km of railway in Spain costs from 5 to 10 times more than in France, England or Germany. The country is generally arid rivers are, or shorts and earrings, or have an irregular flow and a shallow channel. This complicated inland transport, land; river and Peninsula's history were fragmented into isolated markets.

Development of a comprehensive transportation network is fundamental for the industrial revolution; it expands markets and cheaper costs to transport products. In the Spanish case, Peninsula's morphology obstructed transport and until railways were created there was no single national market, but several isolated markets with different prices for goods (domestic market had different prices than coastal regions).

In the XVIII century in Spain were made great efforts to improve its road network, but the War of Independence (a war waged against the Napoleonic invasion) first and the Carlist Wars (given its historical importance it is deeply explained in Annex 1) were then catastrophic. Carlist Wars occupied almost the entire nineteenth century.

In the early nineteenth century Spanish coast was underdeveloped, shortage of good ports, nor rivers were navigable, just Nervión river in Bilbao, and Guadalquivir river until Seville, and this circumstance was due to rides' scope, not due to rivers' flow. Nor was a network of navigable channels, a key element in European countries at the beginning of the Industrial Revolution, even before railroads. Spanish maritime transport was highly concentrated in seven ports: Barcelona, Bilbao, Santander, Sevilla, Valencia, Cadiz and Malaga. Among large works carried out during the period are include the expansion of Bilbao's port and the construction of "Puerto de la Luz", Gran Canaria's port, which would then begin its takeoff. The sailing was slowly replaced by steam navigation, with some delay in Cataluña (Vicens i Vives, 1959), being able to develop a high transport level (generally large and international distances). Cabotage (coastal shipping over short distances between ports on a single country) reached its development in the first half of the century and continued to grow but was replaced by rail.

2.6.1.1 Railway (Gómez Mendoza, 1982)

The advantages for a country like Spain, with a rugged terrain and no navigable rivers, for a railroad construction were huge. However, railway construction began later, although highways and road's networking were poor.

But worse was the railways' situation, whose history began in Spain with the construction of a small line between Barcelona and Mataro in 1844. In 1850, the world had already 35,000 km of railways: 14,500 U.S., 10,000 in Britain, 6,000 in Germany, 800 in Belgium... and only a hundred in Spain (Tortella, 1985).

Construction of an extensive railway network still had to wait for the Progressive two year power and for the General Railway Law, passed in June 1855 (Chastagnaret, 1972). This law adopted a radial structure of the Spanish rail network centered in Madrid and a track width of 1.67 meters, compared to 1.44 for almost all European lines. There is a belief that the gauge is due to strategic reasons.

Spanish Larousse Encyclopedia under the heading Railroad says: "A royal order of December 31st, 1844 provided that the rail width in Spain must be six Castilian feet (1.67 meters), this wide, more than Europe, was chosen by military considerations (hinder a possible invasion by rail)". The truth is that the decision was taken by a commission composed by different members of the School of Engineering and chaired by its school director Juan Suberco. The commission issued in late 1844, a report known as "Subercase Report" and its decision was based upon the belief that without substantially increasing costs it will allow to the locomotives of sufficient size, in a given time, to produce the amount of steam enough to get a higher speed than which could be achieved with the 4.25 feet tracks and also higher than 5.17 feet tracks, more often been used to that date. Also without loss of stability, it can make greater the wheels' diameter, which leads to increase speed. Spanish track width also prevailed in Portugal, Argentina, Chile and the main network of railways in India.

This difference gauge has been paid by the Spanish economy until nowadays. The most discussed aspect of the Act was the authorization to construction companies that were formed largely by foreign capital (especially French) to import free of duty all the materials needed for construction and track operation. However, the assessment of this Act, which allowed to build near five thousand miles in a decade, must not be negative. Spanish steel industry was not able to meet demand from builders and machinery industry did not exist. If Spanish railway station would have been constructed slower than how, to make domestic industry able to serve it, Spanish economy would had experienced very negative consequences for trade, it would never increase as it did and it would produced a production stagnation in many sectors. In addition, animals feeding, required for transportation, would be

necessary to use on third of the food production areas to pasture or cereals to feed animals power instead of dedicate it to the growing population.

Despite its limitations, construction of the Spanish railway network made possible to articulate a true national market. To this, also contributed the construction of roads, the extension step of 9,000 kilometers in 1840 to 36,000 in 1900, of which 16,000 were first-or second order (Gómez Mendoza, 1989).

In 1860 Spain agreed on the impact of an international crisis with a negative internal political and social huge shock, in addition railways failure caused a collapse in the banking system (Nadal, 1975). Railway construction, virtually suspended during the critical decade (1866-1976) was resumed during the last quarter-century under the concentration sign.

In recent years, following the work of Robert Fogel (Fogel, 1964) for USA and Hawke for England (Hawke, 1970) has been much dispute over whether if the absence of rail, the economy and welfare would have been significantly affected. Although these countries would have limited its impact, drawing on other transport systems, there are countries such as Germany, Mexico or Spain where there are no alternatives to rail and Spanish authors (Gómez Mendoza, 1982) following Fogel method have demonstrated the considerable impact that the railroad had in the Spanish economy.

Impact on Spain in the steel industry's empowerment and in the rolling stock production was not too important, among other things because of the tariff exemption of the Railways Act of 1855. It had a moderate impact on the domestic coal consumption and job creation. (Gómez Mendoza, 1989).

The law was more important in the development of forward connections, in Tortella's terminology (Tortella, 1994), there is no doubt that Spain by their physical characteristics could not have developed without a rail network to mitigate their bad driving conditions, that supply food to cities, facilitating transport for industrial goods and labor.

The fundamental problems of railway development in Spain could be summarized in the following points:

1. Late start of construction.
2. Excessive rainfall in the beginning of their development leading to insufficient planning, inadequate funding and a speculative path, which led to a physical and commercial weak structure (Maluquer de Motes, 1988).
3. Financial costs amounted to continuing financial losses, both in times of little use, as when it was intense, as the poor structure of the works made it resisted and required renewal.

These aspects make the role of the train in the Spanish economy lost much of its potential.

2.6.2 Trade

Internal trade in the nineteenth century began with much divided and fragmented markets.

Throughout the century, as in Europe, some barriers were abolished in 1834 repealing the guilds, which freedom to produce was given, without guild's control, which had the danger of reducing quality, but the advantage of a greater number of producers. In 1841, taxes of step were abolish ("portazgos", tolls for roads, "barcazgos" for boats, etc.) and customs unity was been enacted. Also, fees and indirect taxes on trade were eliminated; weights, measures and monetary system were unified.

Market integration was very incomplete, with large differences in commodity prices between different Spanish regions. Starting by basic products (wheat, wine and coal) and alongside the railway, market was unified, contributing to it labor factor and ease of passenger transport.

Not physical communications improvement, as were the telegraph (1853), mail, people's information capacity were a key factor of economic development.

Reinforced by the impact of this transport revolution, markets and colonies search was the reason that led European countries to the phenomenon known as imperialism, both the first industrialized countries (Britain, France, Belgium) and latecomers countries to this process (Germany and Italy). This commercial phenomenon arose because there was a country willing to absorb exports from all the other countries (Great Britain). It had a uniformed and stable monetary standard (gold standard), and an ideological and cultural pattern (faith in reason, respect for science, Judeo-Christian ethics) necessary for international cooperation.

Loss of Spanish colonial empire led to a drastic restructuring, as the New World's monopoly held with exports and imports disappeared. In a few years went from being the head of a great colonial empire to be an underdeveloped country of the European periphery, focused on raw materials exports and intermediate products such as cork, mercury, lead, raw silk olive oil, etc. (Prados de la Escosura, 1982). Foreign trade is, for a developing country, an essential piece of its economic system. In Spain, despite some inaccuracies, data is tabulated from 1850 and some scholars have managed to clarify the Spanish situation (Prados de la Escosura, 1981 and 1982). Data shows that throughout the nineteenth century, Spain, which started from very low initial, grew at rates higher than France or England.

Overall, high growth rates of foreign trade show a high degree of development and trade higher than, for two reasons, we would have expected. First reason is high degree of protectionism that characterizes the Spanish economic policy. It seems, however, that the undoubted impact of tariffs on trade volume takes place more over the short than over the long term: Spanish foreign trade grew

more than the free-trade Britain. The second reason is the poor trade of the Spanish production system and how fragmented Spanish internal markets were.

2.6.2.1 Balance of trade

The two major century's customers and suppliers were England and France, although opens to USA, Germany and Argentina at the end of the century.

Spanish exports grew at about the same pace as European, imports were slower than exports and European imports. The exports were mainly favored by rising world demand caused by the strong growth of the Atlantic economies. Spain underwent trade liberalization until 1874, following European's footsteps; it was the period of greatest growth in exports.

Although raw material exports were the fundamental part of trade, Spain took advantage of some conditions such as phylloxera vines in France and was able to diversify their export production, with footwear, textiles, lead bars, etc.. Revealing a greater complexity degree and flexibility than some underdeveloped countries today.

Imports show something similar, doubling the relative importance of fuels and industrial equipment in the second half of the century, lost some positions in Europe in relation to more developed countries showing that Spain was more underdeveloped in the late century than at the beginning, compared to the rest of Europe (Mitchell, 1976).

In terms of trade, measures for the "net exchange ratio" (ratio between the export price index divided by the import price index) improved in Spain in the nineteenth century. This means that for every unit of value exported, Spain was getting more value for its imports. This contradicts the widespread belief that commodity-exporting countries are harmed in international trade. Anyway it is very difficult to assess the actual balance of payments, as there were pressures from protectionist interests to make bulk variances in order to exaggerate trade deficit to justify high tariffs "ad valorem" (Prados de la Escosura, 1982).

2.6.2.2 Balance of payments

How Spanish deficit was financed. "Invisible" them could play an important role, especially migration and remittances mostly from 1880 (García López, 1992). A key aspect was capital importation, crucial to face insufficient Spanish domestic savings. Finally technology and organizational charts were essential for the transformation of ossified productive structures. On the other hand, FDI played a crucial role in the transfer of technology process to host countries economies, which is of utmost importance because technological innovation is a key factor to improve competitiveness and productivity of enterprises.

Country that does not restore its trade balance by improving their productive capacity went to the long term foreign credit flow, selling parts of its assets to be able to pay off their debts.

Loan interest depends on factors of trust and international capital market. Spanish bargaining power was not good during the nineteenth century, because Spain had a debtor position carried over from the eighteenth century; also it defaulted on its payment commitments. Furthermore Spain had a chronic deficit between trade balance and Treasury and chronic political problems which means economic instability, as we have mentioned in the introduction (Nadal, 1975).

Until 1850 investment in government bonds predominance and then investing in the private sector, first by railroad and mining and at the end of the century in other industries, especially chemicals.

2.7 Monetary system

As we have seen in the previous section, the constant debtor position of the Spanish economy with a steady deterioration in the performance of payment obligations, led to an increase in money and capital market costs for Spain which, as it could be otherwise, produced serious repercussions on the rest of the economy. Virtually all the available money had to be used to state and railways financing, which led to a significant deficit as in education (Núñez, 1991 and 1992).

Public debt reached to absorb 99% of contributions in Madrid stock exchange, which resulted in a crowding out (phenomenon in which demand for capital by the state absorbs a substantial part of a country's savings, it makes loans more expensive in comparison and "driving" from the market private demand).

Transition to a modern monetary system is done in several stages, beginning with the imposition of decimal currency and unifying the system, in Spain during the first years of the century, there was a hodgepodge of coins which made difficult trade activity (Sardá, 1948). French invasion of Spain in 1808 had a major impact on the Spanish currency evolution. From the monetary system's point of view, new French king, Joseph I, do not rush too deep in a reform that seeks to bring Spanish system to French monetary system, as had been done in other European countries invaded by Napoleon. Napoleon's used to impose identical systems based on the germinal franc; in addition he used to make the legal permission of French currency's free movement. However, contrary to which have been common in previous centuries, instead of maintain a unity of the three metals in a single coin, they used to divide it as shield for gold, real for silver and real fleece or maraved for copper. José I imposed the usual French in a single unit of account for pieces of gold and silver, thus facilitating their management and the establishment of equivalency.

This, in fact, fostered a serious problem and felt by Spanish economy throughout the modern age, the output of precious metal Spanish coin abroad, as with eight fleece reals could make more of a

napoleon, when both parts had been nominally matched. Duros migrated to France and turned back as Napoleons', despite repeated extraction ban by Joseph I on 13 September 1809.

The monetary survey was further complicated by the movement of British currency, logical, given the military presence of Wellington's army in the Iberian Peninsula. The Court authorized the use of British guineas in 1813, which would be changed according to their intrinsic value.

Account unity chosen in Spain was fleece real, is introduced thanks to the royal decree of April 18, 1809, according to the following equivalence:

Monetary equivalence April 18th of 1809

METAL	VALUE	NAME	WEIGHT (In grames)	STRENGTH (in thousandths)
GOLD	320 REALS	ONZA (ounce)	27.06	875
	160 REALS	MEDIA ONZA (half ounce)	13.53	
	80 REALS	DOBLÓN	6.76	
SILVER	20 REALS	DURO	27.06	902.7
	10 REALS	MEDIO DURO	13.53	902.7
	4 REALS	PESETA	5.97	812.5
	2 REALS	MEDIA PESETA	2.98	812.5
	1 REAL	REAL	1.49	812.5
COPPER	8 MARAVED	2 CUARTOS (2 quarters)	12.10	
	4 MARAVED	CUARTO (quarter)	6.05	
	2 MARAVED	OCTAVO	3.025	

Dr. D. Javier de Santiago Fernandez.

Chart 12

It is many years of reforms, a period in which the Spanish monetary system had to readjust to the new situation created by the incessant silver flow interruption that had come from America, which is cut by American colonies independence from 1824. Colonial rule collapse meant the end of the traditional monetary model, without being immediately replaced by another more suitable to new circumstances. Reforms had not been able to solve the serious scarcity of silver coin problem, which was essential for small payments/transactions. In 1864, the new unit was the shield system, equivalent to 10 fleece reals, under 900 thousandth laws. The newest, again following European doctrines, was that the smaller coins, peseta and reals, became divisional currency with inferior strength (Francisco Olmos, 2001).

In 1968 Peseta was born and continues until the Euro. But the bimetallic pattern, despite having the advantage of a greater monetary base that served as accompaniment to economic growth, posed a continuing problem that led to its abandonment and countries were adopting monometallic systems. When there was an abundance or scarcity of any of the metals according to the new mines found, its market price could lead to significant deviations from the legal relationship. In Spain, served to

perfection Gresham's Law which says that bad money (low gold content) drives out the good money (high gold content) because the agents tend to use bad money for domestic payments while the good money is conserved as a treasure, they blew it or used it in international payments because foreigners will not accept a bad currency as payment. Thus, in a country where in 1865 had gold base monetary system, twenty years later, gold had stopped running.

Gold disappearance from circulation in Spain had important consequences, gold standard abandonment when other countries are adopting it, contributes to economic isolation and also the abundance of silver makes currency a fiat money, since it was profitable to coin money and avoid any automatic limit to the amount of money in circulation.

Spanish trade and service balance trend was rather to deficit, so that in the absence of capital imports, the result, as we shall see later, was the tendency to take abroad Spanish precious metals, which implies a system of full content (real value) a tendency to deflation by reducing the money supply and tend to depress prices. Its economic activity usually decreases, perhaps more by the credit crunch than by the money shortage (Mochón Morcillo, 2000).

Regarding Peseta in particular, it was never finally join the Latin Monetary Union, Spanish economy imbalances, both internally and externally, led to a loss of reserves that in 1883 helped definitely to suspend the gold convertibility of paper money, leaving the Spanish monetary system consisting of notes and silver coins, both legal items with a higher value than its real worth. This placed Spain in a fiduciary system in which the currency value would be determined by markets fluctuate depending on the national economic evolution indicators in relation to other countries. The existence of a flexible exchange rate for the peseta from early eighties placed our currency in an unorthodox position, although it was not the only currency with fluctuations, in comparison to the prevailing international context in which exchange rates were fixed following the adoption by major countries, since the seventies of the nineteenth century. Gold standard regime presided over the international monetary and financial scene until 1914, the year, that with the First World War advent, countries were forced to leave it.

Despite the adoption of a fiduciary standard and that money supply increased substantially during century's last quarter, prices remained relatively stable, except during the last five years of the century, during the inflation because the Cuba war. There are several reasons: low prices in the international market, slow but steady growth of the Spanish economy which entails a growth in money demand and credit, and finally the attempt by successive governments to maintain discipline monetary as close as possible to that which would have adopted with the gold standard system, slowing down

banknotes volume expansion as far as possible and always within the limits of the public system funding needs.

Therefore, gold pattern abandonment was the least bad alternative. The survival of full-bodied system (bimetallic or monometallic) was a growth obstacle. Spanish money supply grew slowly during the last quarter of the century compared to other countries like USA, UK or France (Tortella, 1994), but the growth would have been even less if gold standard would remained, in an underdeveloped country like Spain was a too expensive luxury. It was more logical to use gold to import food, equipment and technology to use it as currency, replacing it by a cheap circulating (paper, depreciated silver or bank accounts). In return, fiduciary standard reinforced the tariffs' effect, increasing Spanish economy isolation.

2.8 Banking system

San Carlos Bank was the first Spanish bank created by Charles III on July 2, 1782, and founded by Francois Cabarrus. Bank's main mission was to repay the huge public treasury debt. The following year the institution began issuing the first banknotes called "cédulas" ("cards") (Tedde de Lorca, 1988). These "cédulas", known as royal tickets, guaranteed an immediate cash refund, refund to be effected by the issuing bank itself. "Cédulas" were swapped to the carrier without producing any interest, which differed them from debt securities. This character of voucher redeemable for currency lasted until the Spanish Civil War, so all tickets bearing the legend "The Bank of Spain will pay the bearer ...», despite which the government never paid. In the course of the years there were irregularities and losses, to the point that Francisco Cabarrus, Bank's director, had to respond to prison for 6 years.

Fernando VII's government decided to give to San Carlos Bank a 40 billion reals fund. With this help shareholders, who refused to collect the royal tickets and exchange them for new bank's shares, decided to found a new institution Spanish Bank of San Fernando (to be King Fernando VII). This new bank got power to issue notes under monopoly, and finance's world was devoted primarily to lend money to the government.

Some more Banks were created and competition between Isabel II's Bank (Madrid), and Barcelona's Bank, multiplied fiduciary system and cheaper credits. But over time 1847-1848 crisis and both institution's recklessness and inexperience, Isabel II's Bank especially, put both on the verge of bankruptcy and the government merged in 1847 Isabel II and San Fernando's Banks in Madrid, thus saved a very serious financial crisis. The merger took the name of the Spanish Bank of San Fernando. The changes that were happening had an unstoppable career, facing the demands, new times and needs. One of these needs was to open entity branches in the major provinces of Spain, and shortly

after giving them the power to issue money, regardless of the Madrid headquarters. Monopoly to issue money was granted in Spain, except in Barcelona and Cadiz (Cadiz's branch was renamed to Bank of Cadiz, retaining the exclusive right to issue money in that province).

Between 1850 and 1874 a great Spanish political and economic turmoil affected banks, which remained dormant until 1855. With the new banking laws of 1856 (Issuing Banks Law and Credit Societies Law) two types of banks were developed, authorized issuing banks to issue banknotes and credit societies, with structures inspired by the French Credit Mobilier with ability to participate in all types of businesses. Number of institutions increase was enormous, but after this fulminate growth there were hide deep structural flaws, the most important was the lack of asset diversification, concentrating most of the capital on the railroad business and public debt. When in 1864 it was discovered that rail traffic was not sufficient to cover companies variable expenses, banks were forced to suspend payments. Consequences for banking were predictable: Many establishments also suspended payments and closed its doors, leaving many millions of debt unpaid, emerging a financial and stock market panic.

As a result, all credit banks almost disappear and made bank's money (banknotes and current accounts) remained at very small:

Money Supply in 1865 (Millions of Pesetas):

Bills	100
Current accounts	60
Silver	250
Gold	1.100
Money Supply	1.510

Spanish Bank

Chart 13

Monetary Stock and Money Supply in 1900 (Millions of Pesetas):

Bills	1.600
Current accounts	960
Silver	1.300
Gold	395
Monetary Stock	4.255
Lace (Encaje)	(1.005)
Money Supply	3.250

Tortella, 1974.

Chart 14

In 1874 begins a period of much greater stability, March 19, 1874, due to forced and pressing financial needs, is granted to the Bank of Spain by decree the issue money monopoly over the state. The remaining provincial issuing banks are encouraged to merge with the Bank of Spain, trading their shares and remaining as a simple branch or commercial banks without power to issue money. The majority chose the first option and was the origin of the branch network that the Bank came to have in Spain.

In the words of Adam Smith's *Wealth of Nations*, "granting of privileges by the crown anoint rarely was made to promote the public interest but rather to "take money" to the privilege beneficiary" and the financial needs of the Provisional Government of the First Spanish Republic assumed that the new Bank of Spain provided sunk the fabulous amount of 125 million of pesetas to the Government. Moreover, the political decontrol has tirelessly asking for more funds, leading the bank to "monetize the public debt" so the bank lends to the government and government, accepting them, lend to the bank. As it turned out the number of banknotes in circulation came to rely more heavily on state budget problems than in the particular monetary policy guidelines, but was reached the issue top, the government was increasing it where needed.

In 1872 the mortgage bank was funded under official auspices and for similar reasons of the Bank of Spain. Enjoyed the monopoly of issuing mortgage bonds and lend to the state rather than individuals, turning also into a banker of the State.

The division between issue and credit banking is a good doctrinal justification. Issuing banks obtain their resources in the form of short-term liabilities (notes and accounts) and, therefore, they specialize in short-term transactions (loans and discounts). Credit companies get their resources in the long term (company's promotions, subscriptions, revolving loans). In Spain, once again, the results were not as expected, because no divisions successfully fulfilled its mission and some banks began to simultaneously broadcast their business activities by obtaining long-term funds and their use in the company's promotion and corporate credits.

There were coexisting some minor bank figures:

1. An embryonic network of private banks, consisting of small lenders dedicated to consumptive loans more than to productive loans.
2. The "Cajas de Ahorros" (savings banks), who were born with more assistance than financial objectives, historically tied to such charitable institutions, especially "Montes de Piedad", they emerged in Italy in the fifteenth century, initiated by the Franciscans, who gave secured loans without interest to meet basic needs. Initially, both the amounts borrowed and administrative expenses were fed on alms and donations to the monks gave by some rich people.

The modern concept of “Caja de ahorros” appears in Europe (particularly in Britain) during the second half of S. XVIII. This concept is rooted in the thought of Jeremy Bentham (1748-1832), philosophy which is to consider the savings banks as an instrument for improving the living conditions of the working classes, through saving remuneration and creating a higher level of economic security.

3. Deposit Banks, founded in 1852 in order to receive court and forced deposits soon became a great repository of private savings, however the government misappropriation of the funds made “Cajas de Ahorros” enter into payments suspension in 1866.

Money supply evolution and the radical change in its composition can be seen perfectly in the comparison in between previously charts.

In summary:

1. From the standpoint of money and banking, the nineteenth century is an incomplete transition period (Martín Aceña, 1985). Total financial assets ratio was Spain is 39% and the European average was 104%.
2. It establishes early on in Spain, the fiduciary pattern, which is original in the Spanish economic history, but the reality is that it never had as a stimulus the economic development objective.
3. Banking sector evolution reveals the search for a large structure suitable for financing growth, use banks as a development tool according to the theories of Schumpeter and Gerschnkron. Banks replaced market mechanisms in “loanable” funds generation and the industrial enterprises promotion, where banks have had a crucial role in the industrialization and modernization process, as happened in Japan or Germany.

2.9 Public Treasury

In a country like Spain, with chronic imbalances between income and expenditure, economic difficulties arise in cascade. Spanish transformation difficulties were, once again, due to its political instability, previous state treasury was an archaic institution, inherited from feudalism and retouched by the absolutism, which lacked from the most basic principles of equity (tax burden is distributed among taxpayers according to their ability to pay), flexibility (total collected volume should be in proportion to national income, increasing and decreasing with it) and even legal coherence (paying taxes approved by the legislature power). Growing deficit exposed their insecurities and the need for reforms, not flexibility related to the lack of equity makes poor population to pay more than the rich population and incomes increase just raise real rent (net). Change to make rich population to pay more was traumatic in Europe and the only solution was revolution.

2.9.1 Baseline (XVIII Century)

In XVIII century, among tax system "provincial incomes" stood out. This cluster of taxation was a complex of fifteen major taxes, some of which was subdivided, up to a total of forty-six different taxes. The most important of these taxes was the "alcabala" (sales tax) or ten per cent of all sales value. In this ten percent were still added the "hundreds", four one- percent increases that had been giving to the monarch by various Castilian Courts. It should be noted that the final fourteen per cent was more theoretical than practical. In general, always was felt that the "alcabalas" (sales taxes) hindered trade considerably.

Another major tax that fall into these "provincial incomes" was "the millions", created by Felipe II as superb service and consisted on a charge on the retail of some basic consumer items such as wine, oil, tallow, etc. Thus, the most affected were the poorest. Along with "Alcabala", "hundreds" and "millions", "provincial incomes" were nourished by other taxes of a different nature which may indicate the enormous heterogeneity of this tax system.

Oblivious to "provincial incomes", there were the customs or "general incomes" which were both a royal economic tool, for example, to authorize or prohibit the grain trade with the outside, and a source of income received under very different names: "Almojarifazgo, tithes of the sea, dry ports, wool rights ...". And finally, we should know about the "stagnant incomes" that encompassed salt, snuff, stamped paper and the seven little incomes.

In the late eighteenth century, under French influence some currents get imposed tax uniformity on the one hand, reducing the power of mayors on the other hand, and finally, the creation of a representative assemblies.

Mayors' power reduction is one of the top reasons that provincial administrations were establish, due to the excessive power that these mayors exercised in an arbitrary manner, which will be considered by contemporaries as an action of arrogance towards the nation.

With regard to the creation of a representative assembly represented the reform essence. With the establishment of provincial governments it was sought to encourage all levels of the economy on the assumption that, the smaller the space to lead is better and more individualized will know their problems and possible solutions. With them Spain reached a greater efficiency and fiscal flexibility. Also, it was sought the responsibility of all nation social echelons, therefore, the nation sought representation from all sectors. The search for all this will lead to the creation of the current municipal boards.

These provincial governments had both an administrative role and a political function. Regarding the first, its main task was tax revenue collection just to replace mayor's role and their despotic abuses.

This administrative function was carried out, mainly through permanent offices, while the political function acquires its significance in the annual meetings between members of different social ranks. The political function conceived power decentralization in search of greater effectiveness.

In Spain, the reform was much more partial and limited in nature than in France. If in the neighboring country, the new governments had a political and administrative role; in Spain they had an especially administrative role with regard to tax collection and expenditure control.

In Spain there will be no representative assemblies but many of the functions should be carried out by them were collected by the “contadurías” (accountings). The big difference, therefore, was not in if there was or not a representative provincial assemblies, but in France, the new provincial administration would have a greater independence from the central power, while in Spain power was limited to reports to the Treasury Secretary. Therefore we cannot speak, for the Spanish case, as an attempt to decentralize, as the central maximum power had no direct limitations by the provincial administration itself. This is a clear example of what is Spanish enlightened reformism; on the one hand it was a partial reform and somehow incomplete, seeking old political system salvation adapting it to changing times. On the other hand, this moderate reform had the opposition of groups with broad powers in practice, which feared its preeminence in the different territorial levels, which made very difficult to win for the reform and the new provincial administration.

2.9.2 Inevitable reforms of the XIX century

Although the starting point, as we have seen, was not encouraging, reforms were inevitable and, although slow were taking place (Comin, 1992). Moreover, the Independence war, and until 1820, it was a total public capital destruction, which made the public treasury reform even more necessary. Part of the political struggle between liberals and absolutists had as a backdrop the public treasury reform (Fontana, 1971).

Cadiz’s Courts had designed a liberal tax system to meet war expenses. Advocated “equality before law”, that meant that everyone, even the privileged classes, had to pay taxes. Church tax was liquidated, who took lot of resources from public treasure. It was proposed the novelty of making a balanced budget to control state expenditure; Cadiz’s constitution was the first in Europe to use this term in legal documents. Also Parliament was asked to control public accounts. But raising the money by charging directly to individuals was not feasible at the time, and very expensive, so direct contribution was established. Direct contribution was made by assigning a quota of money to each territory where it was collected; these quotas were made according to territorial wealth criteria, according to the Floridablanca Gazetteer. It was also established the proportionality of the tax, that made to pay more the people who had more, there were even attempts of establishing progressive

taxes, but failed to materialize. Budget provided a revenue and expenditure estimate, and admitted a small deficit. What was unacceptable was the surplus. The first budget of Spanish history was 1814, of 1,000 million reals.

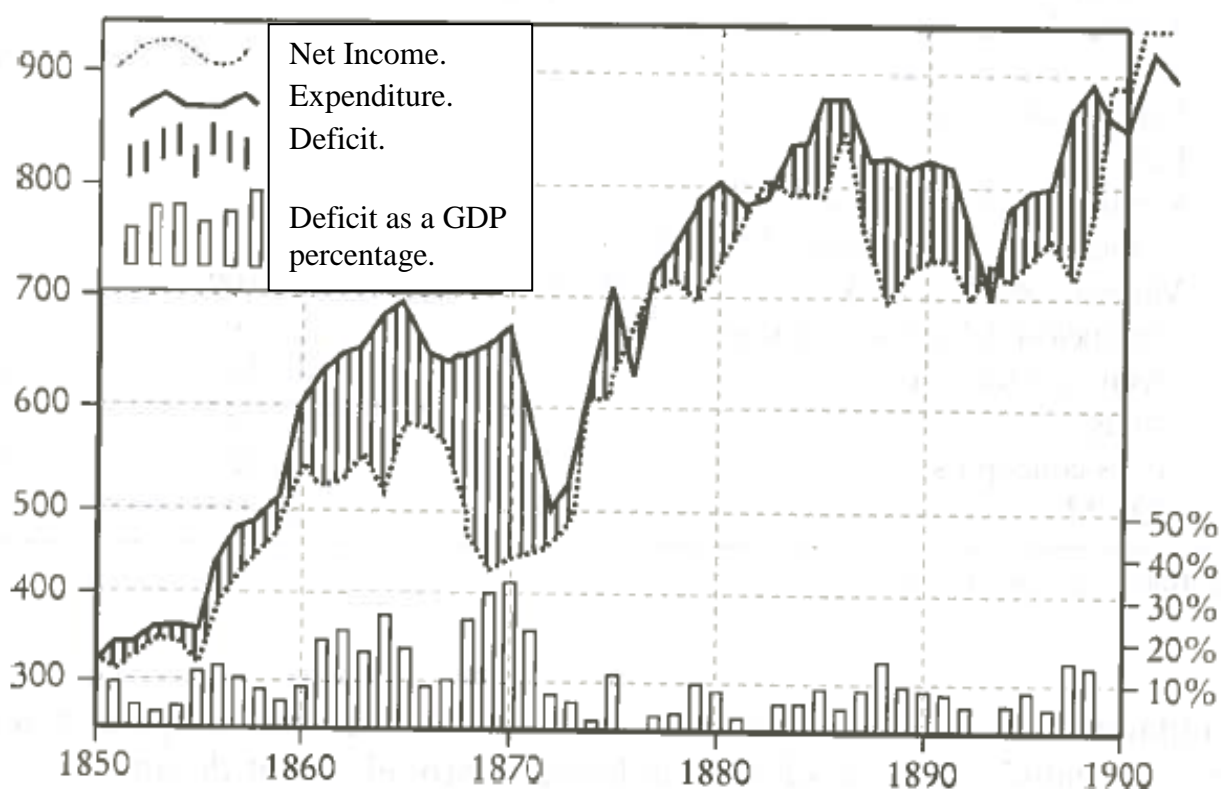
During the Carlist civil war (Annex I), while Isabel II ascended to the throne, being a minor, Liberals got into the power and carry out tax reforms. The most relevant figure in this period was Mendizabal (Juan Álvarez Méndez), he was in power two years (1835-1837) as Minister of Finance and he addressed the ecclesiastical “desamortización” (1836), which meant a large increase in public treasure resources not only for the church properties sales, but by the tithes end, in 1837. The Church disappeared as recipient of direct taxes and from then the Church is maintained by the State in respect of religion and clergy concept.

When Narváez access to power in 1844, his project represented a moderate setback after the previous liberal government. Narváez introduced the practice of presenting a draft budget in Parliament, although no amendments were allowed. Alejandro Mon introduced the tax reform that was adopted in 1845 under the name Mon-Santillán reform (Comin, 1984) and introduced new contributions: on the buildings, industry and trade, consumption and mortgage rights. Its aim was to tax landowner’s incomes. The way to collect these taxes was made according to the quota territorial provinces manner. This was collected by councils, which encourages fraud when paying. To avoid this, it imposes a guarantee fee, which if exceeded could be claimed. This system was quite stable, because tax money returning to the councils was well considered, and tended to not conceal wealth. But Alejandro Mon is also the minister who suspended church property sale, stopping Mendizabal’s “Desamortización”.

2.9.3 The budget

The first thing is obvious when considering Spanish state budgets in the nineteenth century is a chronic deficit.

Revenue, expenditure and budget balance 1850-1902 (Millions of Pesetas).



EP, vols. 1891 and 1909.

Chart 15

Public debt payments came to be more than a quarter of the budget expenditure in the 1850-1890 period. If we add the spending in passive classes the creditor commitment of the Spanish state was more than a third of total costs. Spain incurred in a vicious circle: debt's burden was causing deficit and deficit was financed with new debt which also had harsh interests and conditions because of the insolvency fame that Spain used to had. As we have already seen the consequences were: high tax payers' sacrifice and capital shortage for agriculture and industry.

Let's analyze the budget imbalance from the two parameters that comprise it view:

1. Revenue (see the table below) rises with important inconsistencies.

A. The contribution of real state, crops and livestock, also called "territorial contribution" is little more than a fifth of the revenue, in a country where agriculture was three-quarters of national income. That means a preferential treatment to landowners, because it was very difficult to know the real tax wealth, Spain began to charge by distribution: global income was budgeted and the number was divided by provinces and municipalities. This law (with its real statistic) was opposed by landowners who wanted to evade their taxes, with the town hall collaboration, lying on the farm's records development. When in the XX century was created a reliable register, it was estimated that the landed wealth was more than

double than the one estimated earlier (Malefakis, 1971).

Besides being a widespread fraud, its biggest value was in the vast lands difficult to navigate and measure, and whose owners used their political influence. The deficit, through the distribution system taxed disproportionately to small farmers.

- B. The Industrial and Commercial Tax was also a distribution system, giving a fee to the guild and distributing it among its members. If it was difficult to attribute income to agriculture, these activities make it almost impossible and fraud was also widespread.
- C. Indirect taxes, which by their nature are always regressive, almost did not record incomes, dividends and profits, and accounted up to 20% of the total, including consumption, alcohol, tobacco, customs, transportation, salt, etc. Basic importance was Lottery taxes.

Budgetary revenues accumulated 1850-1890 (Millions of Pesetas).

Rank.	Description	Pesetas	Percentage
1.	Property tax	4.915	21,3%
2.	Industrial and commercial tax	930	4%
3.	Personal properties tax	110	0,5%
4.	Salaries and allowances tax	604	2,6%
5.	Real rights tax	601	2,6%
6.	State "Timbre"	1.149	5%
7.	Customs revenues	3.064	13,3%
8.	Alcohol	1.965	8,5%
9.	Passenger and freight rates	170	0,7%
10.	Tobacco	3.339	14,5%
11.	watertight salt	560	2,4%
12.	Lottery	1.921	8,3%
13.	National goods sells	1.292	5,6%

14.	State Properties and rights	331	1,4%
15.	Important mines	199	0,9%
16.	Military redemptions	299	1,3%
17.	Monetary Warehouses	119	0,5%
18.	Mines	52	0,2%
19.	Other concepts	1.439	5,9%
20.	Total	23.059	100%

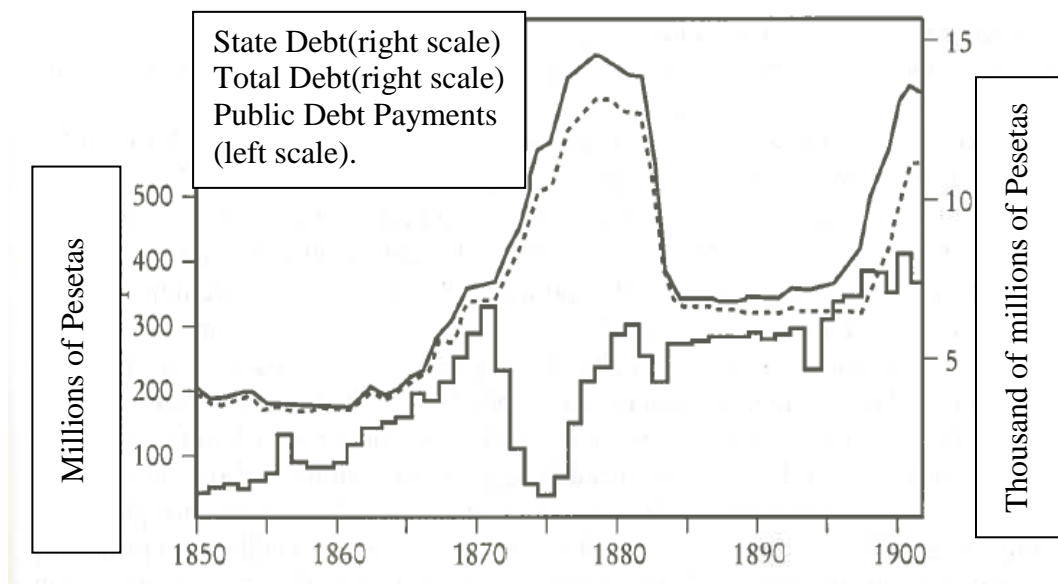
Finance Ministry, 1976.

Chart 16

2. Expenses were inflexible and they were rising, as we have seen a third part were debt and passive classes. Furthermore military expenditures, police and church were another third. It was estimated that Church maintenance in 40 years during those days, accounted more money than the money that was raised through the sale of its assets in the “desamortización” period (Comín, 1988).

2.9.4 Public Debt

Public Debt evolution (1850-1920)



Treasury, 1976.

Chart 17 Debt situation and its economic consequences have been seen in earlier parts of the job. We will focus on seeing chronic deficit causes and also analyzing separately the difficulty of achieving sufficient

revenue to finance a coherent reform and the breaking of balance achieved during the eighteenth century.

Deficit was changed by "American remittances", ie excess taxes paid by the colonies on government spending in America. With Ayacucho's defeat (the last major ground battle in the campaigns of Spanish American independence's wars means the definitive end of Spanish colonial rule in South America, 1824), the items were gone and the debt was the norm and a drag for kings and successive governments, which also had to bear Carlist's wars costs (Appendix I). "Desamortización" was an attempt to recover capital but ultimately fell short of solving the structural budget deficiencies.

The summary can be drawn from a Rondo Cameron's quote (Cameron, 1961):

"The old debts were consolidated deferred reformed and reactivated, but rarely paid. The titles were no longer investments, even speculative, to become simple game pieces. In the 1840 Paris Stock Exchange Spanish stocks traded with six different prices: their contributions ranging from up to 40% of nominal value to a low of 2.5%. A disgruntled investor wrote in 1850: "The history of Spanish borrowings is a sad and shameful continuing story of a SCAM". Securitie's purchasers of a respectable state are not expected or prepared for shearing as if in a gambling house, playing cards, in racing or roulette. During the past 30 years, credit in Spain has fallen so low that the mere expression "Spanish values" is almost synonymous with the most opprobrious epithets of nature, which we decline to specify. "

There were three major conversions in the nineteenth century, though not sole, followed a very similar pattern: it was created and issued a new type of debt, usually with an interesting nickname as "consolidated", "callable", etc. Between a public relations campaign that gave the impression that from then on obligations were going to be paid promptly. It was offered to holders of old securities the exchange or conversion of such securities by new ones, with no lost in capital, interest or both for creditors, but with the added incentive to buy safer assets, also the government promised that the holders of the new titles would be better treated than those with the old titles (which had been also promised in the previous conversion.)

Famous Bravo Murillo's arrangement, after the payments suspension in 1848, was a poorly disguised bankruptcy with unpaid suppliers, unilateral reduction of interests and principal on foreign and domestic debts, not accelerating payments. Creditor's outrage was such that they were able to shut London Stock Exchange all Spanish values. In 1861, Paris Stock Exchange followed suit.

In 1870-71 the situation was untenable and bankruptcy inevitable, some performances that had been cited were necessary: Rental of Almaden's mercury mines to Rothschild, Mortgage Bank creation in

exchange of a series of loans, lowering interest unilaterally, lease of Rio Tinto mines and the Bank of Spain creation in exchange of 125 million pesetas. Finally the conversion of Camacho, by issuing debt at 4% dramatically reduced interests and principal payable in 1880, achieving a period of relative stability in exchange for ensuring payments in Paris or London in francs or pounds to foreigner's holders and also through constant peseta depreciation. Foreign currency debt payment was a depletion of gold reserves in Spain around 1890, returning to debt troubles beset by a steady increase in trade deficit that led to the proclamation of the Tariff of 1891, radically protectionist.

Cuba and the Philippines' wars in 1895 had assumed a debt of around 11,500 million pesetas. Raimundo Fernández Villaverde reduced public debt and reforming the income box. To dominate public debt takes measures to delay payments and reduce interests. They were the first series of budget surpluses in the Spanish history.

Conversions ruined many small investors, but certainly some big businessmen and bankers were able to lend money directly to the government for concessions that interested them, regardless of a stake in the debt. Thus Rothschild, Periere, Prost, Guilhou, etc. received mining concessions, rail and land at bargain prices. Some banks also achieved significant benefits by transferring a debt that had been obtained at low prices and making small investors assume the risk.

2.10 Trade Policy

Throughout the nineteenth century it was seen an evolution in Spain decided to protectionism, it was a general trend in almost all Europe at that time, only England, Belgium, Netherlands and Nordic countries remained loyal to free trade. Budget troubles made desirable a fiscal tariff (conceived as a tax with revenue-raising purpose) relatively low to allow a high volume of trade, but Spanish weak industry and agriculture demanded a high protective tariff with a low revenue.

Protectionism was a betrayal in Spain since fifteenth century, becoming a more monopolistic and prohibitive tariff, the kind that Adam Smith called mercantilism, although mercantilism was not actually a formal and consistent doctrine, but it was a set of firm beliefs, among which they were included the idea that it was preferable to export to third countries than to import goods or to trade within the country, the conviction that the wealth of a nation depends primarily on gold and silver accumulation, the assumption that public intervention is justified if the economy is aimed at achieving the above objectives, etc. So evolution towards a protectionist tariff in the background was a liberal evolution and continued the line of most European countries as a protection against England's industrial dominance.

Agriculture protectionism abandonment in England had an undeniable impact on the rest of Europe and provided a free trade movement of opinion which reached even protectionist countries such as France or Spain, which progressively had been taking steps to liberalization going from a strong high protective tariff with a differential flag law (surcharge on goods imports in foreign flags and national ports which surcharges are inspired by the desire to promote marine merchant of the country).

In 1849, Spain moderates its tariff and smoothed its protectionism favoring above Catalan's textile industry and Catillian's wheat growers landowners. Number of banned products went from 83 to 14, but remained banned yarn and cotton fabrics which were more domestically consumed.

The debate between protectionism and free trade persisted in Europe for decades, liberals according to Smith's theories and protectionists to List's theories that although seemingly unsustainable from a doctrinal point of view but won major support around the Barcelona's cotton industry who had added wills from the grain Spain Midwest industry and other non-competitive sectors. Spanish free traders at that time were a more dispersed and with a more doctrinal content group than economic interests, but had the Andalusian support of Andalusian wine makers, railway companies, much of the first level public charges and politicians (Vicens i Vives, 1961).

In 1969 the so-called "tariff Figueroa" constituting an impediment to extreme protectionism aspirations of industrial lobbies and provided a reference point for the few supporters of further integration of the Spanish economy in the international economy in the last quarter of nineteenth century. Although still quite high bans and differential flag right were lifted and Spain printed a progressive character to the Law from 1875, which meant that in 1881 there was no rate above 15%. In 1882 Spain tried another tariff reduction, but this failed and the end of the century came to a policy of trade agreements between countries, in the case of Spain were developed primarily with France and England, but also with other countries including Norway. These treaties, by granting most favored nation clause angered the protectionists and finally they moved to the "agricultural crisis" (persistent fall in agricultural prices) plunged Europe into a new period of overall protection and commerce treaties end. In the case of Spain was important and known as "tariff of hunger" caused by the rise in food prices. (Gwinner, 1973).

2.11 The business factor

Spanish entrepreneurship scarcity may have historical explanations, from the Catholic Monarchs (XV century) some measures were taken that have hindered the emergence of entrepreneurs to the long term, those measures eliminated the social groups most likely to generate business acumen. Thus, expulsion and repression of Jews population in 1492 deprived the country of a group of entrepreneurs

and financiers on the American adventure eve. Values that prevailed in Spain were those of the nobility and blood purity, with the consequent denial to commercial and business activities. In the sixteenth century Seville (Genoese colony), which controlled the Spanish trade with America, tried not to naturalize, because the assimilation into Spanish society meant the abandonment of the commercial activity and the adoption of arms, Church or the bureaucracy, as the only possible careers for Spaniards. (Pike, 1966).

The few rebellion attempts of the urban middle classes to achieve absolutist government's modernization were destroyed in previous centuries and as we have commented along these work foreign businessmen/owners was the norm.

In the nineteenth century bank since its inception (François Cabarrus in San Carlos' Bank) was in foreigners' hands, so that at least 30% of Madrid bankers were (Vicens Vives, 1959). Basically it was French capital which dominated the credit card companies, plus many French businessmen had great influence on Spanish bank legislation, especially in banking legislation of 1856 drafting.

Also the second Spanish bank in chronological order of importance, Mortgage Bank (Banco Hipotecario), founded in 1872 was largely French creation (particularly Bank of Paris and the Netherlands, Paribas), but on the long term its capital and management fell in Spanish hands, although was directed from Paris Committee for 30 years (Broder, 1981).

Other important and lasting initiatives were undertaken by entrepreneurs from other countries, Deutsche Bank was present in several initiatives always specialized in extending credit to electricity companies. Banco di Roma was present in Barcelona and Barings bank house and its agent in Spain, the Irish Henry O'Shea, were one of the largest banking houses in the nineteenth century.

Railroads were built in very large part with French capital, initiative and techniques (Cameron, 1961).

2.11.1 Agricultural Industries

Spain, agricultural in nature, exported most of its agricultural products (food, animals and raw materials) in the nineteenth century. Most employers were natives generally backward and conservative (Tortella, 1985 and Simpson, 1992), very resistant to innovation. The exception to this rule was in the development of citrus in Valencia area.

Canning fruits and vegetables industry were delay in its develop because to demand problems, resulting from the low purchasing power of the Spaniards. Also foreign capital was involved, especially Switzerland capital (Lenzbourg).

Olive oil had great difficulties, especially for Spanish businessmen low vision and the French were the first installing modern equipment to produce fine oils in 1880. In addition, French and Italians were the

major importers of oil in bulk and re-exported under their own brand packaging. Spanish entrepreneurs, divided into growers and exporters, were unable to popularize Spanish brands in international trade and Spain gave up an important source of added value (Simpson, 1992). Wine underwent a major export boom of all Spanish companies, especially in the second half of the nineteenth century, helped by the spread of phylloxera in France. Many regions have benefited from this boom that required little business innovation, except in the area of Jerez where it required a big trade and production effort. Sherry wine rise took place after a change in British taste which went from sweet to dry wines and Jerez passed from fragrant wines (dark and sweet) to fine (light and dry) with significant investment and innovation. The export was largely owned by foreign businessmen as discussed above.

2.11.2 Mining and steel

Mining was the most dynamic factor of the Spanish economy at the century end. It was based on legislation, Mining Act of 1825, which gave the Crown confiscatory powers over the mines, which produced an enormous insecurity in a very costly investment. It was not until 1868 revolution where liberalism triumphed when mining activity sparked intensively.

Despite the laws, economic factors play an important role in mineral development; these were almost always stronger than the law. The mines were developed because there was a strong mineral international demand, but also there was capital and technology to put it in place. 1868 revolutionaries saw it clear, or mines were opened to international capitalism or minerals would remain in the ground.

Iron was the most important example, while the Spanish steel industry, as we have seen in previous sections, with its slow development could not constitute sufficient stimulus for iron mining. It was England, with its steel industry and the use of Bessemer converted (see above), who needed no phosphoric mineral that Spain had. English and French large companies occupied mining industry development with a small Spanish contribution. As we saw earlier, steel industry, with major political protection and technological backwardness, was never competitive in spite of an iron ore rich country. The rest of the mining industry just followed iron way, so major French and British companies exploited each Spanish mining site. Spanish business sector was guilty of lack of foresight, lack of education and lack of market knowledge.

In Spain, the large mining companies were seen always with great hostility, but mining and steel are a classic example of the inability of Spanish businessmen to deal with problems involving the development of a complex technology, capital-intensive, rapidly expanding and important

international ramifications sector. The space they left off was occupied by foreign businessmen, largely from the countries that constituted the major markets (Tamames, 1967).

2.11.3 Capital goods and energy

Almost all machinery and other equipment needed in mining and steel industry were imported, but the explosives were produced in Spain but with foreign capital, managers and engineers. Gas, electricity and urban transport were also introduced by foreign capital and businessmen (Rueda, 2005).

Electricity, as in most of Europe, was introduced by German companies like AEG, Siemens and Schuckert, hand in hand by Deutsche Bank financing. However, Spanish businessmen, with state support, had a more important role in this field than in other modern industries, especially with hydropower expansion and its legislation which reserved water jumps and drops property to Spain and its citizens.

In summary:

The course, as commented in other work sections, only shows Spanish business factor weaknesses. Spain was just able to create an interesting development in activities with a high protectionist component as in textiles, cement and sugar cases (Nadal, 1975).

Since mid-nineteenth century, Spain's economic growth was protected by a majority foreign partner: France. This country, followed by Britain, led the first significant entry of foreign capital. Both focused on railways construction, banking and mineral reserves exploitation. Three scale economic activities, which required a favorable legal framework to foreign investment, industrial financial institutions and appropriate human resources (Broder, 1981). Gallic hegemony finally made an impact on management and business' organizations in the country. Political power connections importance, bankers dependence, general manager accumulation of power, engineers preponderance among top managers, accounting techniques and lack of interest in marketing are some of the features that persisted during the century in French capital companies (Vicens i Vives, 1961).

British stamp was, however, comparatively weaker. Not because the world's first industrial nation at that moment had nothing to teach to rest of the world companies and entrepreneurs, but because English companies established subsidiaries in Spain following a model that, without forgetting their mark in other sectors (such as textiles or alcoholic beverages), could well be described as colonial. This was clearly evident in the mining sector, for example, where investments were just directed to minerals extraction without any kind of productive diversification (Carreras, 1989).

Neither domestic market protection through tariffs and restrictions, or increasing barriers to the establishment and activity of foreign companies, represented a real brake on foreign capital in Spain.

In fact, Restoration Spain became one of the scenes where great powers struggle to achieve or maintain their global political and economic hegemony (Cameron, Rondo. 1961). By then, the most advanced countries were going through the second industrial revolution and an economic internationalization with no precedent. U.S. and Germany as emerging powers, expense of Great Britain and France, major international investors from the middle decades of the nineteenth century. Another indicator of the significant role played by foreigners in the economic development of Spain is the patent statistics. In 1882 69% of patents registered in Spain were by foreign individuals or companies (Ortiz-Villajos, 1994).

Some theories relate Spanish social values to its underdevelopment, the most important relationships are:

1. Old aristocratic prejudice against work, particularly manual work (Sarraihi, 1957).
2. Traditional Catholic mistrust towards capitalism (usury laws, praise of poverty, suspicion toward competition, materialism and rational attitudes.) (Hamilton, 1948).
3. Intellectual passivity and respect for the orthodoxy imposed by the Inquisition (Hamilton, 1948).
4. Low levels of education (Núñez, 1992 and Kagan, 1981).
5. Mercantilist tradition, favored government intervention in the economy and the regulation and gremialización ("guildation") of business and labor (García Sanz, 1991).
6. The well-known vicious circle: the delay itself is an obstacle to economic development and a barrier to entrepreneurship (Tamames, 1967).

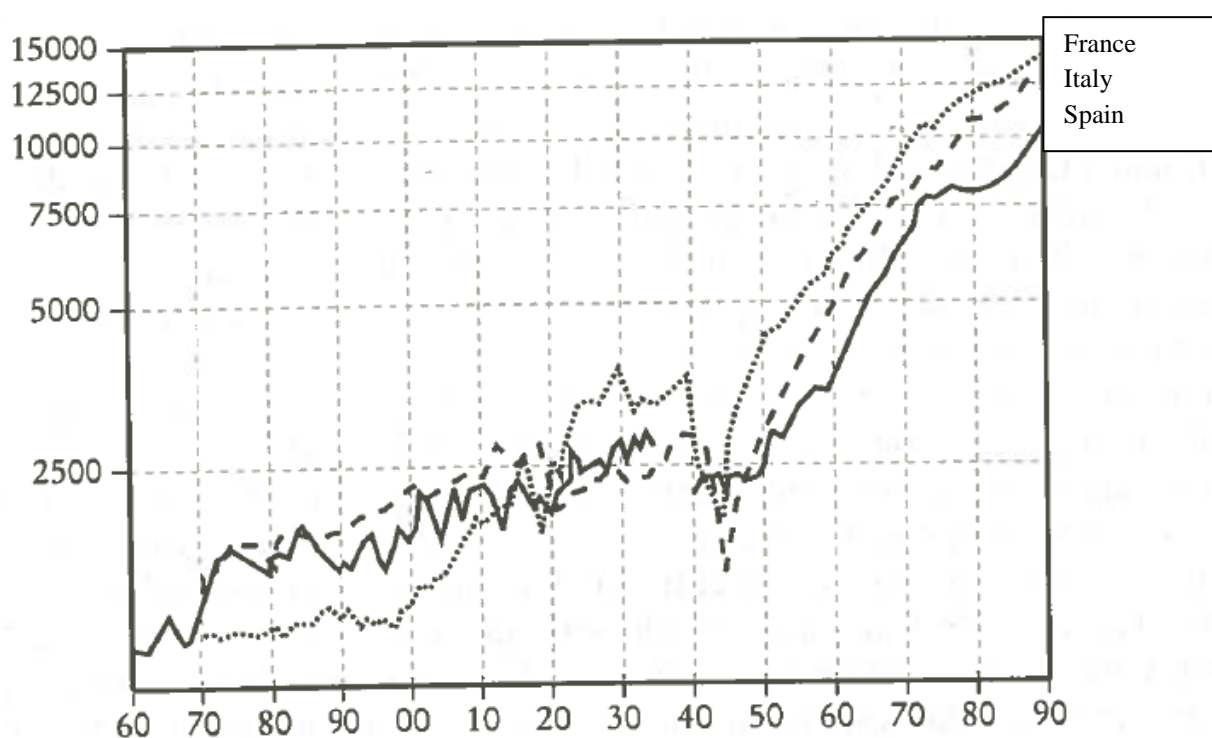
It would be naive to attribute solely to the mediocrity of Spanish businessmen the economic backwardness of Spain. The causes are deeper and more complex. But neither can deny that social attitudes, though difficult to learn, are very persistent. **My main assumption** throughout this study was that a society that since the sixteenth century was frozen by an imposed orthodoxy, which systematically stifled original thought and freedom of action in earthly happiness pursuit, found over three centuries later, without a competitive and dynamic business class. Societal attitudes, I repeat, are very persistent: there are indications that the problem is not solved yet (Tortella, 1985).

It is starting to be seeing that Spain has been delayed about Europe since long time ago. But it is not just this, it is how it used to resolve it, always with an exterior support/interest.

XX CENTURY

As I indicated at the start of work, it will highlight those phenomena in the European context of the twentieth century which marked differences with Europe, avoiding common economic phenomena that led to Europe (see figures below) development of similar income. In this sense, the exhibition is more in historical and economic terms than in purely economic sections as I followed in the nineteenth century exposure.

Per Capita income in Spain, France and Italy 1860-1990 (US\$ of 1985, purchasing power parity)



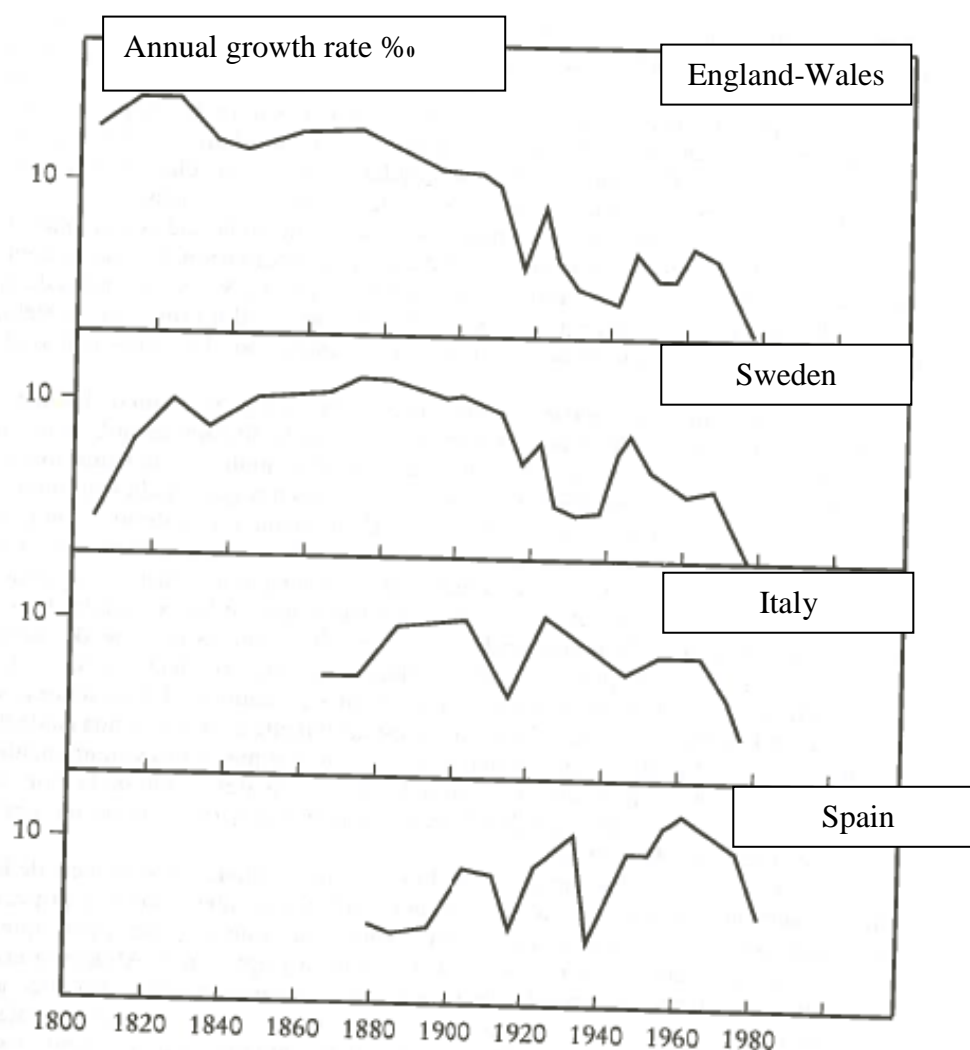
Prados, 1993.

Chart 18

3.1 Demography

As in Europe there was an increase in birth at the beginning of the century, down to the end and a very important and progressive mortality decrease. See the graph below (adapted from Mitchell, 1943).

Annual mortality growth rate evolution in four European countries, 1800-1981.



EH 1989.

Chart 19

Economies modernization involved its villages/towns urbanization, with a deep transformation of behavioral parameters and political and cultural habits (schooling and literacy rates).

Charts below reflect this phenomenon in Spain.

Urbanization indicator in Spain: citizens of municipalities of over 50,000 and 100,000 inhabitants, 1900-1990.

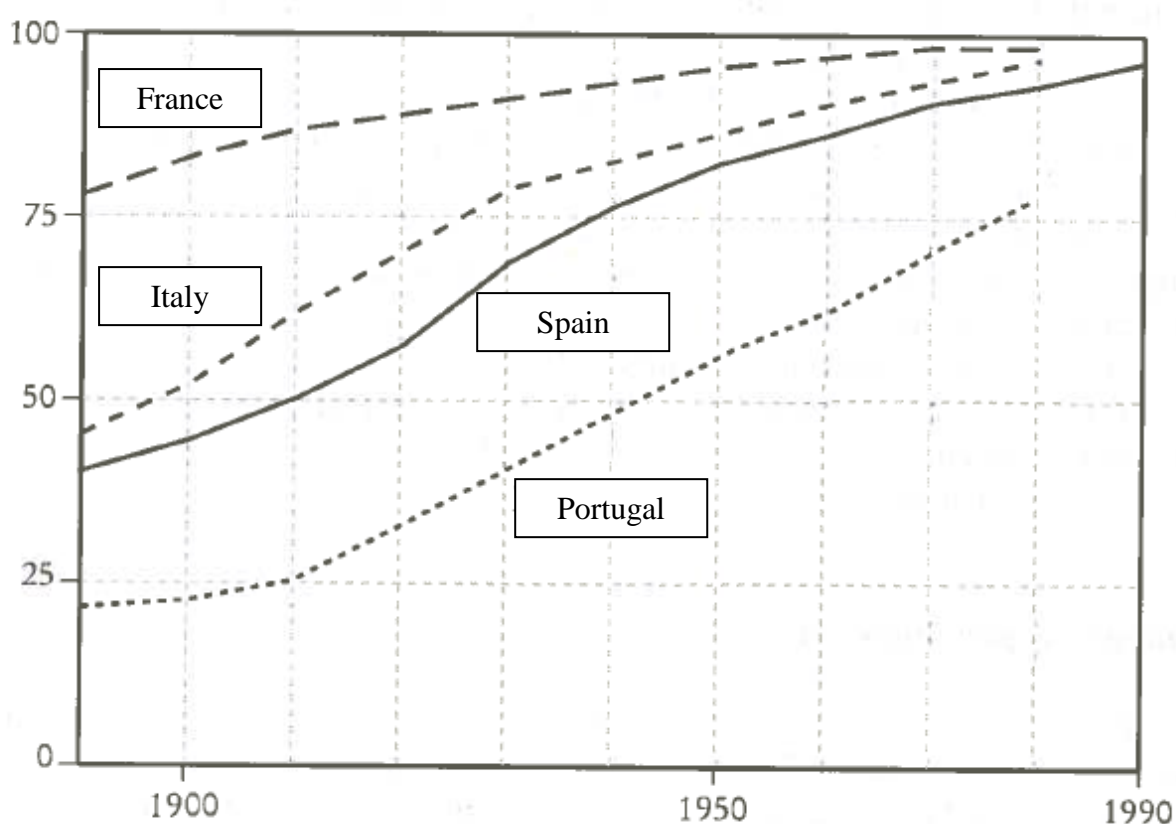
Year	Population in cities		Percentage of total population		
	50<100	>100	50<100	>100	>50
1900	857	1.677	4,6%	9,0%	13,6%
1910	935	2.054	4,7%	10,3%	15,0%
1920	1.264	2.567	5,9%	12,0%	17,9%
1930	1.276	3.513	5,4%	14,8%	20,2%

1940	1.512	4.972	5,8%	19,1%	24,9%
1950	1.884	6.741	6,7%	24,0%	30,7%
1960	2.442	8.483	8,0%	27,7%	35,7%
1970	2.470	12.489	7,3%	36,8%	44,1%
1980	3.521	15.864	9,3%	42,0%	51,4%
1990	3.774	16.917	9,6%	42,9%	52,5%

AE.

Chart 20

Literacy rates in France, Spain, Italy and Portugal, 1890-1990.



World Bank. Zumagni, 1992.

Chart 21

3.2 Agriculture

Spain has been historically subjected to a serious and deep phenomenon of deforestation, as well as from being a forest country in the middle Ages, has come to have serious desertification as a result of vegetation cover loss, forcing drive important reforestation and fire fighting projects in the twentieth century.

Agriculture rapid growth in Europe made Spanish agriculture to follow Europe and in 1980, as seen in the below, sector productivity (calculated as the quotient of dividing agriculture-GDP percentage

between the percentage of human resources it uses) was the lowest of the 10 countries that then formed the European Community (Tortella, 1985). That is, worker productivity in Spanish agriculture changed little, in relative terms, with Europe during the twentieth century, with very low yields per hectare.

Participation of agriculture in GDP and sector's productivity, 1980

Country	1.	2.	3.
	% agricultural production/GDP	% agricultural population/total population	Col. 1/ Col. 2
Belgium	4,7	2,9	1,62
Denmark	9,2	8,2	1,12
Germany	3,8	5,9	0,64
Greece	18,0	30,3	0,59
France	6,7	8,8	0,76
Ireland	19,3	18,9	1,02
Italy	8,6	13,9	0,62
Luxemburg	3,6	5,7	0,63
Holland	7,7	4,5	1,71
U. Kingdom	3,8	2,6	1,46
EEU (10)	5,8	8,0	0,73
Spain	7,1	18,5	0,38

Camilleri, 1984.

Chart 22

In Europe, the common agricultural policy (CAP) has not contributed to market liberalization, on the contrary traditional protectionist phenomenon has continued in Spain, with a subsidized production through price products guarantee, overproduction, cost of storage and dumping (prices below the market) exports. No wonder that CAP has incurred $\frac{3}{4}$ of the total budget of the European Union (<http://epp.eurostat.ec.europa.eu>).

Despite the great social and political instability that Spain began the XX century, economic evolution shows a clear continuity (Mitchell, 1976) with the only interruption of 1935-1950, which led Spain to regain some ground lost over Europe during nineteenth century.

Early in this century become aware of the agriculture's poverty reality and it was driven up by the public administration, given private sector's inefficiency). Among other measures that were taken to save the Spanish agriculture's backwardness, one of the most important ones was the "water policy", in 1902, The canals and swamps' plan, which aim was to triple watered surface and reach 1,600,000 hectares, this doctrine was continued throughout the twentieth century and is still deeply rooted in Spain (<http://www.ine.es/>). Large hydraulic infrastructure were built in Spain during Franco's dictatorship in the mid-twentieth century, that accompanied by a rural areas colonization reached to populate unoccupied areas with all the revaluation that resulted from the new irrigation areas implementation in the 60's without go to land expropriation (Tamames and Rueda, 2005).

3.3 Industry, "The Takeoff"

The Spanish tariff economy of the late nineteenth century created some provisions by which last colonies were forced to consume cotton and other Spaniard's products, while its main export product, sugar (Barela López, Carreras and Tarufunell, 2005), looked excluded from the Spanish market. The awareness of being ruthlessly exploited by Spain helped foster the rebellion's spirit among Cubans and led to the armed conflict.

The remnants of the colonial empire loss (Cuba, Puerto Rico and Philippines) in the war against the United States launched a major intellectual debate about the homeland (Spanish) evils. Paris' treaty was the end for the colonial encounters in the last third of the nineteenth century and settled the old Spanish Empire scant remains, dramatic event with internal translation to an authentic national disaster (Tortella, 1994). This, not because of the destructive nature of war, but because of the political consequences, the outcome was the end of a four centuries empire. "Disaster" negative consequences were largely magnified by different sectors of the Spanish intellectuals and produced the spreading of revulsion and demoralization feeling. In this sense, it should be taken in account human, physical, military and economic resources loss, furthermore trade and transport networks were deleted.

But the colonial disaster and its gestation process also meant a high cost for the country that had to be financed with its own resources, relative inflation, currency depreciation and an increase in public debt due to wars finance loans that had to be made (Barela López, Carreras and Tarufunell, 2005). All these factors were more or less impact on the Spanish economy and, in general, led to a spread of a discouragement feeling and decided in favor of a renewal and reform of the country with amazing and diverse manifestations, such as moving regeneration, or "regeneration", and a legislative program to balance the budget and producing a series of budget surpluses during the first decade. "Villaverde's Stabilization", moreover, compatible with a favorable trade balance.

In this period Spain experienced an economic growth process which can be summarized by saying that while in 1900 it was basically an agricultural country; in 1930 production structure had diversified significantly. The essential element was the gradual reduction of primary's sector weight, and secondary' sector increase in GDP percentage. Thus, the industry involvement in GDP increased from 20 to 31 percent, thanks to a substantial reduction in primary' sector that initially exceeded 46 percent (Barela López, Carreras and Tarufunell, 2005). This change responded to the protectionist policy, which involved national's market reserve, because of the indigenous industry's inability to competitively access to foreign markets (Carreras, 1989) and Spanish' agriculture modernization process begin. It helped to overcome the century end crisis and catch up with other industrialized countries. In particular, agriculture went to perform necessary functions for industrialization (provide labor and capital while it was making incipient manufactured inputs consumers). The gap between surplus systems of distribution (production relationships), remained stagnant compared to productive forces expanding which led to a large rural unrest outbreak that marks the whole period. Spain followed the "Hoffman's law", according to which industrialization begins by consuming industries and at the time industrialization process advances, equipment or capital industries become increasingly important, that is, industries whose main customer is the industry itself. Protection afforded that industries which had not developed during nineteenth century, they did it in the twentieth.

3.4 Autarchy and monopoly

World War I brought an economic boom period by a boom in exports to warring countries, but also meant an internal shortage and a domestic prices rising because Spain didn't bring in the necessary investments, so that, economic conditions of much population did not improve.

Since the beginning of the century, Spain embraced the great social unrest currents of that time, anti-clericalism, anti-militarism and a radical worker population/movement that was tempted by violence, mainly anarchist. In Spain, after several revolutionary attempts, more or less inspired in the emerging Russian revolution, it was inevitable to become a military dictatorship (Primo de Rivera 1923), which financially exploited a favorable international environment allowing the beginning of the dictatorship with the strengthen of the industrial growth. With autarky thesis was intended self-sufficiency and, therefore, the momentum before any of internal development instrument. To this aim, decisive public action into de economy was needed to meet the backlog of private investment (Tamames and Rueda, 2005). His economic policy was characterized by an intense state intervention in line with current prevailing in Europe then. To ensure autonomy or self-sufficiency were regulated markets, prices and production through the National Economic Council. Aids and subsidies became very important and

tariffs became the protectionist measure. All this led to an economy bureaucratization, leading to favoritism episodes (Carreras, 1989).

The economy well protected by the state with unique or maximum pricing fix, lived moments of expansion at all levels, heavy industry and mining included. On these bases, and industrialized regions such as Catalonia or the Basque country, saw a significant increase in economic prosperity and jobs growth. For the first time it went from 57% of workforce engaged in agriculture, 45%, and car industry has doubled in six years. It consolidated a model that would allow economic development in some Spanish areas and stagnation in others. In addition, population growth, coupled with the above process, caused the first significant migration movement within Spain (Barela López, Carreras and Tarufunell, 2005).

Spain used infrastructure's construction as its major economic engine, developed in the National Infrastructure Plan (1925), Spanish government tried to lowering transport costs and to expand the domestic market. In addition, these measures were quite popular, despite the serious indebtedness assumed. It was also developed an interesting water policy that came up with many reservoirs to increase irrigation, avoid flood troubles and generate electricity by hydropower. Confederations were created to prevent Landlords' watering control (Tortella, 1985).

To solve Spanish high indebtedness, resulting from its significant infrastructure investment that generated budget deficit, the country sold its monopolies (snuff, telephone, oil, lottery,...). It was missing an advanced fiscal policy, except as an attempt by Jose Calvo Sotelo (Primo de Rivera's Treasury minister 1925) to create a unique and progressive tax pushed back by the bourgeoisie; no attempt was made to Treasury Policy improvement (Fuentes Quintana, 1990).

All succeeded in increasing the national income and industrial production, but dramatically worsened Treasury situation, more debt. The debt would crawl beyond the dictatorship, conditioning economic policy of the subsequent Second Republic (1931-1939) (Fuentes Quintana, 1990).

Labor disputes were fought by trying to attract the most moderated workers. This was done by populist and paternalistic measures such as subsidized housing and worker's pensions, or large families' protection and the women's work in motherhood issues. Changes did not address to land reform or economic structures which created the bulk of problematic situation. Joint committees to discuss regulating wages and working conditions were built in the so-called National Corporate Organization. It welcomed moderate trade unionists, Free Trade Unions and UGT preferably, while anarchists and radicals were excluded (Tortella, 1985).

In terms of social forces, Second Republic came about because military officials did not support the king, militaries were upset because Alfonso XIII accepted Primo de Riveras' resignation, and it let Spain

go to an increasing freedom demand, rights for workers climate. Furthermore, unemployment rates rising resulted sometimes in street fights, anarchist's riots, murders by extremist groups from either side, military coups and revolutionary strikes (Tamames, 2000).

In Spain political turmoil also took a particular look, because Church and religion was a frequent target of revolutionary left political side. They saw privileges enjoyed by the clergy a cause of the social unrest that Spain was suffering, which resulted many times in churches burning and destruction. Conservative right political side, too entrenched in the country also, was deeply offended by these acts and looked increasingly threatening its good social/economic position enjoyed before the growing revolutionary influence of the left polity side groups. From the Spanish international relationships' standpoint, Second Republic suffered a severe isolation because foreign investors groups put pressure on their countries' governments to not support the new regime, fearful of the social trends that become important within it, and it would end up imposing a nationalization policy of businesses in Spain. To understand this is enlightening to know that phone company monopoly was owned by the U.S. "International Telephone and Telegraph" (ITT), railways and their operators were primarily held by French capital, while electric companies and cities' trams belong to different strange companies (mostly British and Belgian). As a result, there was no nationalization during the republican period, but, nevertheless, many conservative generals, supported by fascist powers, were encourage planning military uprisings and coups.

Second Republic, Civil War and Franco's initial regime pose Spanish industry stagnation. As we can see in the figure below industrial production per capita indicators reached in 1930, have been never reached again until 1952. In addition to the European common factors such as the Great Depression, in Spain of course the Civil War is an absolute decline, not so much industrial infrastructure destruction (Ros Hombravella, 1973) as the general disorganization, markets fragmentation, communications interruption, lack of raw materials and energy, etc. (See Chart 23 afterwards).

Leftists launched a property collectivization that had much relevance in the Andalusian countryside and in the Catalan industry. Almost half of the usable land was expropriated and much of the industries were expropriated in the cities, especially in Barcelona where it was assumed that the production rate was reduced to one third (Ros Hombravella, 1973).

Franco's dictatorship and European fascist's countries alignment, in addition to financial support with no return, had a important impact in the commodity markets.

Autarky was the Spanish dictatorship's economic model during the 40's. To get a clear idea of the Spanish situation during this period it should be added to the external factors, beginning of the Second World War and subsequent international isolation, the ideological component that was based on a

strict economic nationalism markedly interventionist. With a grand rhetoric, autarky launched unreal industrial projects on a strong state intervention basis, dedicated to promote those industries and sectors defined as national interest, to preserve these interests it was created in 1941, “INI”, Instituto Nacional de Industria (Industrial National Institute), which prompted many public industries establishment, whose views were not always the profitability and economic viability. Industrial policy resulted in a notable failure, as mentioned until the second half of the fifties industrial production rates were not recovered to prior Civil War levels, the impracticality of many industrial projects helped to this delay. Foreign trade intervention through import and export licenses system, patronage and favors focus, fed one of the dictatorship’s economic model characteristics, economic policy corruption. So, during autarky years Spain found in the black market, one of the basics of running a stagnant economy, inefficient and hampered by widespread corruption (Schwartz, 1978).

In agriculture National Wheat Service creation, far from guaranteeing food supply, favored by his rigid intervention to empower the black market. Fiscal and treasury policy favored financial institutions, issuance of public debt, placed through private banks, was the preferred mechanism for financing the state and its public enterprises, grouped in “INI”, with inflation destabilizing effects, putting in place a negative redistribution of income fiscal system, where the privileged were permanently advantaged during the dictatorship (Schwartz, 1978).

Autarky’s overall balance could not be more detrimental to Spanish society and economy, per capita income in 1945 was reduced to one third of the existing before civil war’s outbreak. GDP and other macroeconomic indicators did not reach prewar levels until 1954. Famine’s years, where large Spanish society sectors suffered the effects of a delusional policy which privileged and those with political connections sectors were benefited to expand or build from scratch their considerable fortunes. World War II end in 1945 made Spanish dictatorship’s situation even more complicated. In San Francisco’s international conference which gave birth to the United Nations, Spanish’ dictatorship was excluded from the new international system. In Potsdam’s International Conference, Allies declared their incompatibility with Franco’s regime and, a few months later, in 1946, France closed its borders to the dictatorship. In December 1946 the UN decided ambassadors’ withdrawal in Spain until democratic rule would be restored. It was the most critical time for the Spanish dictatorship. International isolation and the difficulties of a bankrupt economy introduced strong unknowns on the survival of the dictatorship regime. In this critical context, help received in 1947 by Juan Domingo Peron’s Argentina was crucial to alleviate food shortages in Spain (Tortella, 1985).

3.5 The Forties.

Spain was deprived of the allied loans as well as of the trade relations that would allow the so required aforementioned raw materials to be imported. Other clear mistakes can be noticed when the authorities supporting Franco (or the Francoist) established both import controls, and rationing of foreign exchange. These ended up being simply more and more obstacles that replaced the logical criteria of allocation by own criteria, prestigious or self-sufficient politicians, or even by the own interests of those who held the power.

The labor market was heavily regulated and therefore, its rigidities were very remarkable. Since the wages were adjusted to levels below those of the pre-war, the purchasing power decreased, and consequently, this had an influence on the low levels of consumption and basic industrial products. Besides, due to the food shortages - a symbol that characterizes unequivocally the Spanish post-war years – and considering the arbitrary fixation of prices (regardless of the conditions of the law of supply and demand), the rationing would be absolutely necessary, which was officially established on 14 May, 1939 by the decree of *Ministry of Industry and Trade*.

The unreality of the new rates would cause the immediate appearance of a black market. In the case of oil and wheat, the quantities diverted into this illegal market were equal or superior to those channeled through government regulation. This was, with no doubt, the prevailing feature of life in Spain throughout the period of the Forties and it was not until 1952 that it was finally possible to end the rationing of bread; the food of the people par excellence. The oppression caused by the policy of autarky (of self-sufficiency) applied abroad would become outstanding and, in fact, the slowness of the recovery could be seen as a clear symptom of this.

Moreover, taking fully into account the industrial topic, it could be said that the policy of the New State would have no less obstinate effects. Indeed, determined to ignore the cost of production – as well as the opportunity cost, the advantages of specialization and the need to acquire greater competitiveness – the authorities pushed for a promotion of those industries deemed of a particular national interest in their politics, thus distorting resource allocation through such a rigid as well as arbitrary policy. The pro-Franco mechanism not only discouraged but also reduced the investment with great forcefulness. On top of that, it limited the employer's capacity for action and initiative.

The cancellation of market mechanisms within the general isolationist framework was basically led by two methods. On the one hand, a very tight control of foreign trade that was subject to a regime of complete intervention in order to reduce the imports as much as possible (“...to redeem Spain from the import of exotic products...”).

On the other hand, since a quite active industrial policy was launched with the aim to make Spain politically and economically powerful, it could be said that it was not by chance the great importance and number of the military people occupying major political or economic positions. Furthermore, they also managed the powerful *Ministry of Industry and Commerce* or decreed laws such as the "*The Management and Defense of the Industry*" of 1939 that classified the industries according to their military value.

Neither was it by chance Jose Antonio Suanzes's long presence (from 1941 to 1963) as president of the Spanish government and promoter of the famous "*Instituto Nacional de Industria*" (*I.N.I* ; a symbol of the state intervention in industry at the time of Franco's regime), nor his position as the executor of the creed of "industrialization priority" par excellence; i.e. "to produce and industrialize at any cost." This important man was not only both a military and a naval engineer, but also one of Franco's personal friends. On top of that, he was an advocate of industrialization and autarky at all costs, and the importance of efficiency or even of profitability objectives was clearly considered secondary to him against the momentum of Industrialization.

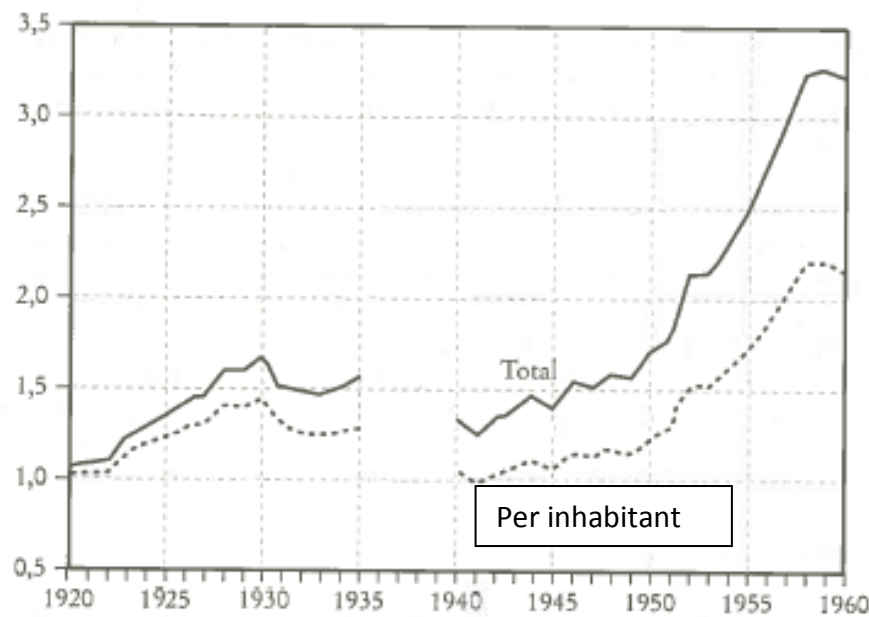
The *I.N.I.* emerged as a big "enterprise of enterprises," or a "business enterprise," which was concerned with the support, development, management, negotiation, and / or participation in companies and manufactured goods whose managers considered being creditors of support and sponsorship. Most of the basic industrial sectors were endorsed, especially energy (oil and electricity companies such as *Calvo Sotelo*, *Endesa*, ... among others), and steel (*Ensidesa*) industries. Other sectors that were actively involved included transportation, mining, and chemical industries.

As a final assessment of the performance of the *I.N.I.*, it could be said that despite the scale of their efforts, their work led to an efficient allocation of resources and the resulting waste of these. Furthermore, as discussed below, the funding of its projects was developed through a series of "credit privileges" which allowed a large volume of hoarding funds, thereby draining the supply of funds for the entire private activity.

In summary, it can be concluded that the endeavor placed in creating a basic and strong industry was lost as soon as it declared its weakness when it came to confront and face a competitive environment. This was regarded by some as a very serious economic weakness that would get worse after some years and would therefore be invoiced later on (Schwartz, 1978).

3.6 The Fifties

Industrial production, absolute figures ("Total") and per inhabitant ("Por habitante") (1913=1).



Carreras, 1984.

Chart 23

As it can be observed in the graph, a boost to economic development and industrialization emerged and evolved from the year 1950 onward. Indeed, a progressive change in the economic policy took place throughout this period and some innovations that would lead to very important positive consequences arose. Although this interventionist and self-sufficient policy was not substantially modified until 1959, the introduction of some small changes and a different orientation in economic policy would allow higher levels of growth. New paths were taken in reference to the international trade relations, the regulation of the domestic markets, and even the agricultural policy (leaving aside the terrible “supply policy and rationing” of the previous period).

Among the facts that happened at an international level at the beginning of this new decade, which had some importance in making the economic system grow and become more flexible, some of them can be dismissed.

On the one hand, these include the appropriate agreements with the United States to rent military bases from the year 1951 (which, although not as considerable as the famous *Marshall Plan*, they helped Spain to unblock the foreign trade). Another fact could be the French opening of the foreign trade against Spain in 1948, the vote for Spain by most of the Latin American countries, certain Western European countries, North Americans and Arabians. Furthermore, it must be noticed the fact that in 1949 the king Abdullah of Jordania was the first head of state to visit Spain since 1936 in favor of reversal by the UN on November 4, 1953 from its earlier resolution condemning Spain.

In addition to this, it must be said that these were international events, which allowed Spain to get slowly into the national agreements instead of doing it through direct action or the law of Franco.

On the other hand, the events that took place within the Spanish borders can also be considered relevant. In spite of going unnoticed in the tough legislative field, the new government of 1951 was doubtless much more conducive to openness. The participation of the foreign trade in the national income increased (the ratio moved from 6.8 to 8.7; a quantity which despite not being spectacular was absolutely significant for the first changes). The structure of the imports changed, raising the capital goods at the expense of food, with the resulting difficulties in the balance of payments, which became a traditional phenomenon in the Spanish economy. That is, a symbol of the poor compatibility between sustainable growth and a well-balanced foreign salary.

It is also important to stand out on an international scale the fact that the representatives had a greater political role (at least when they were freed from Suanzes's domination, as soon as he dissociated from the *I.N.I* in 1951). Particularly, the professional and bureaucratic framework of the Administration was reinforced in such a way that the state came to be governed by a complex, though less arbitrary and partially ideologized legal regulations. Another element to consider concerned with the industrial growth is the improvement of trade relationships with respect to the agricultural sector. Moreover, the low wage levels, which were stuck due to the hardness of the discipline imposed by the regime, made the claim return to an attractive business investment, which, obviously, increased greatly in turn.

As a result, these so simple and "miraculous" measures led to a significant increase of the tax in terms of GPD, with an average annual growth of a five percent, or in terms of the real income per capita (which in the fifties came to be multiplied by 1.5). This growth lined up Spain uniformly at the time of the progression of other European countries, most notably those in southern Europe.

This way, Spain could be placed within this "Latin pattern" of growth that highlights the high sensitivity of their economy, all external influence and their heavy reliance on rubrics as emigrants' remittances, transfers or international capital flows and tourism receipts. This heightened perceptiveness with respect to the international ups and downs would be more obvious with the openness of the Spanish economy. It clearly announced the waste involved in keeping a hindered economy against its potential abilities of growth to make a better use of the foreign circumstances.

The gradually liberalizing policy in this decade of the fifties, which marked a turning point in the Spanish Industrialization and reached its peak with the *Stabilization Plan* in 1959, had two particular outstanding features that are worth mentioning. The first one consists of smoothing out the difficulties

observed in the previous decade. The second manifesto regarding this matter is its gradual change, not resulting from a deliberate management, but rather from "a tug of war" with the internal contradictions still entrenched in the Spanish economic structure.

In spite of the promising prosperity outlined in the previous paragraphs, the externalization of certain serious contradictions that all this retouching and thrust generated cannot be omitted. Some include the financing of major public works and companies resorting to bank credit that was eventually monetized; so that the monetary aggregates increased adversely. Another contradiction includes the external squeezes and heavy import requirements, without any endorsement by small and uncompetitive exports whose value transaction was damaged by an arbitrary exchange rate overvalued. On top of that, there were the so existent inflexibilities in the labor market, with its increasing salaries that fed the inflation. Finally, it can be mentioned the creation or maintenance of the necessary conditions for the establishment of monopolies, which, though not necessarily natural or legal, led to a greater inflexibility and rigidity of the offer.

All these can be said to be paradoxes built up and strengthened over the years, which would require in the middle of the decade new measures that would lead to a more energetic, drastic and lasting rectification. This is what would come to be called *The New Economic Regulation Plan* of July, 1959; better known as *The Stabilization Plan*. In practice, this new plan symbolized the end of an autocratic dream and - in time - the beginning of a new age of an intensive growth that ended in 1974. Throughout that period of time, Spain was consolidated with some remarkable weaknesses and imbalances, as an industrialized society.

3.7 The Stabilization Plan of 1959

The famous *Plan of 1959* - inspired by Joan Sardá *from the Research Department of the Bank of Spain*—became much more steady and definite than the previous measures practiced so far. The steadiness of the decisions taken was complemented by the economic rationality of the same, as well as by the international aid that gave way to new projects. On top of that, in a short period of time, the resulting effects were easily externalized, and the previous upheavals became finally consolidated in the Spanish economic framework, in a longer period of time.

The Stabilization Plan was, as opposed to other measures previously adopted, supported and advised by a series of international and professional organizations, which gave a much more logical and rational environment in light of the possibilities, circumstances and existing resources. However, the finest meaning of the Plan lies in that it involved the recognition that the path that the Spanish economy was following was not the right one. Indeed, it was not in line with the new economic and

international demands, since all the resources generated during the period of the autarchy were obsolete and withered.

The resulting effects of the measures taken in the summer of 1959 can be said to be inseparable from two main factors. First, and above all, from the expansive stage predominant at the time in the leading European countries. Second, the internal industrial push consolidated over a long period during which the appropriate components and factors were gathered. These include the increase of the capital stock both physical and human, rising expectations, the decline of the submission of the industry to the old agricultural activity, the progressive incorporation of women to work, the expansion of an industrial and financial middle class (*bourgeoisie*), which advocated a more liberalized and enterprising policy, etc.. All of them allowed the exploitation of a favorable international context.

To sum up, and before describing the following sixties and seventies, it may be necessary to summarize that the *Stabilization Plan* created a framework, which resulted more flexible and consistent in order to enable the functioning of the economy properly in line with the rest of Western Europe. This granted the primacy to the private sector and to the market prices, and assigned the public sector the task of enforcing the rules of the game to achieve more or less free competence, as well as to make the necessary investments to stimulate or supplement it. That is, the internal, and especially, external liberalization ended up being both a simple and in consequently, efficient resolution.

3.8 The Sixties and the beginning of the Seventies.

At the forefront of these reforms lies the industrial sector. It intensified both the capital and the refurbishment outstandingly, as well as the productivity and the competitiveness, and it even achieved a certain process of productive specialization. This most important sector of the Spanish economy, apart from growing very fast- particularly in regard to basic industries- was modernized and diversified, pushing the consumption industries into the background, although they also grew.

However, there were some exceptions such as the shoe industry, which acquired a spectacular importance those years. The scope of this expansion can be glossed in a series of very conclusive and categorical data. From 1961 to 1974, the average GDP growth was of a seven percent, which resulted undoubtedly impressive in the Spanish economic history, not only in amount but also by its long time scale.

Nevertheless, it is also true that this quantity disguises the fluctuation that occurred constantly during the three decades considered. The industrial involvement in GDP increased from a twenty-six percent in the year 1964 to a thirty-four percent in 1974, with a much lower increase in labor force participation. This implies a significant increase in the labor productivity in the manufacturing

activities, particularly noticeable compared with the increases in productivity in non-industrial activities. However, the key feature of the economic development of the seventies was the imbalance between industrial development and agriculture.

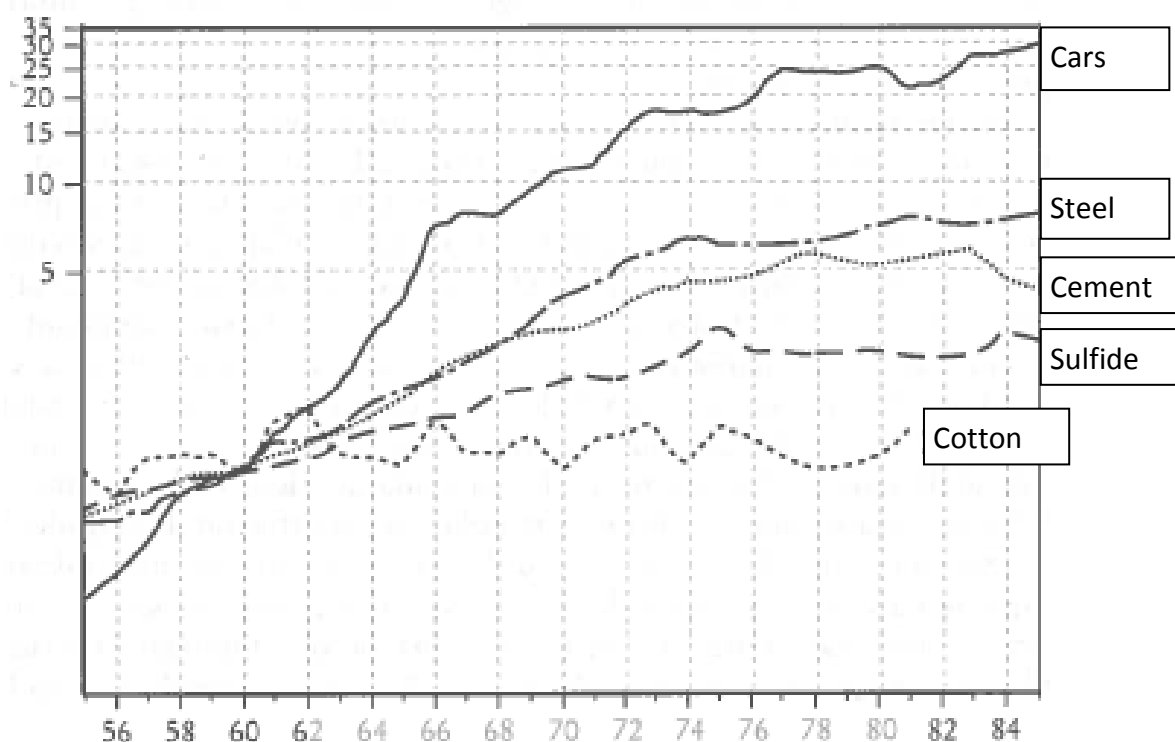
In spite of being numerous the industries that prospered extensively (mostly the chemical, metallurgical and capital goods industries), the automobile industry - with the beloved "six hundred" model as flagship, which, paradoxically, was not considered at the time of the Plan of 59. This new car symbolized in a better way the years of development, revealing the relative vigor and potential of the Spanish economy, as well as the increase of the standard of living and the purchasing power of the consumers.

The venture of the industry pushed into the background other outstanding events in this period of unprecedented development. Some phenomena such as the flowering of the tertiary sector (with tourism as the leading section), not only stood at the head of the sectorial distribution of GDP; but also of the concentration of active population by different industrial sectors; the so called *The General Education Act* of 1970, which launched the instructions and qualification of the population.

Another characteristic event of this period was the one concerning the importance of the migratory balances that happened during this period of time, which was the result of improved technology for labor saving. This way, the emigration was consolidated one of the major modernization counterparts. Furthermore, more than 1.3 million of the Spanish population was transferred to other European countries – more notably France and Germany- and on the national territory; the displacements were even more dramatic. For example, from 1962 to 1973, four million people changed their place of residence, of which Madrid, Cataluña and The Basque country were the main destinations.

The growth of the automobile industry was very paradigmatic in the Sixties. The brand "SEAT" – a subsidiary of the Italian brand "FIAT" – became a symbol and almost a surprise to the pro-Franco regime, which, in spite of its disastrous management, found a sector that revealed the relative potential of the Spanish industry and its staff, through a partnership with rising living standards and purchasing power and an engine of industrial development (see the graph below). It was regarded as an authentic, though late, "Industrial Revolution" based on the economic liberalization tight to one of the periods of the fastest growth that the international economy has ever experienced, apart from the communist bloc.

Industrial production indexes (1960=1)



EH, 2012.

Chart 24

Thus, because of the stubborn reality, the regime had to adapt, but it did so very slowly, recoiling at all times. The most obvious and solid controls disappeared, while others simply transformed or disguised, and, of course, new more ingenious and refined ones were created, though they were equally true and operational. The Spanish businessmen continued to develop their roles over the years, as throughout modern times. That is, in an economic context dominated by the facultative discretion, the repeated disruption of market rules, and the numerous restrictions imposed by public agents, likely to respect, or even increase, the positions of privilege to some of those whose relationship with political power has always been very close.

The direct consequence of the return to the controls was the rebirth of the privileged positions, and therefore a new discrimination in the provision of facilities for investment. In sum, more than the removal of tough autarchic bonds, the development plans of the sixties were, in part, a subtle but effective conversion of interventional and obsolete guidelines.

There were great difficulties that the autarchic dictatorship imposed and the economy was liberalizing much slowness and fear due to the lack of ideas of the ruling classes. As a result, the industrial growth

was favored with very little prospects that had to be reconverted in the years after Franco's regime; i.e. the post-Franco years.

The last years of Franco's dictatorship, these policies had a gradual weakening. The decline of the regime, and the subsequent political transition introduced a feeling of uncertainty in the businessmen that affected their making of decisions and the prospects of the investment. Therefore, the industrial legacy that the years of Franco's regime produced suffered from a host of shortcoming and weaknesses of the crisis that highlighted the fragile structures of the Spanish economy throughout the years of the economic development. The crisis affected Spain fully, leaving the country a powerless witness of what it could have been but was not.

3.9 The restructuring of industry

The Spanish economic crisis of the seventies was very hard, what could be even defined as a "deindustrialization", which affected mainly the the manufacturing industry with taxes of negative growth (-2.2% between 1978 and 1984) (Segura, Julio. 1989) and, especially, the traditional industry and the "weak demand" of the shoe industry, the textile industry and the mining industry, among some others.

The crisis happened at an international level and all countries suffered as a result of higher energy prices favored by OPEC, which along with the heavy reliance and an inflexible oil demand of the developed economies produced a huge inflationary impact, forcing the government to introduce restrictive measures. Indeed, there were some internal factors that made the crisis even worse, among which stand out the following:

3.9.1 Political factors.

Franco's death in 1975 produced an emptiness of power and the transition to democracy. Also, there were some unresolved uncertainties by the politicians, who were more concerned with the institutional transformation than with the economic problems. The lack of business confidence, with some doubts regarding the role of free trade unions, the left-wing political parties and the new regulatory frameworks limited investment and growth.

3.9.2 Economic transition.

The mixture of political and economic factors returned some decades later. The managers, unable to take unpopular measures, opted for a "compensatory policy," which did not have an impact on the consumer prices compared to the oil prices. This led to an increase of the demand and consumption, with logical consequences of great deficit in the current accounts. In the end, with some delay, they

had to pass the costs on to the customers, which increased inflation. This caused the imposition of monetary restrictive policies of high interest rates, and finally, two devaluations of the *peseta* with more expensive imports, thus making the inflation increase again.

3.9.3 The legacy of Franco's regime: The legacy.

This legacy could be said to be divided in the following:

On the one hand, the industries of high labor content and low technology, with a very low level of competitiveness due to the traditional protectionist politics, and a heavy reliance on foreign technology and high energetic consumption. On top of this, the financial structure was out of balance, with excessive credit.

On the other hand, the public sector, with the *I.N.I* at the head, was a trading center that provided employment for a million of workers. This produced some indecision in the different governments, either progressive or conservative, and it was practically not until the mid-90s and after the hard industrial restructuring that Schumpeter called "creative destruction" and privatization. However, the holding company (with one or another acronym), did not disappear.

3.10 The energetic problem

It could be said, then, that Spain is one of the clearest examples of energetic dependence of the European frame. It could also be confirmed that this country has hardly met periods of self-sufficiency since the import of the English coal, with more affordable prices than the ones resulting from the Spanish mining production. Moreover, Spain has always depended on other countries for supply of energy, even for the oil and the natural gas demand of the last decades. However, this feature of its economic structure did not involve either precaution or research plans. Indeed, after the oil crisis of 1973, Spain did not adopt any measures in relation to the adjustment of domestic prices, saving or energy planning. Instead, it put into practice a policy of the subvention of prices – the beginning of a public deficit– without regard to a national energy plan.

From the decade of the nineteen fifties until the present day, the energy consumption has been multiplied by six, in a parallel way to the country's economic growth. In recent past years, the relationship between production and energy consumption has decreased due to the measures that encouraged saving and the development of new technologies.

Although this path could be followed more slowly, the economic consumption had to keep increasing in absolute terms in order to be able to reach the economic levels of the most developed countries of the European Union.

In spite of being mentioned that the energy deficiencies were one of the explanatory factors for the delay of the industrialization in Spain, it is unclear its comparison with more developed countries such as Japan, Switzerland, Sweden or Holland.

Spain had always been a country with low levels of consumption. For instance, on the eve of the Civil War, Spain consumed 457 KEC (kg coal equivalents) per capita, as opposed to the 729 of the 2000 global average of the industrialized countries (Ed Turner, 1985). The great protectionism of the Spanish coal allowed the industries to use, often on a compulsory basis, expensive coal of poor quality.

Oil consumption did not reach a significant level until after the First World War, achieving its full development by mid-century. Once again the consequences of political dictatorship - Primo de Rivera's dictatorship in this case - justified the need to establish an oil monopoly that, due to such a lack of production, dedicated to the sale and distribution of products along with the refining. The result was large inefficiencies and an apolitical and, even more ineffective, tax collection from the point of view of technological development. Nevertheless, in the mid-fifties, the oil consumption in Spain became more intense than in Europe, increasing over the twenty years of consumption from around a fourteen percent of the total energy in 1950 to a fifty-eight percent in 1970.

Gas consumption in Spain has always been marginal, mainly because of underdevelopment in the distribution networks drawn from the nineteenth century along with the low rates of urbanization. The Franco dictatorship, another error in historical perspective, opted for the empowerment of petroleum gases distributed in cylinders. Almost to 1990 has not undertaken a real effort in infrastructure even gas distribution wing.

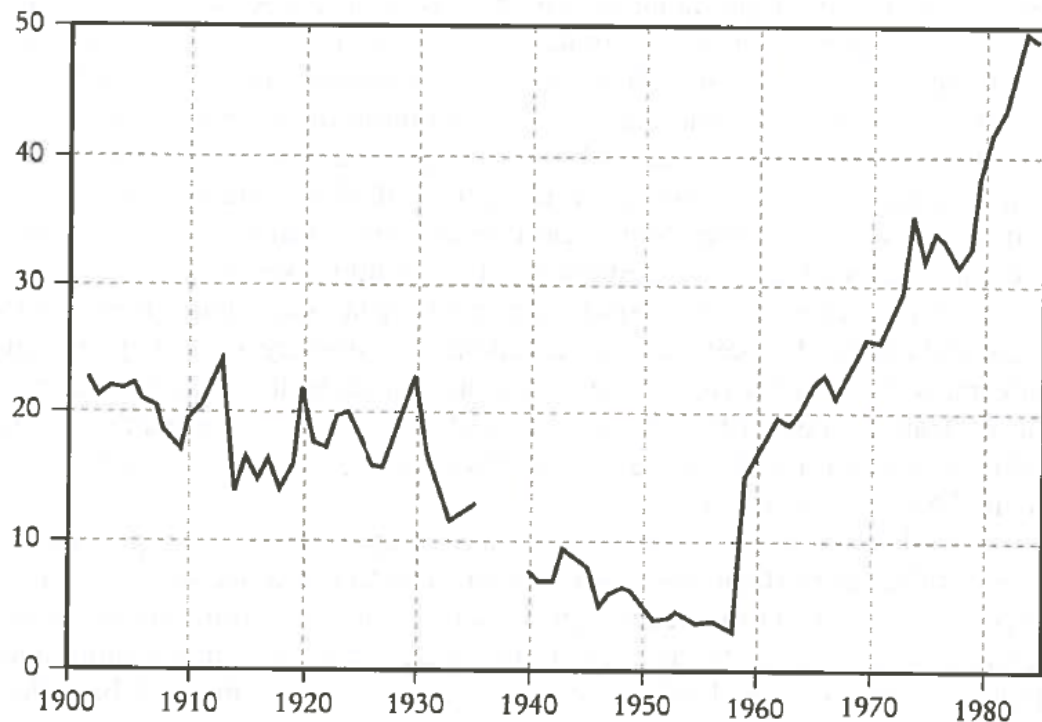
At the beginning of the century, the first hydroelectric power station appeared, favored by the mountainous territory and steep slopes. On top of that, after the Civil War, there was a great increase of the demand that could not find its equivalent to the offer. Therefore, a very famous phenomenon in the years after Franco's regime happened, which consisted of the electric cotes of several hours a day, depending on the demand and the rainfall pattern. The political conditions of the autarchic control did not allow a development of the installed power until the fifties, when the conditions of the dictatorship improved and allowed the import of equipments and the improvement of the inversions. The increase in power took place since large hydraulic works achieved their peak, which caused the generation of electricity from power plants.

Gas consumption in Spain was always aside, mainly because of an underdevelopment of the distribution networks drawn since the nineteenth century, along with the low urbanization taxes. According to the historical perspective, another error in Franco's dictatorship was that it opted for the

empowerment of petroleum gases distributed in cylinders. In fact, it was not until 1990 that a real effort was undertaken in the infrastructure for the distribution of ga

3.11 The foreign sector

Spanish economic opening 1901-1984 (Foreign sector weight as a percentage of the GDP).



EH. 2012

Chart 25

In the figure above, it can be observed what has already been indirectly indicated; i.e. the massive contraction of the international payments in the thirties as a result of the Great Depression, the terrible isolation of the Spanish economy during much of the time of Franco's regime, and the gradual opening since the Stabilization Plan of 1959. What became really exceptional in Spain were the so low prices and the declining levels of openness during the forties and the fifties. The years that the World War II lasted could have been a chance to export, as were those of the World War I. The pretext - very much used in Spain - regarding the destructions that the war produced cannot be said to be very faithful. Indeed, the damage was not as large and in any case, it would have relieved much earlier. Germany, Italy and France, following the massive destructions much greater than the ones produced by the World War II, recovered in two or three years, while it took Spain more than ten years to do so. The autocratic obsession led Spain isolated from the economic and commercial development that began in Western Europe in the late forties.

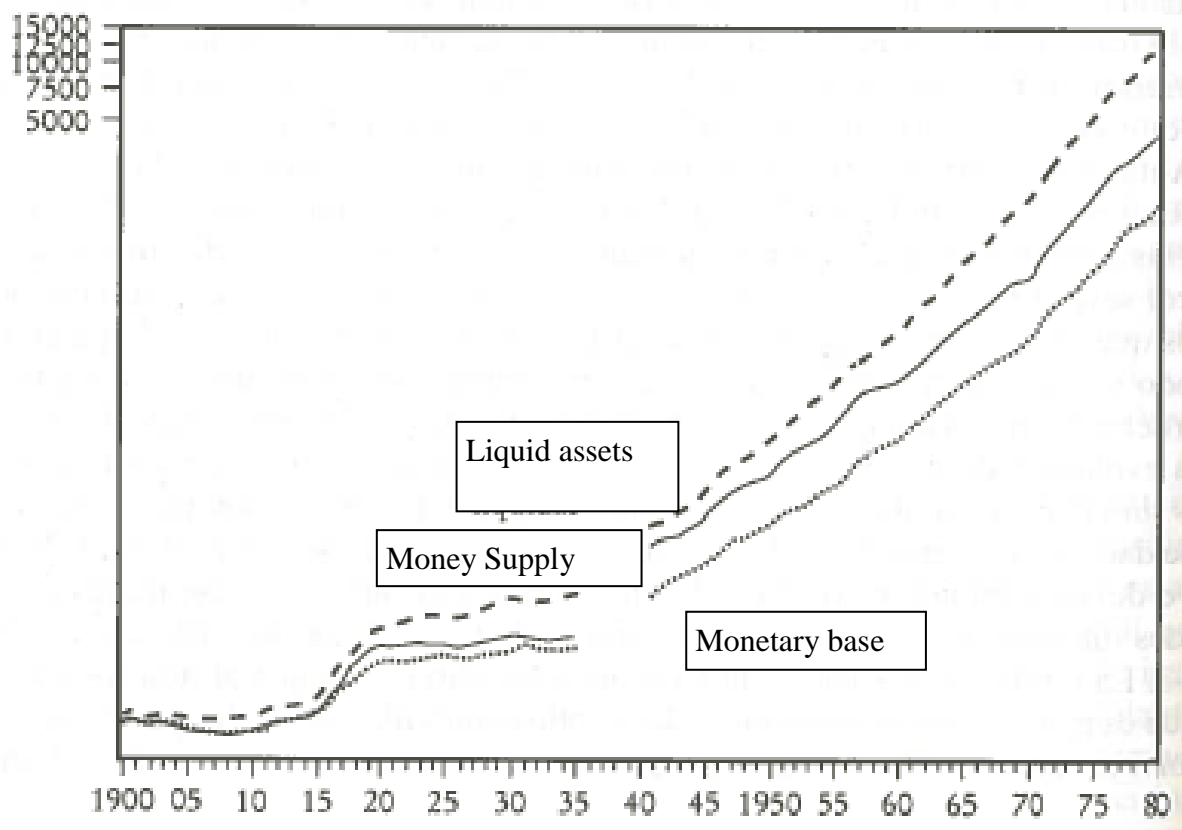
Apart from this, another example needs to be mentioned with respect to the changes in the foreign relationships, and their vast significance and ability to drag the whole Spanish economy. The balance of

the transfers, services and long-term capital had, in the long run, a main role in offsetting the trade deficit and the sustainability of the whole process of expansion of the sixties. The exportations increased (the percentage of GDP rose between 1967 and 1974 from 4.7 to 8.0, reaching 14.7 in 1984) - and substantially – changing its composition. The foreign agricultural sales of the farming products fell outside half (the percentage of the GDP between 1967 and 1974 changed from 40.33 to 20.36 percent), while exports of capital goods and manufacturing increased its relative weight highly around the same date. The goods increased from 12.96 to 22.32 percent and the manufactures from 24.87 to 36.02 percent.

After the evidence of these details, it is important to note that the dynamism and development of the Spanish exports was not only due to the increase of the demand, but also – and more distinguished – to the improvement of the competitiveness in comparison with the traditional aversion of the Spanish foreign sector to face a competitive environment (relying on the protective tariff shelter, the replacement of products or markets etc). Moreover, the autocratic economy- after the establishment of the *Common Market* in 1957- realized the need to look for international cooperation, although the imposition of a democratic system based on the *Treaty of Rome* prevented Spain from achieving any commercial agreement in Europe until 1970 when a mere trade agreement was managed. In 1977, after Franco's death, the accession for membership was finally achieved in 1986, with a transitory period that lasted until 1993.

3.12 Money and the banks

Monetary aggregates, 1900-1980, in millions of Pesetas



EH 2012.

Chart 26

As the graph shows, the evolution of the different monetary aggregates (see footnote) as in every economic system, includes the private bank and the foreign sector of primary money plaintiffs (M0). This way, despite not being submitted to any pattern or automatic discipline, the Monetary Base obeyed the different orientations of the economic policy.

One of the peculiarities of the Spanish economy in the European context during the first third of the twentieth century lies in the nature of its monetary instrument. As opposed to almost all the other European countries, Spain was never attached to the golden standard since it was suspended in 1883 due to a massive outflow of gold as in the history of the nineteenth century.

Note.- The Monetary Offer refers to the collection of the economic means of payment. Keeping in mind the financial assets, the Monetary Offer could change its concept. Therefore, the M1 refers to the cash, the bank notes and the deposit in current accounts. M2 also includes saving accounts, and M3 includes other assets with less income as installments, investment funds and others. This refers to

what could be called ALPES; financial assets for the public. Finally, the M0 or monetary base would be the group of monetary assets delivered by the Central bank (Martín Aceña, 1985).

It could be said that this was an advance for the time, since the rest of the countries ended up moving to a trustee in the thirties. However, Spain did not establish the golden standard because of doctrinal principles, but because of the fear that its chronic trade deficits would produce an uncontrollable outflow of gold. This happened due to the fact that the amount of money that flowed at the end of the nineteenth century was decided based on the amounts of money that the Bank of Spain loaned to the government. The fact that marked the difference in such a fiduciary pattern caused the monetary, and therefore, economic isolation.

The Spanish population did not take advantage of the possible good results that Spanish discretion would produce, which depended on the wishes of a “monetary respectability”. Indeed, the politicians kept a restrictive policy that prevented the growth of the Monetary Base, except for the period of the Great War as a consequence of the foreign sector. Throughout the twenties and the thirties the discretionary monetary policy seemed to have adapted to the economic needs, thanks to the positive evolution of the magnitudes which were so out of the control of the monetary authority at the time (availabilities in cash M2).

At the beginning of the century a new Spanish private banking system was set up, following the German model of mixed activities; that is, commercial banks with advocacy and support of companies. This symbiosis of bank-industry – considered both unorthodox and dangerous in the Anglo-Saxon world – which has always distinguished between the commercial and the business one banking.

The Spanish fiat standard allowed the development of mixed banking, since this practice involved risks that would be offset by the Bank's role as a moneylender as a last resort. This, however, was an ultimate role facilitated by not having to maintain the discipline of the gold standard. As a result, the immediate consequence of this bank involved fully in the industrialization was an important recovery of the inflation that led to the aforementioned *Stabilization Plan* of 1959 and the nationalization of the Bank of Spain in 1962.

As it happened in the rest of Europe, a progressive concentration of banking and branching occurred throughout the century in Spain. It covered the whole national territory and replaced the Central Bank in the loans that the Public Debt requested, thus, preventing the tickets from being in such an elevated proportion as before.

Until 1973-1974, and though not without significant changes (such as the reform of 1962, by which the Bank of Spain was nationalized), the financial system and the whole network channeling lacked an

active policy of control of the basic monetary aggregates, regulating all kinds of interests to a lower "artificial type."

The chosen system involved the establishment of the capital requirement ratios, which was supported by the credit system, so that most of the resources were absorbed by various public and "preferred" organizations. Again, among others, the famous *I.N.I.*, could be financed at rates below the market with the consideration of the possible theft of credit supply for all private activities and enterprises. Between 1962 and 1979, about a 35 and 45 percent of the funds channeled by the credit unit were absorbed by these privileged circuits.

This system was in crisis with the famous case *Matesa*, which had significant political repercussions, with the onset of decomposition of the Franco regime. However, that did nothing but show that the state could not assume a role for which he was not qualified. (Annex II). Among the important economic consequences is to highlight the derailment of the ideas of using public banks as an instrument of economic planning as it was envisaged in the Franco dictatorship.

Throughout the twentieth century, saving banks came to lose their charities to become financial institutions. Despite being non-profitable entities, the progressive weight in the financial system dissociated them from its purely beneficial objectives since the beginning of the century. In the Franco era, these were seen as a resource for the plans made by the government, thus forcing investment with fixed coefficients. In the seventies, they were considered to be financial institutions for all purposes, except in their governing institutions that became politicized, due to the lack of organized impostor groups and the benefit sharing that was done through "social work", thus funding charitable projects or of social interest.

3.12 The state intervention and the fiscal reform

The Spanish people could be considered to be reluctant to assimilate the premises and the basic method of economic reasoning. As it has been previously explained, it has been decades or centuries of alienation between rulers and ruled. They have had everything to fear and expect from the state; a semi-divine institution that seems to be outside the laws of society and of political economy, which seems to have inexhaustible coffers and absolute power.

Curiously, the Spanish State (See table below) did not participate in government spending exponentially compared to its neighboring countries. In fact, instead of intervening with direct actions that would have led to much spending, it confined itself to developing some regulations. For example, it preferred to encourage the domestic industry by imposing a protective tariff, rather than subsidizing or creating businesses. This action may be explained in relation to other facts that differ from Europe,

particularly the archaic Spanish tax system. The tax system has always been outdated and rudimentary apart from being unfair and inefficient as it has been explained previously. If the bases of a modern tax system should provide sufficient flexibility and fairness, the Spanish system has rarely been sufficient - as the nineteenth century proved – as well as chronically poor.

Public spending as a percentage of the GDP

Country	1900-02	1935-38	1956-60	1970-72
USA	6,8	21,3	31,1	34,1
FRANCE	14,4	30,5	51,7	49
UNITED KINGDOM	14,4	23,4	36,3	50,3
GERMANY	16,2	42,2	44,4	35,6
ITALY	7,1	13,6	28,1	37,8
SPAIN	9,4	13,5	11,2	17,3

Comín, 1990.

Chart 27

Following the *Reform of Villaverde* in 1899 – in which they were able to oversee the corporate profits and capital - the first and only period of sufficiency was achieved, but large defects remained, and as the spending increased, the deficit returned. Indeed, the privileged classes were not even able to contribute fairly to the expenditure, even in periods of military dictatorships or during the nearly revolutionary government in hands of the left-wing in the year 1932. The reason for this was sometimes due to the wealthy classes and others due to the lack of human and technical resources to carry them below. The Franco regime perpetuated the regressive taxation and at the end of this period of time, the Spanish Treasury was technically the most backward in comparison to the rest of Europe (Fuentes Quintana, 1990).

Nearly after a century lagging behind with respect to the rest of Europe, Spain achieved a real tax reform in 1977, which caused the indirect taxes to go in a few years from 54.1% of the total- in 1971- to 38.1% - in 1980 - and the direct taxes from 28.9% to 44.9% on the same dates. Despite this, there were some concealment problems that the system was not able to tackle, in addition to some technical ones such as the excessive complexity and progress that ended up being disincentive, thus

keeping the major loads on the working classes, which could be said to be the easiest to control (Fuentes Quintana, 1990).

In terms of public spending, the evolution was similar to the rest of Europe. That is, the development expenditure on the military or financial people was predominant in the Nineteenth century. The same happened with inflation, which was very high throughout Europe after the Second World War, although worse in Spain. Associated with the regressive tax apolitical, there was another distinguishing feature: the polarization of income distribution throughout the Franco era, which showed an improvement at the end of the century and an approach to the European countries.

4. KEY FINDINGS

After this deep analysis we now know that there are some continuous problems that have been in Spain forever. They have very important factors for the actual crisis, but we have been successful with those factors being around our economy too. All of this give as a lot of to think, the negative factors that are common for all periods since three centuries ago, at least are:

1. Politicians: Spanish politics have always thought in the short it is very difficult to find “State compact for any matter either education, justice, ...” and that has been always a huge problem for the Spanish sustainability. Even in the long dictatorship periods the measures were improvised and there was not any long term view for the Spanish economy.
2. A systematic delay with regard to the rest of Europe in most of the economic indicators: It is the clearest finding we can see all through the Thesis. In every economic indicator evolution that we have analyzed Spain was at least 20 years behind of the normal European evolution.
3. Foreign capital:
 - a. Raise capital difficulties: A constant in the Spanish history.
 - b. No re-invest in Spain: We have examples of both kinds of investors in Spanish history but the no-reinvest ones are much more common.
 - c. Delayed and too slow: Again we have been slow and we have had an archaic legislation in this area.
4. Human Capital:
 - a. Quality: Depending the period, probably nowadays Spain has the most valuable human capital of its history.
 - b. Brain drain: A constant scourge in Spain which is connected with the absence of long term political/economic projects and inversions.
5. Historical deficit (chart 15): There are just a few periods when Spanish economy has been in public expenditure surplus more than five consecutive years (early 1900’s, mid 1950’s. Barea Tejeiro, 1999), no example in the Euro current history. We just have three consecutive years of surplus in the short term past 2005-2007, it was in the very best period of the Spanish economy and after this period the expenditure deficit had a drastic fall in 2008 and 2009 (Spanish Bank) . So again it was not a sustainable situation for the Spanish economy

All this analysis comes out with the same final conclusion, **Spain have never face up a deep economic crisis with an Europe and a U.S.A in a difficult economic situation.** Spain have passed through a lot of

different situation, and always with some constant obstacles in its history but the external market was most of the time there when the home economy was not strong enough, for the good and the bad.

5. CONCLUSION

As a conclusion we can set that Spain has been always delayed in economic evolution/growth matters. That is not an explanation for the whole economic disaster that Spain is nowadays involved, but is a constant century by century. There are some more constants that explain an important part of the actual situation. Not taking in account the entire international finance situation, internally in Spain we have behavioral/environmental patterns that we can affirm, after this analysis, that have marked Spain for the past three centuries, those have been explaining above. Over and above patriotic justifications, I think that Europe has been always Spain's big brother/father or emergency button that if Spain pass through a crisis it has the money to invest in Spain and pass over it. We have examples for all kind of arguments win win agreements, abusive agreements in both sides. So the only conclusion which has direct impact on today is that Spain have never face up a economic difficult situation with Europe and the U.S. "injured". **So the past DOES explain the present**. Let's see what happens with the future. It will keep explaining it? That is what makes life that good and history that interesting.

6. ANNEX I: THE CARLIST WARS

The Carlist Wars refer to the three Spanish civil wars of the Nineteenth Century between the Carlists (absolutists) and the liberals. The first ones were supporters of Carlos María Isidro de Borbón (who was Charles IV and Maria Luisa of Parma's second son, and Fernando VII's brother) and his descendants, while the liberals supported the government of Isabel II of Spain (niece of the former) and her descendants.



Picture 2

Portrait of Carlos María Isidro de Borbón, pretender to the Spanish throne as Charles V, by Vicente Lopez Portaña. Academy of San Fernando. Madrid.

He was born in the Royal Palace of Madrid. Between 1808 and 1814, he lived in Valencia as a prisoner of Napoleon with his brothers. In 1814 he returned to Madrid with the rest of the royal family. In September of 1816, he married his niece, the Infanta Maria Francisca of Portugal (or of Braganza), daughter of King John VI of Portugal and Carlota Joaquina de Bourbon, his sister. The couple had three children:

- Charles Louis de Bourbon and Braganza, Count of Montemolín (1818-1861);
- Juan Carlos de Borbón y Braganza, Count of Montizón (1822-1887);
- Fernando de Borbón y Braganza (1824-1861).

In May, 1830, Ferdinand VII published the Pragmatic Sanction (laws of legal management of the Old Regime in Spain that were promulgated by the king with respect to key aspects of the State), abrogating the *Salic Law* (Lat. *Lex Salica* or more accurately, *Salic laws*. This law consisted of a body of laws enacted in the early sixth century by King Clovis of the Franks. It owes its name to the tribe of Salian Franks. It survived in the European history for centuries. It prohibited a woman to inherit the throne of France, and even her rights to transfer the throne to her male descendants) and therefore, it allowed women's access to the Spanish throne in the absence of male heirs. The decree was originally approved in 1789, but was never officially promulgated. Until then, Charles had been the heir of his brother.

On 10 October 1830, Maria Cristina of Bourbon-Two Sicilies - Ferdinand VII's fourth wife – gave birth to a daughter with the name of Elizabeth, who moved her uncle from the line of succession to the throne. Although in 1830 Charles admitted the Pragmatic Sanction, he recanted in 1833, and in Portugal, supported by his family ties to the ruling dynasty, he constantly delayed his departure, and refused to return to Madrid to swear allegiance to Elizabeth as a successor to the throne.

On Fernando VII's death on 29 September, 1833, Carlos Abrantes issued the manifesto of October 1, in which he declared his ascension to the throne under the name of Charles V. On 6 October, General Santos Cegama Thief proclaimed Charles as king of Spain in the town of Tricio (La Rioja), date on which the First Carlist War (1833-1840) started. Maria Cristina of Bourbon-Two Sicilies -whose daughter Isabella was less than three years old when her husband died - acted as the regent during her daughter's minority of age until 1840. That year, she was forced to hand over the regency of General Espartero, from 1840 until 1843, when he was finally forced to leave office. At thirteen, Isabella was declared of age. When the Queen was 16, the government arranged a marriage with her cousin the Infante Don Francisco de Asis de Borbon; Duke of Cadiz.

The Queen's wedding was a national and international issue, as the different European countries maneuvered in order to not allow the new king's nationality to damage their alliances and interests. Finally, they chose Francis of Asis, who seemed to be a timid and a good-tempered man, who would not interfere in politics.

On 14 September, 1839, Carlos María Isidro de Borbón crossed the French border and the French government decided to set him in Bourges with his wife and children. There, on 18 May, 1845, he abdicated in his son Charles Louis de Bourbon, who adopted the title of Charles VI.

The Second Carlist War (1846-1849) took place mainly in Catalonia between September 1846 and May 1849 due, at least theoretically, to the failure of attempts to marry Elizabeth II to the Carlist pretender, Carlos Luis de Bourbon, who had been sought by moderate sectors of Elizabeth, and the Carlist.



Picture 3

Carlos Luis de Borbón, pretender to the Spanish throne as Charles VI. Image from Wikipedia

The conflict, questioned by many historians as such war, was essentially a popular uprising in different parts of Catalonia. The party of Matiners fought against the Republican ideology, what came to be called progressive coalition-Carlo.

The Carlist attempt "Ortegada" (1860), was a conspiracy by General Jaime Ortega and Olleta, General Captain of the Balearics, on 1 April, 1860, to proclaim the Carlist pretender Charles Louis de Bourbon and dethrone Queen Elizabeth II, by sending a military expedition of three thousand men of the garrisons, who established themselves in the Balearic bound near the Ebro Delta with the intention of provoking the revolt of several barracks in Catalonia and forcing the abdication of Queen Elizabeth II. However, most of the army refused to march on Tortosa, cheering Elizabeth II and failed in their attempt.

The Third Carlist War (1872-1876) took place among Charles's (Duke of Madrid) supporters, (Juan Carlos María Isidro de Borbón y Braganza's son, Count of Montizón and Charles Louis de Bourbon's nephew,) the Carlist pretender named Charles VII, the governments of Amadeo I, the First Republic and Alfonso XII.



Picture 4

The pretender Charles VII, in a lithograph of the British magazine Vanity Fair (1876). In <http://www.antiquemapsandprints.com/p-10000.jpg>

After the proclamation of the First Spanish Republic in February 1873, many Elizabethan monarchists switched to the Carlist supporters' side, thus increasing the cantonal insurrection. By contrast, the restoration of the fallen dynasty in 1868 in hands of Alfonso XII, contributed to diminish the power of the Carlist forces as well as the Vatican's approach to the Spanish Government.

7. ANNEX II: Spanish Political Resume

1. Fernando VII Reign (1814-1833): First, he overturned the liberal gains that the Cortes of Cádiz constitution had been achieved.
 - A. 1820: Military coup that forced the monarch to carry out liberal reforms.
 - B. 1822: With the French army help, it is restored the absolutist regime with internal persecutions against the liberals.
 - C. 1816: Start of the independence fights in the American colonies.
 - D. 1830: Issue of succession, which leads to civil strife in the “Carlistas Wars” (Annex I).
2. Isabel II Reign (1833-1868): Fernando VII dies in 1833 and because of the minority of Isabel (his daughter), Maria Cristina de Borbón (his wife) assumed the Regency of Spain.
 - A. 1836: Revolt of the Sergeants which requires a liberal change with a new constitution in 1837.
 - B. 1841: Maria Cristina's opposition to the Municipalities law of 1840 (choose of mayors and councilors), together with various problems related to Maria Cristina's private life forced her to resign and go abroad. General Espartero took the power (1841-1843).
 - C. 1843: A military revolt organized by moderates overthrows General Espartero and enthroned Isabel II, declared adult at the age of 13.
 - D. 1845: New constitution.
 - E. 1854: General O'Donnell military uprising, with a liberal impulse. New constitution in 1856 which never even come into force.
 - F. 1856: Queen Elizabeth II decanted again to a new Conservative proposals, with great political and social instability, ongoing unrest, foreign wars and military coups that were suppressed.
3. 1868: Military coup, called “1868 Revolution” or “La Gloriosa” (The Glorious One), which overthrows Isabel II and chairs General Serrano. New progressive Constitution in 1869.
4. 1870: Rejected the option of the Borbones family, it began a search for a suitable candidate to the Crown over the European royal families. Eventually the national courts chose Amadeus of Savoy as King. He was Victor Emmanuel II son, king of the newly unified Italy, and belonging to a dynasty with a liberal reputation. Amadeus of Savoy, who reigned as Amadeo I, but should abdicate in 1873, overwhelmed by all kinds of problems and a wide front of rejection.
5. 1873: The First Republic. The weakness of the republican regime provoked a huge political instability. Four presidents succeeded in the short span of one year: Figueras, Pi y Maragall, Salmerón and Castelar.

6. 1874: General Pavia led a military coup. The Republican Parliament was dissolved and established a government headed by General Serrano that suspended the constitution, the rights and freedoms that the previous period has created.
7. 1874: Martínez Campos military coup on December 29, 1874. Isabel II's son was proclaimed king of Spain as Alfonso XII. It started in Spain the Restoration period, absolutely linked to the figure of Antonio Cánovas del Castillo, he was assassinated in 1897 by the anarchists. New constitution in 1876.
8. Alfonso XII (1875-1885): The widespread electoral fraud that characterized the turn system takes place in an agrarian and backward context. The tampering electoral key was in the "Caciques" ("chiefs") who were responsible for implementing the results agreed by the party elites.
9. María Cristina's of Hamburg Regency (1885-1902). Until Alfonso XIII became an adult. Continued a system of widespread corruption and election results manipulation.

Serve this minimum historical reminder to focus the Spanish economic development in a century that could be summarized as politically unstable, continuous wars, internal violence and underdevelopment. An idea of the great political upheaval that happen in Spain during this period is the nineteenth-century Spanish constitutions list:

1. Constitution, promulgated on July 8, 1808 by Napoleon.
2. 1812 Spanish Constitution.
3. May 4, 1814, Fernando VII abolished the 1812 Constitution.
4. 1834 Royal Charter.
5. 1837 Spanish Constitution.
6. 1845 Spanish Constitution.
7. 1852 Constitution Project.
8. 1856 Constitution, not promulgated.
9. 1869 Spanish Constitution.
10. 1873 Federal Constitution draft.
11. 1876 Spanish Constitution.

Another fact that shows the incredible political instability is that between 1868 and 1874 the government head changed 15 times.

12. Cuba and Puerto Rico loss in 1898. Last overseas colonies.
13. Frustrated anarchist attack against the King.
14. 1909: The Marocco war. On July 9, 1909 some Spanish workers who worked in rail construction that was going to link Melilla to Beni-Buifur mines, owned by a company controlled by the

Conde (count) of Romanones and the Marqués (marquis) of Comillas, were attacked by the natives in the area. This incident constituted the beginning of the war in Morocco, which runs until 1927.

On July 18 began the real insurrection with the lifting of barricades in the streets, several deaths and extensive damages. The government immediately started, on 31 July, a harsh and arbitrary repression. Spain arrested several thousand of people, which 2.000 were processed resulting in 175 banishment penalties, 59 life imprisonment and 5 death penalties (Tortella, 1985). The executions cause a wide revulsion in Spain and throughout Europe.

15. 1914: The First World War, Spain was left out.
16. 1917: Russian Revolution and the subsequent Bolshevik Revolution.
17. 1921: Spanish army defeat in Annual, which was a big blow to the Spanish rule in Morocco.
18. 1923: September 13, 1923, Cataluña's captain general, Miguel Primo De Rivera, rebelled against the Government and led a coup supported by the majority of the military units and their own King Alfonso XIII.
19. 1931: The Second Spanish Republic. During the municipal elections of 1931, despite the greater number of monarchist councilors, the elections amounted to the Crown a large loss in urban councilors and the King leaves his post being proclaimed the Republic. New Constitution of the Second Spanish Republic.
20. 1936: Spanish Civil War, preceded by years of intense social conflicts with military proclamations aborted and pre-revolutionary atmosphere in the industrial working class.
21. 1939: End of the Spanish Civil War and the beginning of the Second World War in which Spain did not participate.
22. 1939-1975: Francisco Franco's dictatorship.
- 1978: New Spanish democracy.

8. ANNEX III: MATESA CASE

The *MATESA* case or scandal was one of the most important political and economic scandals in Spain, during late Francoism.

The scandal erupted on July 23, 1969 when the Director General of Customs complaint *Matesa* (Northern Textile Machinery SA) before the Court of currency offenses, involving the company and imprisoning the employer and principal shareholder of the company, Juan Vila Reyes and also to other shareholders and directors. It is known that the *Matesa* Company, founded in 1956 as a family business, had a debt of ten thousand million pesetas with a public bank (*Banco de Credito Industrial*). The company had acquired in 1957 patents for manufacturing a French shuttleless loom (renamed by the company as *Iwer*), capable of weaving any kind of material, from paper to glass fiber. Furthermore, the company developed more than a hundred patents and deposits and offered them abroad, beginning an international expansion.

The loom was introduced as a national product that allegedly was meant to export thousands of units sold to numerous subsidiary companies that had been established by the company in several countries. That is; a model of financial 'holding' in its heyday of development.

The true extent of the proposed company's international expansion through exports of such loom was exposed with a visit of the Argentine Minister of Industry to Spain. It was proved that they had only sold a hundred and twenty of the thousand and five hundred looms that had been sent to Argentina without a customer to collect export credits through the bank. This way, they manipulated documents and performed illegal capital outflows by a few billions of pesetas.

9. REFERENCES

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