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# **The de-industrialization process in South-Italy and new industrial policies in Europe**

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## **1. Introduction**

Italy has gone through the deepest economic crises since the years after the Second world war to our days. Compared to 2007 the GDP has dropped of more than seven percentage points. Industry is the field where the downturn in production has been heavier both in manufacturing and building sectors. In 2013 industrial production was more than a quarter below the pre-crisis level, involving sectors - such as the cars, electrical appliances and footwear – ones which for long have represented the productive peculiarity of Italian economy. That is a downturn which is having a negative influence on the productive potential and future perspectives of Italian economy but above all on the potentialities of recovery of South Italy.

In the last ten years the gap in development times between southern industry and centre-northern one has become deeper: between 2007 and 2011 the industrial value added of southern regions has dropped more than 16% (10% in central-northern regions) with effects especially on the domestic demand more affected by the crisis. The reduction of the industrial employment has been more than two times the Centre-North's, also as a consequence of the smaller covering of the social security system in South, connected with a productive scheme centred on the small enterprises. There has been a fall of the industrial investments, with a reduction between 2007 and 2010 of 13,7% (-2,7 in the Centre-North). In Southern Italy crisis has affected above all the petro-chemistry, the rubber, the working of no-metalliferous minerals and the means of transport.

The crisis of industrial system reflects the difficulties of Italian productive system in fitting in the great changes that have affected the International economic field in the last two decades and that have been radicalized by the crisis: the process of globalization and integration of the real and financial markets; the European integration, with the introduction of the single currency; the change in the technological field with the new information and communication technologies. Those are three elements producing a strong and rapid increase of the competitive pressure. The Italian productive system has not succeeded in reacting readily because of its old structural problems. Finally, in addition, there is the weakness of the domestic demand that, in the last decade, has meaningfully reduced as a consequence of the tensions in the credit market and the public finance measures.

Re-launching the Italian industrial growth in more modern ways, must be the priority of economic policy. Today industrial represents less than 20% of the value added and the employment, but it is the main source of innovation and competitiveness (it means more than 70% of the expenses for the research and development of the private sector) and has a decisive role in the balance of the payments (it gives a contribution of 80% to the exports). With a lot of services it represents a driving force to the tertiary sector; the industrial exports include the value added produced by the service sector for 40 per cent of its own global value<sup>1</sup>. It is, therefore, a sector made up of a lot of enterprises which, even in the new

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<sup>1</sup> OECD/WTO (2013), *OECD-WTO: Statistics on Trade in Value Added*, (database)

difficult global competitive context, had started an important process of reorganization but which, today, risk to be wrecked by the economic crisis and the new marginalization of Southern Italy.

This process of de-industrialization and marginalization of the economy of Southern Italy must be opposed to start a real recovery of competitiveness. To do it, it is necessary to support public policies which may produce positive effects on the total Italian economic system. With this aim we want to describe the recent evolution of the Italian industrial system and in particular of Southern Italy. We will analyze the global and European context together with the state of Italian industrial field and later the causes and the effects of the de-industrialization in Southern Italy. Finally will give some hypothesis for an industrial and economic policy.

## **2. The de-industrialization concept**

The cut in the number of the employees in the manufacturing system in the mayor sign of the “de-industrialization” phenomenon shared by the main industrialization countries. Contrasting with it, it is the increase in the number of the employees in the service sector, which has the majority of the workers. The cut of the manufacturing employment is worrying, because it is seen as a cut of the productive basis in the country, with a lower production of tangible goods. This phenomenon is seen as harmful to the possibility for a country to produce future richness and compete in the international markets. That for two reasons: on the one hand the increase of the tertiary products reduces the mean rate of the increase of the productivity; on the other hand the cut in the manufacturing fields reduces the production of tradable goods and it could worsen the relationship with the balance of payments, taking away the resources necessary for the economic development.

These considerations, actually, do not consider the variety of the causes producing the de-industrialization. In particular, it is possible to distinguish a positive and negative de-industrialization (Bazen e Thirwall, 1979). The positive de-industrialization is caused by the process of development of the economic structure, which means both an increase in the demand of services from the consumers, connected with the high flexibility of some consumptions of services, the income and the demographic characteristics of the growth process, and with the increase in the number of services used in the production of the other goods, often as result of the process of technologies innovation and globalization of the economy. In the negative de-industrialization, instead, the cut in the number of the industrial workers means a loss of competitiveness in the manufacturing industry contrasted by a drop of the workers to adjust the resources to the demand and increase the productivity. In the first case the de-industrialization goes with a growth of economy towards a full employment and where the industrial sector gives way to the service sector, after an expansion phase typical of the economy “take off”; in the second the de-industrialization is a sign of the objective difficulty of the economic system in keeping in step with the rhythm of the growth of competitiveness of other areas, and so it is connected with an increase of the unemployment and a slow, if not negative, process of growth (Rowthorn e Wells, 1987).

In the territory, this ambivalence means heterogeneity of local and regional development models. In particular, in the most developed countries, where you can easily find the necessary dimensions of market and externality, there is a strong boost to the expansion of the service industry, while, on the contrary, in the underdevelopment countries, characterized by a smaller weight of the manufacturing sector, the compensation between the industrial decline and the increase in the employment in the services is more difficult. The concept of

de-industrialization is, therefore, complex and cannot be reduced to a condition of uniformity or a deviating uniformity. Different areas live this process in different ways. Another aspect: the term of “de-industrialization” itself implies a decrease, a fall compared to a previous level. But how important is the extent of this level as for the consequences of it? In other words is it correct to think that some levels of industrial development may be connected with a decline which means a sort of maturity and opening of a different phase linked to an economic stability, while in situations where the industrial development has not yet reached “normal” or “sufficient” levels, for example in Southern Italy, a possible decline seems to be worrying? All that implies that a situation of decline and de-industrialization such as the one in Southern Italy, becomes relevant to promote new growth policies.

### **3. The world economic context and the change factors**

Understanding the consequences of the economic crisis in the last decade and analyzing the process of de-industrialization of Italian economy requires an analysis of the changes of the global economic context.

The main element of change, at a world economic level has been the growing international integration with the entrance of great emergent countries (China, India, Russia, Brasil, Turkey) in the world markets. That is due to the great geo-political transformations of the end of XXth century, and also to the progressive reduction of the costs associated with the international trade. Between 1960 and 1995 the duties on the import have diminished, in all the countries, from 8,6% to 3,2% (Clemens e Williamson, 2004). For the Italian manufacturing sector the average tariff has passed from 6% in 1990 to less than 2% in 2009. The quantitative restrictions to the international trade have been reduced, above all with the progressive cancellation of the Multi-Fibre Agreement, which from 1974 to 2004 has imposed limits to the quantity of the textile and clothing products which the developing countries could export to the developed ones. The costs of international dispatch have fallen both for the sea and air transports<sup>2</sup>.

The globalization has so changed the competition context of the enterprises of the most developed countries, in particular the technologically less advanced ones which are more exposed to the competition above all in prices, than the emergent countries. The most evident example is the rapid increase of the Chinese exports from the 1,6% of the world exports in 1990 to the 11,4% in 2012. The increase of the percentage point in the rate of the export from China on the total Italian demand is thought to correspond, in a year, to the reduction of the dynamics of the prices in Italian factories of about 1,7 percentage points; the associated reduction in the profit has been greater in the sector with a little educated workforce and, within them, in the least productive enterprises (Bugamelli, Fabiani e Sette, 2012). Considering 230 Italian manufacturing sectors, an increase in the imports from the emergent countries of seven percentage points is associated with a reduction of 4 per cent in the employment (Federico, 2012). That has been more limited in the sectors with a greater presence of capital-intensive, of qualified workers and R&D activities and in the sectors with a greater qualitative differentiation of the products.

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<sup>2</sup> The introduction of the containers in the ocean dispatches has allowed a fall of both direct (storage and stowage) and indirect costs, because of the long periods of wait in the docks (Levinson, 2006). The air transport costs (in USA dollars of 2000) have fallen from 3.87 dollars for ton-Km in 1955 to less than 0.30 dollars between 1995 and 2004; between 1980 and 2004, in particular, the price of the air transport has fallen to a rate higher than two per cent a year (Hummels, 2007). Glaeser e Kohlhase (2003) consider a fall of the transport costs of about a third from 60's to 2000. More than 60% of this drop has been recorded in 1980.

The process of a world integration market has been added by the process of European Economic integration. The single market and in particular the monetary union - which has reduced the transaction costs, taken off the risk of currency change and given a greater transparency on the prices and costs – have promoted the competition in the markets and favoured a relocation of the production on a European scale. The adaptation of the Euro has also ended the possibility for every country to turn to devaluations to face losses in competitiveness (Bugamelli, Schivardi e Zizza, 2010).

In spite of it, most studies, above all about the manufacturing sector, agree on underlining a positive effect of the Euro adaptation on the trade exchanges within an area. The assessments are different according to different methods: the early studies showed an increase between 5 and 15% (Micco, Stein e Ordonez, 2003; Flam e Nordström, 2006; Baldwin, 2006), the latest ones reduce this evaluation to 2-5 per cent (de Nardis, De Santis e Vicarelli, 2008)<sup>3</sup>. The effect of the euro introduction on the Foreign Direct Investments (FDI) is positive too, in addition to the one of belonging to the single market (Petroulos, 2007; Schiavo, 2007; Brouwer, Paap e Viaene, 2008; Flam e Nordström, 2007): it could be of 15% for the movements of FDI among the Euro countries. The Monetary Union has also supported, even if in a limited way, the movements of foreign direct investments (FDI) with the countries out of the Euro area. According to Del Gatto et al. (2006), the process of economic and monetary integration has increased the productivity of about 13%. This effect is different in the Union countries with the positive effects in the countries which were initially more productive (Germany and Denmark); while in Italy the effect would be inferior and of 6,7%.

The globalization has advanced thanks to the spread of the new information and communication technologies (TIC) which have contributed to reduce the costs of transport and communication and allowed the control of productive and distributive processes on a global scale<sup>4</sup>. The fast circulation of the information has created differences in performance between those able to catch the potentialities and those who have showed difficulties in adapting. According to Triplett e Bosworth (2004), the production and the use of TIC have favoured the economic growth of the USA in the late '90. Some studies about American enterprises have found a strong positive relation between the investments in TIC and productivity, above all when the use of the new technologies is together with a greater level of human capital and deep re-organizations of the productive processes (Bresnahan, Brynjolfsson e Hitt, 2002; Black e Lynch, 2001 e 2004). Bloom, Sadun e Van Reenen (2007) say that the returns of the investments in TIC are different in the countries, sectors and enterprises. In particular the USA enterprises show much higher returns above all in the sector with a high use of TIC. Italy and Europe, in general, have adopted these technologies late and with less intensity.

Moreover, the industrialization and the opening to the commercial exchanges of the great emerging countries, in particular China and India, have rapidly increased the demand of

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<sup>3</sup> Some analyses made on the data of enterprises in some countries (France and Belgium) show that the increase of the commerce is due to the expansion of the number of the markets and the sold products from the enterprises which before produced and exported in the area (Baldwin *et al.*, 2008): the adaptation of the euro would, in fact, have reduced the fixed costs of the enterprises for the entrance in a new foreign market (f.ex those ones associated with the management of another currency). The number of the export firms would have enlarged also because of the reduction of the real interest rates, if obliged to run into debts to cope with the fixed costs of an entrance in the new markets (Mancini-Griffoli e Pauwels, 2006).

<sup>4</sup> According to Baldwin *et al.* (2001) the costs of the communications by satellite have reduced of over 90 per cent from 1970 to the early 2000; Caincross (1997) underlines that the cost of a 3 minutes telephone call from New York to London has passed from over 250 dollars in 1940 to few cents in the '90's.

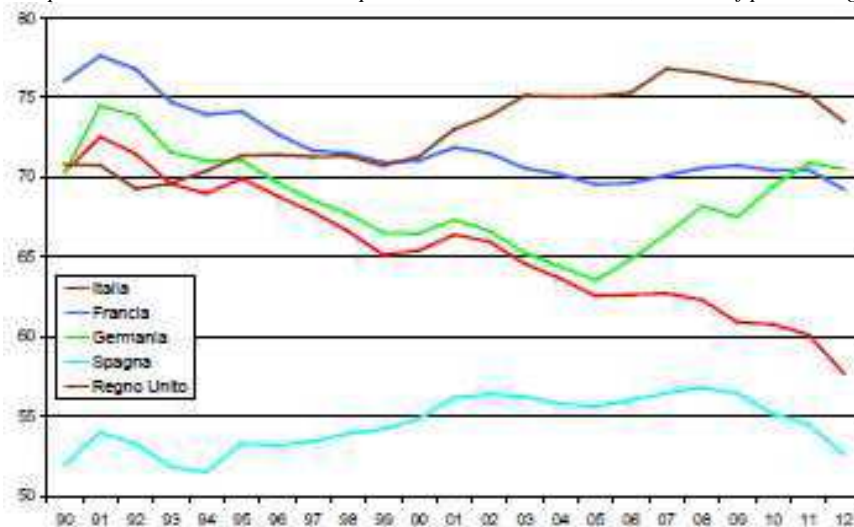
energy sources, as well as the other raw materials, with a pressure on the prices<sup>5</sup>. Between 2000 and 2011 the price of the import of gas and oil in Europe has almost tripled; the coal one has more than doubled. The extraordinary rise of the prices of energy is an element which has increasingly conditioned the competitiveness of Italian enterprises whose energy demand has progressively reduced to little less than a quarter of the final uses of energy (-13% from 1990)

The rise of the costs of the energy raw materials has been followed by some changes in the European institutional context such as the liberalization of the energy markets, the constitution of a market of the permissions of gas emissions and the adaptation of the climate-energy package, which has become an integral part of the green strategies of Europe 2020<sup>6</sup>. These changes have increased the costs of the industrial enterprises which use the energy as a production factor and condition the national energy sphere, which is relevant in the Italian productive system and includes some of the few large enterprises<sup>7</sup>.

The difficulties of the Italian industry in facing the new global competitive context have worsened as a consequence of the economic crisis in 2007 – 2008 and have involved all the European countries in a different way and with different reactions; and in particular, for Italy, besides these economic difficulties, there is a stagnant state of productivity and a loss of competitiveness in the international markets.

**Fig. 1 – State of GDP pro capite in the main European countries**

(Index: GDP per capita USA = 100; values at 1990 prices, international dollars, in terms of purchasing power)



Source: The Conference Board Total Economy Database.

<http://www.conference-board.org/data/economydatabase/>

<sup>5</sup> Between 2000 and 2011 China and India have doubled their consumption of crude oil, quadrupled the natural gas ones and tripled the coal ones which represent over half of the world consumptions. The plateau of production of the main crude oil mines has contributed to the rise of the prices because of the higher cost of the mining of the marginal deposits (International Energy Agency, 2008).

<sup>6</sup> The objectives of the packet consider that EU reduces the emissions of the greenhouse gases of 20 per cent in comparison with 1990, that the incidence of the renewable sources on the energy consumptions decrease of 20 per cent against the trend values.

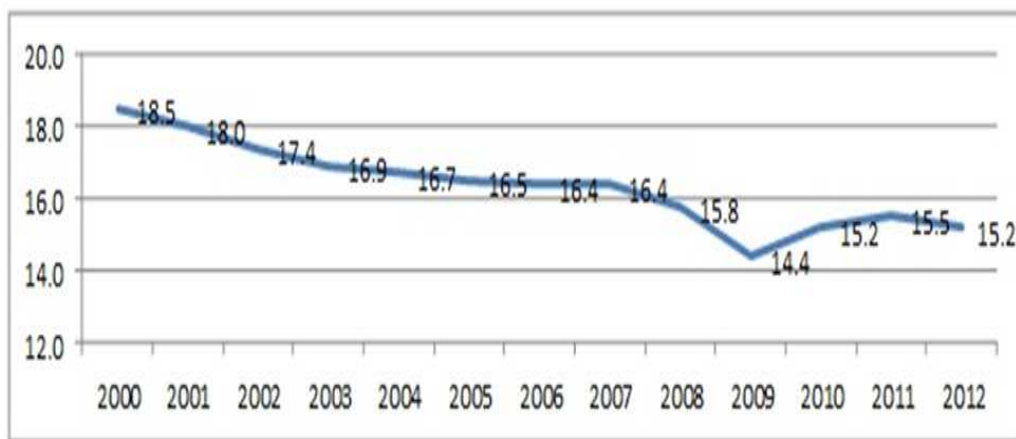
<sup>7</sup> The public sector has a relevant role. According to *Invind* database in 2010 the incidence of the industrial enterprises as public companies with 50 employees is little less a quarter in the sector of the mineral and of Energy, gas, water (Franco, 2012). A recent survey of ANCI shows that of 3.600 enterprises with town participation above 9 per cent work in the Energy sector (ANCI, 2012).

#### 4. Less and less manufacturing in Europe

The global economic context has, therefore, consolidated a deep transformation of the economies of the main European countries with a progressive loss in the manufacturing sector. This phenomenon, which involves Italy and above all Southern Italy, has been differently interpreted according to the different causes given to it to understand its evolution, but it has certainly been accelerated by the 2007-2008 economic crisis that has made stronger the above described change factors.

The statistics referred to the European Union (Figure 2) shows as the contribution of the manufacturing sector to the European GDP has in times reduced, getting to a scanty 15,2% in 2012.

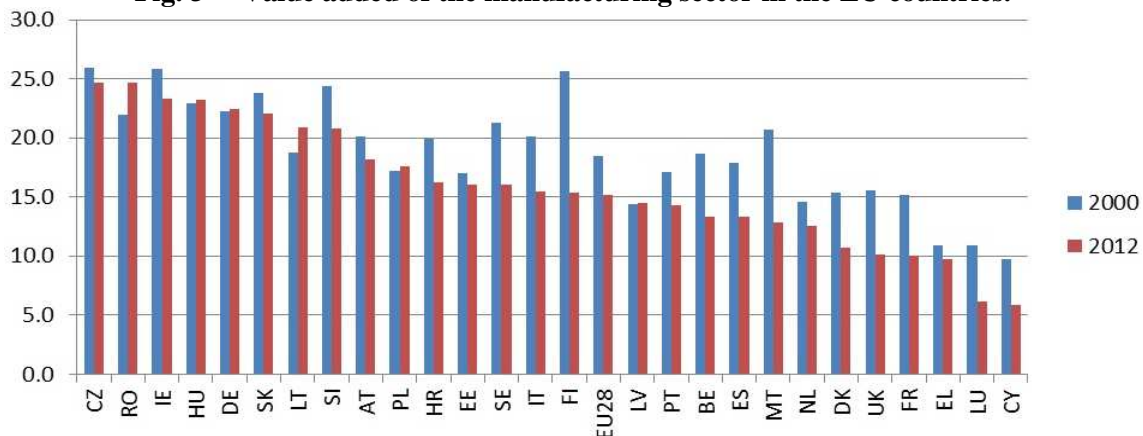
**Fig. 2 – Value Added of the manufacturing on the European Union's GDP**



Source: Eurostat 2012.

The next graphic shows as in 2012 the manufacturing sector in the countries members of the EU, compared to 2000, has reduced. A constant de-industrialization in the last 12 years, that especially in some countries, has been much bigger.

**Fig. 3 – Value added of the manufacturing sector in the EU countries.**

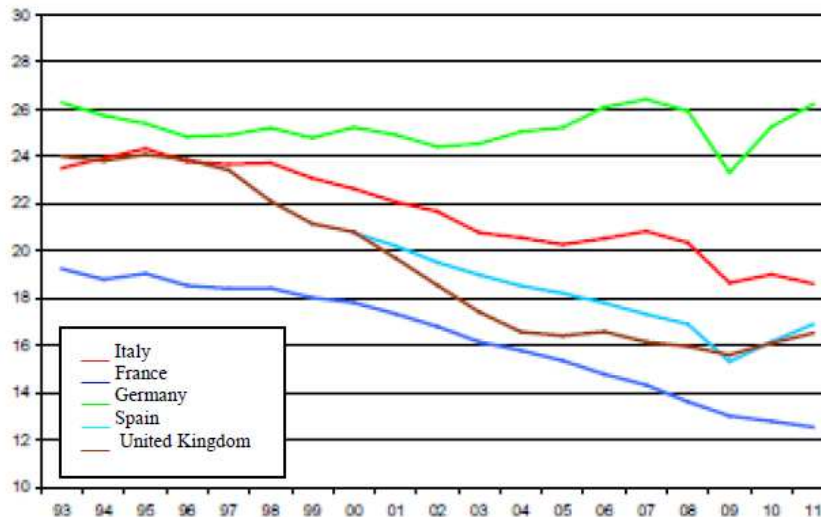


Source: Eurostat.

This process has been greater in the economies of more ancient industrialization: in the United Kingdom the number of the employees in this sector, which in 1970 was a little less than 35%, becomes of 20% in 1990 and falls in the following years until a little less than 13% in 2011. Although with different intensity and, the English experience mode has been

traced by the other European economies. In Italy the economic transformation process, which has started later, has had features similar to those in other European countries but it has not succeeded in overcoming the territory and productivity gaps. In Italy the number of the manufacturing employees has had a relevant fall, from 33% in 1970 to 20% in 2011. Only Germany, in the general pattern of the manufacturing sectors in Europe, has reacted to the economic crisis, establishing itself as the continental industrial and economic engine. After a reduction in 2009 of 19% the Germany production has grown between 2010 and 2012 with a value added, in the manufacturing sector, passing from 22% to 26% as to GDP.

**Fig. 4 - Incidence of industry value added in the main European countries**  
(Percentage points; current values at basic prices)



Source: Based on Eurostat data.

If the reduction of the manufacturing sector is a phenomenon common to the EU countries with different consequences both on the employment and the value added, Italy shows some peculiarities because of the deep territorial gap between the North and the South which the economic crisis has made deeper.

## 5. The de-industrialization in Italy

In the period 2000-2013 the global manufacturing production has had a 36% rise at prices constant. As for Italy two essential differences emerge. The first is the loss in manufacturing production, because of the economic crisis which in Italy has been longer than in other countries and with more destructive effects. In particular Italy has had a 25,5% fall in all the industrial sectors, in contrast with the rise of the world industrial production which in the period 2007-2013 has been of almost 10% (at constant prices). The second difference is associated with the performance in some sectors: electronics, computers and office machines show a greatest rise in the world and worst in Italy. Instead, the paper industry and the clothing one, which in Italy have been better than other fields – the second and the sixth position in the classification of the growth rates of the national production in 2013 – are at the bottom in the world classification.

The reasons of the Italian anomaly are two: on the hand the peculiarity of the productive specialization of its industrial system which means a substantial non-alignment of its productive structure and in particular of its exports, compared to the other advanced countries and the new emergent industrial economics. The second reason is the state of the domestic demand, which in Italy has been worse than in the other countries. In particular in 2013 there



has been a fall of 5% in the domestic demand, compared to 2000, the only negative sign among the analyzed countries<sup>8</sup>. This recessionary progress has deeply affected the industrial production, which is mostly oriented to the domestic market<sup>9</sup>.

The resulting picture, considering the shares of the total manufacturing production is coherent with the analysis as in table 1. Italy shows the worst performance in the growth of the manufacturing output at constant prices in the period of the crisis 2007-2013 (-5% a year) against the -1,7% of the average in EU-15, United States and Japan, and -7,4 per cent of BRIC countries. But it is much worse if we consider the previous period 2000-2007 (-0,1% a year) compared to the +1,4% of the advanced countries and + 9,5% of the emergent ones.

**Tab. 1 – Shares on the total manufacturing production**

Producing country	% Share of world manufacturing output (dollars)			% Average rate of manufacturing output growth (in 2005 dollars)		% Share of world population 2013
	2000	2007	2013	2000-2007	2007-2013	
1 China	8,3	14,3	30,3	11,6	9,1	19,1
2 United States	24,5	17,7	14,3	1,4	-0,3	4,4
3 Japan	16,0	9,5	7,0	1,6	-3,2	1,8
4 Germany	6,7	7,5	5,4	2,9	0,0	1,2
5 South Korea	3,2	3,9	3,6	7,6	3,1	0,7
6 India	1,7	2,8	3,0	8,4	6,2	17,5
7 Brasil	2,0	2,6	2,8	3,1	0,8	2,8
8 Italy	4,2	4,5	2,6	-0,1	-5,0	0,9
9 France	4,0	3,9	2,6	0,2	-2,4	0,9
10 Russia	0,8	2,1	2,2	6,2	-0,2	2,0
World				3,4	1,2	
EU 15+USA+Japan	66,0	54,4	39,3	1,4	-1,7	11,8
BRIC	12,8	21,8	38,2	9,5	7,4	41,4

Countries ordered by their % share of world manufacturing output by 2013.

Source: elaborations of the CSC on data from Global Insight and the Population Reference Bureau.

After seven year from the beginning of the economic crisis the balance is very negative. The damages produced by the two recessions of 2008-2009 and 2011-2013 have been deep and have so changed the economic activity to produce lasting effects on the productive potential lowering the possibilities of expansion in the future years. In particular the crisis has affected the industrial sector. Between April 2008 and March 2009 the manufacturing production has diminished of 26,6%, a fall never reported in peace times. The recovery of 16% in the following two years, has been followed by a new fall (-13,2% from March 2011 to March 2013) which has taken the level of production back to the minimum of the previous recession. From the spring of 2013 the manufacturing production has had a slow and discontinuous recovery: +2,4% in March 2014.

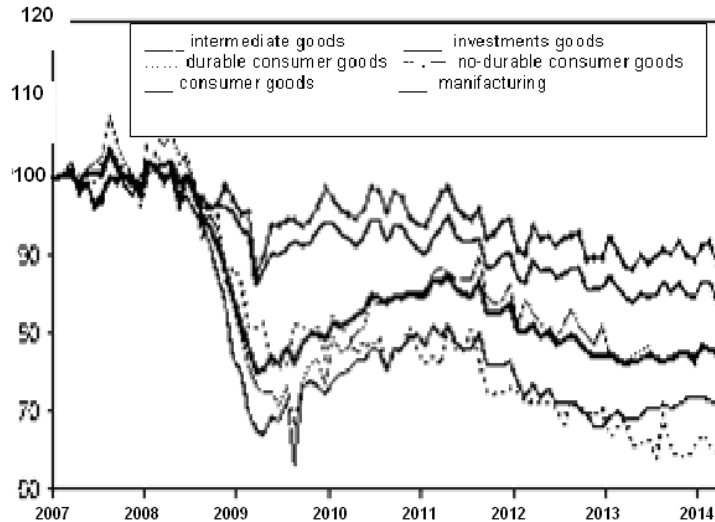
The Figure 5 shows that the contraction has been deeper and rapid in the intermediate goods the first recession and in the durables in the second one. The recovery in the last years has been stronger in the no-durables. In all the industry groups the variations from the pre-crisis peak to the last month have been very negative, with some sectors still at activity levels

<sup>8</sup> This date is substantially unchanged if the comparison is made between the three-year averages of start and end of the period.

<sup>9</sup> According to ISTAT estimates (2013), the share of foreign turnover amounted to 30,9% in 2011. Estimates for 2012, obtained through data processing Global Insight and ComTrade, indicating a share of 41%.

lower than 40 per cent (the working of no-metalliflons minerals, wooden products excluding furniture, cars and electric appliances)

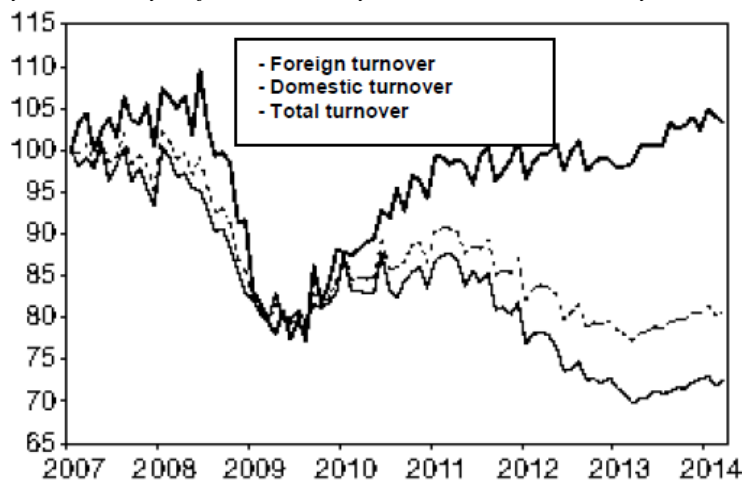
**Fig. 5 – Where the crisis has hit**  
(Italy ,manufacturing production, index of January 2007=100,  
deseasonalizing monthly data)



Source: Confindustria Centre elaboration on ISTAT data

The contribution of the foreign demand has been essential to the recovery of industry after the first recession and to limit the contraction of the activity in the second. To evaluate this contribution it is necessary to analyze the state of the turnover (at constant prices) distinguishing between the flows destined to the foreign market and those ones destined to the domestic market (Figure 6)<sup>10</sup>.

**Fig. 6 - Industrial turnover: the support is also from the inside.**  
(Italy, seasonally adjusted monthly data, volumes, January 2007 = 100)



Source: Confindustria Centre elaboration on ISTAT data

<sup>10</sup> The series ISTAT in value have been deflated with the respective prices to the production of industrial products. Industrial production and turnover do not coincide for a lot of reasons. The first is the turnover doesn't include the sector of the supply of electric energy, gas, air (10,4% of the industrial production). The second is the variation of the stores of manufactured goods (but not sold). Important difference refer to the standard of the differences surveys (on production, turnover, prices) and that the turnover includes the value of all the sold goods, while the production refers to the prevalent goods.

The data of the turnover say that in Italy the first recession has been characterized by a strong contraction both of the foreign demand and the domestic one. The following recovery of the activity has been supported by both the elements of the demand. Between 2011 and 2013 the good performance of the foreign demand has limited a fall of the activity which could have been made deeper by the fall of the domestic demand in those two years. During the second recession the positive dynamics of the exported turnover has allowed a recovery of a large part of the levels lost during the first one (in March 2014 the difference with the spring of 2008 was of about 4 %). The domestic turnover is still on levels inferior of 28% than the pre-crisis peak.

The foreign demand has had amore and more important role as the enterprises are forced to remake the turnover looking for new opportunities on the international markets<sup>11</sup>. However, the quotas of foreign exports is still relatively low: in the manufacturing sector it was of 30,9 per cent in 2011<sup>12</sup>. The gap between the foreign component an the domestic one of the demand has contributed to deepen the gap in the results between the export-oriented companies and the no-export ones, even if the fall of the domestic demand has slowed down the growth potentiality of the same export-oriented companies, which realize almost two-thirds of their turnover in Italy.

As for the employment analyzing only the manufacturing agricultural activities and the industry and building there is a constant reduction of the employees (Table 2). From 2001 to 2011 the two sectors show a reduction respectively of 17,5% and of 33,9% meaning a loss of the employees in the industry and building of 732.322 units and of 21.869 in the manufacturing agricultural activity<sup>13</sup>.

**Tab. 2 - Employees manufacturing sectors 2011**  
**Percentage change in absolute values and 2011/2001**

	<b>Agricultural Activities</b>	<b>Industry and building</b>
Year 2011	64.513 employees	4.184.698 employees
Year 2001	86.382 employees	4.917.020 employees
Var. %	-33,9%	-17,5%
Var. absolute value	<b>-21.869 employees</b>	<b>-732.322 employees</b>

Source: Based on ISTAT data.

In addition to it there is the datum of the production units of the manufacturing industrial nd agricultural sector (Table 3. That is a clear process of de-industrialization with a reduction of the productive units, reduced to 5.881 in 2011 in the agricultural activity sector (-23% compared with 2001) while for the industry and building sector they reduce of 80.930 units in 2011 (-18% compared to 2001)<sup>14</sup>.

<sup>11</sup> The ISTAT report on the competitiveness of the productive sectors (cfr. ISTAT 2014) shows as, during the crisis, there have been movements towards more evolved forms of internationalization with positive effects on the performance of the exporting companies: “un increase of the number of the outlet areas on the extra European markets (the passage from a condition of “exporter” to a “global company” one) has determined (between 2008-2011) a positive impact on the economic dimension of the enterprise of 8 per cent as for the value added and 7 per cent as for the employment (p. 31).

<sup>12</sup> The datum corresponds to the forcing turnover on the total one (ISTAT 2013).

<sup>13</sup> ISTAT 2011, 9° Census of industry and services

<sup>14</sup> ISTAT 2011, 9° Census industry and services

**Tab. 3 - Production units active in 2011, the manufacturing sector**  
**Percentage change in absolute values and 2011/2001**

	<b>Agricultural Activity</b>	<b>Industry and building</b>
<b>Year 2011</b>	24.921 units	439.839 units
<b>Year 2001</b>	30.802 units	520.769 units
<b>Var. %</b>	-23,6%	-18,4%
Var. absolute value	<b>-5.881 units</b>	<b>-80.930 units</b>

Source: Based on ISTAT data.

Concluding, the Italian manufacturing sector is going through a deep structural crisis, producing in 2013 only the 15,5% of the GDP in terms of value added, which in 1995 was of 22,5% of the GDP<sup>15</sup>. The above change factors and the recent economic crisis produce a cut down productive system compared to the past. However, in spite of the industrial decline, Italy remains a strongly manufacturing country, with a contribution to the national richness (in 2013) of the 15,5% of GDP superior to the European average of 15,1%. The factors of change, which have been focused and the recent economic crisis, make the productive system deeply scaled down if compared with the past.

## **6. The structural elements of the industry in Southern Italy**

Because of these difficulties, the consequences for the industry in Southern Italy have been heavier in the second phase of the crisis, as a consequence of the larger orientation of the productions, located in this macro-area, towards the domestic demand. But the present conditions are not only the result of the great crisis of 2007-2008 but the result of the long-term dynamics and transformations. In fact it is since the early 2000 that there has been a slowdown of the process of the widening of the enterprises basis in the Southern Italy, which has become worse and heavier than the national average in the last years of last decade.

The productive system of Southern Italy, in fact, has some structural elements of weakness which have made the impact of the crisis heavy. As the economic studies show the Southern regions have the same problems as the whole country, but heavier in this macro-area. Those are the dimensional problems and the limited abilities of renovation and internationalization, besides the difficult context conditions. These recent dynamic elements have contributed to make the economic difficulties heavier and to accelerate the decline processes. On the one hand there is the problem of the dimension of the Southern enterprises. If the weight of the big companies as for the employees is not very different from the other macro-areas of the country, the weight of the medium companies is inferior. The average dimension of the Southern manufacturing enterprises is 5,5 employees in 2010, very inferior to the Italian average (9,4 employees). Moreover the high fragmentation of the industrial system of Southern Italy emerges also in the international comparison: in other European regions late in development the incidence of the plants with less than 10 employees is very inferior. During the crisis the turnover of the small enterprises has fallen more than the average: between 2007 and 2011 has reduced of 9,3% against a growth of 13,5% of Southern manufacturing enterprises<sup>16</sup>.

There is a smaller activity of innovation and opening of the Southern enterprises. In 2006-2008 the percentage of the enterprises introducing innovations was of 24 per cent (against 32% in the Centre-North) and the private research and development weighed on the GDP for less than 0,3%, against the value in the Centre North which was low, compared to the international one. At the same time the enterprises show some limits as for the

<sup>15</sup> EUROSTAT Data

<sup>16</sup> Confindustria South Italy and SRM, 2013

internationalization and going to the foreign market. Southern industry gives a very limited contribution to the national exports and the companies which are present abroad are few. In 2012, the weight of the export on the GDP in Southern Italy is of 11,7% against the 28,1% in the Centre-North. The weight of the exports of Southern Italy on the national total is the same as the one of early ten years. In the same period the relationship between the exports and the total value added is the half of other European regions. The presence of foreign investments in Southern Italy is still less. As the results of the Bank of Italy shows, the enterprises more open abroad and more innovative have got results much better than the average as for the turnover and profitability in the last years.

In addition there are context factors which limit the competitiveness in the area. As a lot of studies and analysis show, there is a wide gap between the South and the Centre North of Italy, in the services for the citizens and the enterprises, the social capital, the infrastructures, the role of the local and territorial institutions. Finally, in some Southern regions, the presence of criminality has a negative influence on the social and economic life.

## 7. The dynamics of the de-industrialization process

In the last ten years, and above all as a consequence of the economic crisis in 2008, the gap between Southern Italy's industry and the rest of the country has become deeper, worsening the existent de-industrialization process. The limited contribution to the national value added has reduced; the investments have fallen much more than the national average; the exports have been mainly supported by the oil products; the gaps in productivity with the Centre-North Italy are still wide. The crisis has made the gap between rich and industrialized areas and the poor ones deeper. In these years in Southern Italy the GDP has reduced of 13,3% against a reduction of 8,4% in the North-East and 6,3% in the North-West.

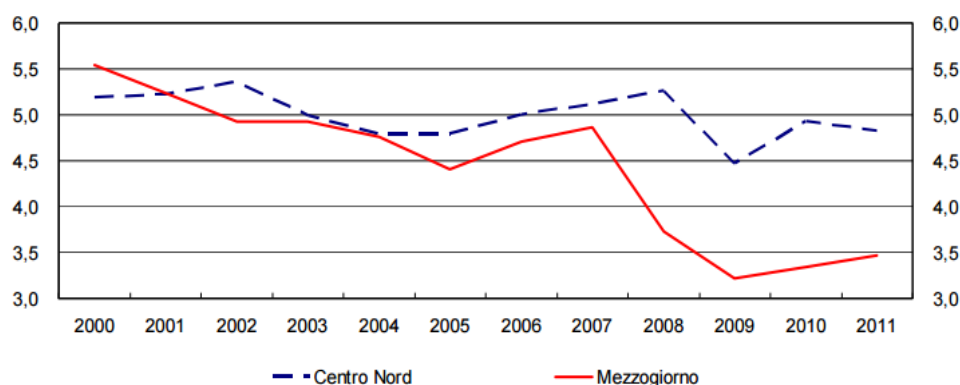
**Tab. 4 - Gross Domestic Product  
(annual and cumulative changes in%).**

<b>Division</b>	<b>2012</b>	<b>2013</b>	<b>2008-2013</b>	<b>2001-2013</b>
<b>Southern Italy</b>	<b>-3,2</b>	<b>-3,5</b>	<b>-13,3</b>	<b>-7,2</b>
<b>Centre-North</b>	<b>-2,1</b>	<b>-1,4</b>	<b>-7</b>	<b>2,0</b>
<i>North-West</i>	-2,3	-1,2	-6,3	1,4
<i>North-East</i>	-2,2	-2,1	-8,4	0,3
<i>Centre</i>	-1,9	-0,8	-6,5	5,0
<b>Italy</b>	<b>-2,4</b>	<b>-1,9</b>	<b>-8,5</b>	<b>-0,2</b>

Source: Svimez Report 2014 on the economy of South Italy.

In the same years (2008-2013) the value added of industry has reduced of 29,9 per cent in Southern Italy. There has been a reduction also in the service sector which loses the 7,9%. The incomes have fallen of the 15% and the investments of more than 50 per cent. During the crisis, the South has lost about 583.000 jobs; in the last year (the first 3 months of 2013 and the first month of 2014) the 80% of unemployed in Italy belonged to the South. The structural weaknesses of Southern Italy, together with this crisis, have distorted the economic but also social outline of the territory. Between 2008 and 2013 the investments of the industrial sector in Southern Italy have fallen of 53,4% against a fall of 24,6% in the Centre-North.

**Fig. 7 – Investments in industry excluding construction. Percentage of GDP.**



Source: Istat "Regional economic accounts".

**Tab. 5 - Investments in the fields. Annual rates of change.**  
**Percentage variation. Reference year 2005 (= 100)**

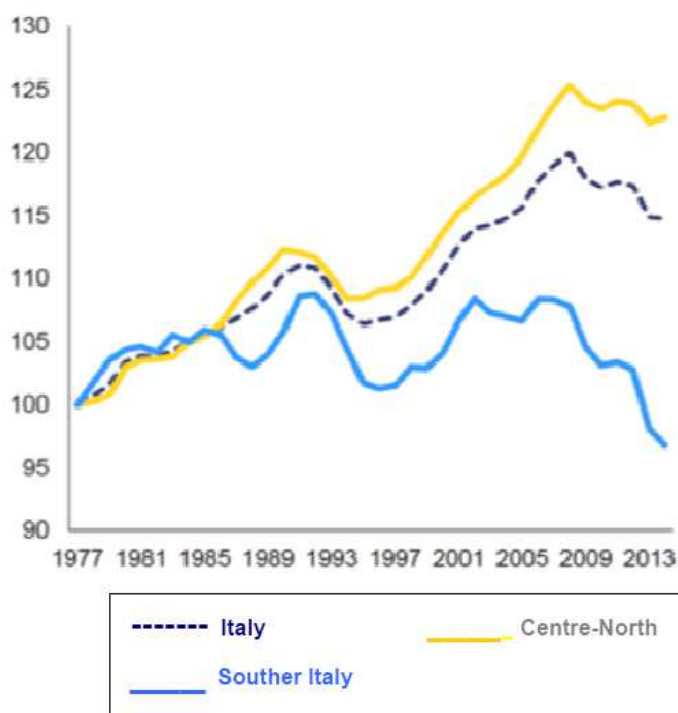
Sectors	2013	2001-2007	2008-2013	2001-2013
<b>Souther Italy</b>				
<b>Agriculture</b>	- 5,0	- 3,6	- 44,6	- 46,7
<b>Industry</b>	- 3,8	- 5,6	- 49,4	- 52,2
<b><i>Without building</i></b>	- 2,6	- 5,9	- 53,4	- 56,1
<b>Building</b>	- 7,5	- 3,7	- 26,7	- 29,4
<b>Services</b>	- 5,5	20,2	- 26,5	- 11,7
<b>TOTAL</b>	- 5,2	11,3	- 33,0	- 25,5
<b>Centre-North</b>				
<b>Agriculture</b>	- 3,8	8,6	- 14,5	- 7,1
<b>Industry</b>	- 5,5	9,8	- 26,6	- 19,3
<b><i>Without building</i></b>	- 6,1	8,3	- 24,6	- 18,3
<b>Building</b>	- 0,9	19,8	- 38,4	- 26,3
<b>Services</b>	- 4,2	17,8	- 24,1	- 10,6
<b>TOTAL</b>	- 4,6	15,0	- 24,5	- 13,1

Source: Elaboration on Istat and SVIMEZ

The data of the direct investments from the Centre-North to Southern Italy and those of the foreign countries are much scaled down. Southern Italy's industrial development has been influenced, in the last decades, by the Centre-North enterprises which have decided to invest in Southern Italy, also because of interesting fiscal incentives. In particular some North-West enterprises in engineering sector and enterprises in the energy-extractive sector (belonging to Eni – Enel groups) have settled in Southern Italy. In the decade 2000-2011, with reference to the enterprises with at least 50 employees, the enterprises of the Centre-North with plants in the South, have assured a year average flow of investments in South of about 4,3 milliard euro, corresponding to 67,5% of those made in the area by the enterprises of the same dimension. In the last decade these conditions of attractiveness and investment have been lost. Southern Italy is less attractive even than the North. More risks, no incentive and many infrastructural and service diseconomies have moved the investors away from the South.

Finally the data of the jobs market are emblematic in representing the extent of the economic and social crisis in the Southern Italy. The process of de-industrialization in the South of Italy results above all in the increase of the unemployment.

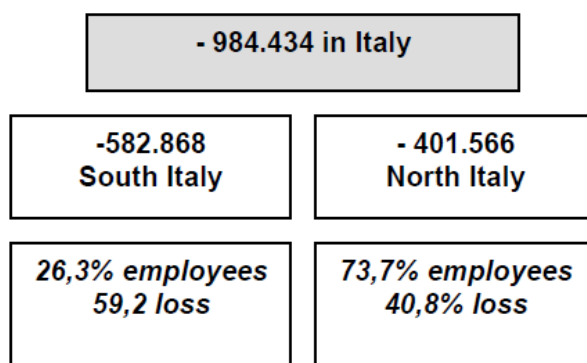
**Fig. 8 – Regional employment, comparison between Southern Italy and Centre-North from 1977 (=100) to 2013.**



Source: Istat.

If the unemployment from the 1996 in South was very high compared to the centre-northern part of Italy, the gap has become deeper and deeper from 1996 to 2013. The data are dramatic if we analyze the years from 2008 to 2013.

**Fig. 9 – Unemployment trends, absolute and percentage values, 2008/2013.**



Source: Svimez Report 2014 on the economy of the South.

The South, between 2008 and 2013, has had a 9% fall employment, four times more than the rest of the country (-2,4%), in absolute values of the about 985.000 units that have lost the job in Italy, 583.000 are in the South. About 60 per cent of the unemployment of Italy has been in the South, during the crisis<sup>17</sup>.

Therefore, the economic crisis has affected above all the South of the country. The cyclic weakness, that has meant a lower resiliency of the industrial apparatus, has added to the difficulties of competitiveness due to the structural problems of the area, in particular the

<sup>17</sup> Svimez Report 2014 on the economy of South Italy.

sectorial dimension and composition. In the pre-crisis period 2001-2007 the South had had the same growth as the rest of Italy (+5,9% against the 7,5% in the Centre-North) In the seven years 2008-2014 the Southern manufacturing sector, little present in the Southern economy and after a decade of difficulties due to the greater impact of the globalization on its products, has shown a fall of 34,8%, more than the double than the Centre-North's -13,7%. In Southern Italy the contraction of the product is such that it cannot mean only the "virtuous expulsion" from the market of the less efficient and dynamic enterprises, but it has affected also good enterprises but unable to cope with a so long and deep crisis, so that the "destruction" has not been followed by and "creation". In these conditions, there is a high risk for the Southern industry not to recover.

The reduction of the industrial basis of the Southern Italy is particularly evident if we consider the fall in weight of the value added of industry excluding construction on the total area, which has fallen from 10,7% in 2007 to 8,0% in 2014, which is very far from 17,9% of the Centre North and from the 20% set by of the new European strategy of industrial policy.

**Tab. 6. % Share of manufacturing value added in total value added (a)**

	2000	2007	2013	2014
<b>Southern Italy</b>	10,6	10,7	8,1	8,0
<b>Centre-North</b>	19,8	19,4	17,9	17,9
<i>North-West</i>	21,5	21,0	19,3	19,4
<i>North-Est</i>	22,3	22,7	21,7	21,6
<i>Centre</i>	14,7	13,7	11,9	11,8
<b>Italy</b>	17,5	17,4	15,7	15,7

(a) Calculated on chained volumes, reference year 2010.

Source: Svimez Report 2015 on the economy of the South.

Southern Italy the crisis has affected above all the petro-chemistry, the rubber, the working of no-metallic minerals and means of transport. The fall has affected first Campania and Sardinia regions.

The backlashes of the economic crisis are part of the structural weakness. Southern Italy shows the elements of weakness typical of the national industry, but they are worse: in particular the little dimension of the enterprises, the scarce internationalization and innovation produced by the industry. Moreover, differently from the Centre North, the Southern industry takes benefit of the presence of districts or other forms of agglomerations. The profitability of the great southern industrial enterprises, which in early 2000 was not different from that one of the enterprises as big as the Centre North's, has fallen to very low levels, near to those of the small south enterprises, characterized by profitability levels inferior to the rest of the country.

However during the crisis the wastage of the performance has increased. Even in the South, some enterprises of great dimensions have continued to expand their production, to innovate and internationalize; thanks to them some areas show signs of vitality in the productivity and exports. They are marked by the presence of the food sector (Naples, Bari, Salerno, Palermo) and of then only hi-tech sector between the best productive realities (the airspace one in Naples). The car sector in its main eight southern sites (Naples, Potenza and Chieti) has showed, instead, elements of deep weakness as the furniture industrial districts (Bari) and leather (Avellino) and the metallurgic areas of Taranto and Cagliari. In the clothes production



the situation is heterogeneous, successful in Naples, weak in Teramo and medium in Bari and Pescara. The signs of vitality have been more spread in the industrial agglomerations<sup>18</sup>.

Concluding the persistence in time of the industrial gap between the North and the South of the country, together with the economic crisis, have produced a dramatic de-industrialization situation, and it is very difficult to get out of it. Without a meaningful development of the industrial basis and of a supporting industrial policy there is the risk of a real productive desertification making the growth more difficult as well as the only keeping of welfare levels in the South. The role of the industrial basis is essential for all the regions and countries which have reached or want to reach advanced development levels (McKinsey, 2012). Of course, for an industrial basis, we refer not only to the manufacturing industry but also to large part of services more and more linked with the manufacturing productions and which can be less and less distinguished even on a statistic basis and which share a lot of essential elements.

## **8. The new policies in the industrial field**

At a European and National level, in these years of crisis, attention has been mainly paid to the balance policy (the national sustainability of the debts and fiscal consolidation) and on the stabilization of the economy, neglecting the de-industrialization and productive desertification process in some areas of the considered continent.

After the recent economic and industrial data and the consequences on the community plane as for the value added and the economic recovery, the EU Commission has, finally, promoted in January 2014, a programme of *European industrial renaissance* to reverse the de-industrialization process of Europe with the aim to get from the industry the 20% in the GDP by 2020, against the present 15%. The 20% of the GDP in this sector would produce an increase of over 840 milliards of euro in value added and over 15 millions in new jobs.

With these ambitious aims the EU Commission has adopted the "*Industrial Compact*", that is a common industrial policy with the main aim of encouraging the re-industrialization in Europe and promoting the growth and the competitiveness by the mobilization of the available instruments. The industrial competitiveness is, in fact, the element shared by the different policies in the definition of priorities and strategies. This program wants to give priority to the industrial competitiveness. The Countries, members of the European Union, are asked the same together with a real co-ordination from the Community to the regional level of the policies which influence industry and are essential to assure the aim of a bigger competitiveness. Therefore the central themes of the *Industrial Compact* are:

- The reduction of the costs of raw materials;
- The consolidation of the process of the European market unification;
- The total liberalization of the markets;
- The internationalization of the enterprises;
- The training and the enrichment of the human capital;
- The access to an easier and less expensive credit.

Two operative instruments have been assigned to the aims: The Cosme Programme addressed to the SME and the Horizon Programme 2020 about the research and the innovation. The aim is to link these two programs with the national and regional industrial

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<sup>18</sup> Bank of Italy "the Southern industry and the crisis" n. 194 2013

policies to better the level of competitiveness of the European industry. It's a very important challenge if we consider that industry is one of the sectors which have to contribute to the value added and the richness of the European Union.

However the *Industrial Compact* strategy is not sufficient to give dignity to the industry of Southern Italy. Southern industry has endured for long a backwardness process which, with the crisis, has become a de-industrialization deep phenomenon. The crisis of these years has highlighted the structural weakness of Southern industry besides the one of the real economy in general. And as we have already said, that has happened above all in Southern Italy

For Southern Italy, the development of a more adequate industrial basis is an essential element just for these reasons. It is not a poor region but it is characterized by two relevant macro-economic and social problems (Viesti, 2009, 2013). On the one hand the insufficient ability of producing a job demand equal to the available supply, which produces great problems of unemployment, underemployment and emigration reducing the quantity and the quality of its development levels. On the other hand the insufficient ability in producing export incomes (interregional or international) to finance its necessity of importing goods and services. It's impossible to imagine a good growth of employment in Southern Italy without the contribution (mainly in an industrial form – employment in the services produced by an industrial development) of a large industrial basis. Much can be certainly done in the improvement of the activities, both agricultural, logistical and tourist ones but it seems impossible to keep and grow the employment and so the income and welfare of a so large and densely populated region such as Southern Italy, without a meaningful presence of the industrial sector.

And to do it, the industrial development process must be characterized by an active role of the State and of the industrial policies. It does not mean to propose old assistance models but some guides of economic and industrial policy able to give a contribution to the recovery of the economy and the manufacturing sector. All that has always happened in history, since the first processes of industrialization in the USA and in Germany in the nineteenth century. The same happened in the mid XX century when countries such as Italy patiently built, thanks to full industrial policies, their productive basis. And it has happened and still happens in all the successful emergent countries.

## **9. Which guides for the economic policy?**

The analysis of economic policy must deal with two preliminary questions; if the recovery of Southern economy can be independent from the one of the industrial sector; if the decline of this sector is irreversible. The answer to both the questions must be negative.

A recovery of Italian economy, in the immediate future, can hardly be realized without a relevant contribution of the industrial sector. Industry represents about a quarter of the value added of the private sector and 80% of the export value; it concentrates more than three quarters of the expenses on research and development and on the innovation activity of the private sector. Even if a de-industrialization process in favour of a consolidation of the service activities, were considered inevitable – because of the evolution of the world job division – an extraordinary relocation of the resources and reconversion of the human and physical capital of one country would be necessary. All that would require long times with the risk of a definitive loss of the productive power.

There are, therefore, good reasons to doubt that the destiny of the Italian industry is sealed. The Italian productive system is, in fact, characterized by a high number of enterprises which are competitive also in an institutional, normative and fiscal context less favourable than the one of the other European countries. Before the great recession of 2008-2009 there were evident signs of a reorganization of the industrial system. In the long present recession there are also strong signs of dynamism, as for example, the high propensity to export and the success of a lot of enterprises in the international markets. In short, the Italian industrial system, even if in difficulty, has some enterprises, above all of middle-dimension, which are highly competitive, leader at an international level, than can realize relevant and frequent innovations, to face the international competition.

The economy policy has, therefore, to aim at transforming a widespread decline into a positive process of “creative destruction”. The system of social safety values and the active labour market policies must make the reallocation of the labour among productive units easier and more efficient. The financial system has to get a greater ability on moving the capital to more promising enterprises projects. The taxation must be modified to stimulate the expansion of the business areas. As for the services the competitiveness must be grown where there are still high revenues of position. A deep war against corruption and illegality can avoid the removal of the economic resources to the best enterprises.

There is also the need of working on the costs of the enterprises and their context, while the cost of labour, if considered net of tax, is not the main check factor for the competitiveness of the Italian enterprises, the energy costs and very high pressure of taxation on the regular economy make the competition on the global markets more difficult for the enterprises. Moreover the activity of an enterprises suffers both the monetary charges and the limits of the operating powers, coming from complex and expensive regulations, from the insufficiencies of a civil service and the civil justice, from a changeable and uncertain set of rules, the lacks of some public services and some infrastructures.

There is a large set of interventions, some of which starting from the August 2011, because of the emergency caused by the crisis of the debts, aimed at improving the economic and regulation context of all the Italian enterprises. The economic policy has to concentrate its efforts with large even radical solutions<sup>19</sup>. Of course these policies must be stronger in the weak areas of Italy and Southern Italy.

The economic policy has to pay a particular attention to the specific industrial sector. To favour a recovery of the industrialization in the South, according to the international experience, it's necessary to do a long-term interventions to improve the contexts (horizontal policies) to favour the process of structural transformation of the political and economic economies (industrial policies). Forcing industrialization, without territory horizontal contextual conditions favourable to the enterprises, is delusive; but expecting the automatic progress of context conditions without policies helping the structural transformations is false too (Rodrik, 2013). The development of the industry in the South of Italy, as everywhere in the world, needs horizontal long-term actions which may create conditions favourable to the enterprises and the industry, as well as actions aiming at favouring the structural transformations of the industrial system.

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<sup>19</sup> In this direction also it operates the reduction of the amount of trade payables of general government, which - if accompanied the slaughter of the payment period on new purchases made by the Government - will become more transparent relations between the public and private sectors.

That does not mean a traditional and planned industry policy. That is a set of public interventions (incentives, direct and indirect benefits, public financings) which wants to favour the reorganization of the productive system on schemes defined by the public authorities, but rather promoting policies in favour of the ongoing process of interaction between public authorities and private sector and between the private sector and the territories. Therefore, in addition to the above interventions, it may be better to define a limited set of clear, controlled and targeted back-up measures for the industrial enterprises of Southern Italy.

Those interventions have to increase the number of the enterprises, promoting the birth of innovative enterprises and the appeal of enterprises with a high qualified human capital. They have to support research, development and internationalization activities and finally to integrate the industrial policy with the territorial development policies.

And finally the problem of the human capital which is subordinated to the need of innovation and *upgrading* (productive, technological and organizing) of the Southern productive system. The South of Italy has a large supply of qualified human capital. A reform and special investments in school, university and education systems are necessary. All that would also help the power of the enterprises of improving the productive process and increasing the adoption and the development of new techniques and products (Visco, 2011).

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