

Mediterranean capitalism in disarray: Financialization and deindustrialization in European periphery

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ABSTRACT

Southern European countries (E, I, P, Gr) share a "semi-peripheral" model of capitalism which is characterised by fundamental fragilities in the production system. Those countries are now undergoing a deep and thorough process of de-industrialization which is due to both financialization and EU "internal devaluation" policies. Unfortunately, the absence of a coordinated European industrial policy makes the single national or regional policies difficult to enact or even to be conceived.

Keywords: Southern Europe, Financialisation, Deindustrialisation, Peripheralisation.

A. INTRODUCTION: THE TROUBLES OF SOUTHERN-EUROPEAN CAPITALISM

A severe process of de-industrialization is taking place in many European countries. In Southern Europe (SE), deindustrialization has been particularly intense after the 2008 crisis. Contrary to Continental European countries, the fall of manufacturing production in SE is not compensated by a rise in high-productivity services. The result is the diffusion of low quality services and high unemployment rates.

This dynamics is pushing Mediterranean countries at the periphery of the 'developed world' economic system. We draw the term 'periphery' from Wallerstein's (1979) argument that the world economy is structured according to centre-periphery relationships. Such relationships directly connect production processes along the international commodity chains. Core activities are those that command a large share of total surplus, whilst peripheral activities only command a minor one. Consequently, surplus distribution is better studied between nodes of a network rather than between factors of production. Furthermore, core activities tend to cluster in regions that are accordingly called 'central regions'. Institutional and political reasons as well as locational advantages like positive externalities and high aggregate demand are responsible for clustering. Core activities, such as high-tech ones, are rare in peripheral regions. On the other hand, semi-peripheral regions show a mixed picture.

In Wallerstein's view, development in a region is the result of a process of structural change, from an economic system characterised by low value added activities to one with a high share of strongly connected high value-added activities. This change affects the wage level positively. However, such development path is strictly related to the coherence of institutions, particularly those that facilitate the production and redistribution of value in the economy.

What distinguishes South-european countries (E, I, P, Gr) is that industrialisation was a relatively recent appearance. They were characterised by a process of 'late development' (Fuà 1980) that resulted in a 'dysfunctional' kind of the continental model of capitalism: an idiosyncratic variety of capitalism which has attracted little attention (compared to the coordinated or market-driven capitalism) and is best defined in historical rather than geographical or political terms (Gambarotto and Solari 2015).

'Late development' meant inconsistency between the productive system and the required institutions. Governments played a great role in addressing development requirements, trying amending inconsistencies – while also enhancing them. They did so both through direct intervention and regulation and control of private economic activity.¹ As regards welfare, these countries developed a generous pension system and diverged from the pattern of continental economies by providing a universalistic health system much like Northern countries.² As to economic activity, Southern 'late development countries' developed an industrial structure based on traditional sectors with a dualism of economic organisation between large corporations, sometimes state-owned, and some lively clusters of small firms. They used to have thick labour market regulation and the labour markets was characterised by a fragmented corporative structure with wide areas of precarious employment. The financial system, mainly based on bank credit while the stock exchange has long remained underdeveloped and is still highly speculative.

The issue, of course, is that 'late development' tends ultimately to evolve into 'semi-peripherality' (Arrighi and Drangel, 1986). We believe that this has indeed been the case for Southern Europe. Unsurprisingly, government strategic behaviour is crucial in driving the

¹ In the Iberian states, some original corporative regulation was implemented during dictatorships, which encapsulated sectoral markets and determined some political control over business.

² The latter represented remained a limited experiment. 'Late development' brought about an underdeveloped corporative welfare state, which never established a complete system of protection from the risks of a developed industrial economy: above all, the risk of becoming unemployed. These economies tended to rely much on the family as a crucial institution in supplying assistance and redistribution services.

evolutionary process of a latecomer country, as we expect that it may want to play a greater role than those of central areas in order to overcome lags and counter imbalances and fragility – which is an important point facing EU policies (Reinert, 2013).³ In fact, Arrighi and Drangel (1986: 22) argue that *“by restricting or enhancing the freedom of undertaking or entering specific economic activities, states can upgrade some activities to core status and downgrade others to peripheral status affecting the core-periphery structure of the world economy”*.

Historically, while such latecomers as Japan have succeeded in upgrading, others – like Southern European countries – have succeeded only partially, constantly bearing the risk of downgrading. Up to the '90s, Southern economies increased their industrial production. They also benefitted from the decentralisation of production from Continental Europe. That induced an industrial specialisation in ancillary productions, medium-low technologies and consumer production. Low capitalisation of industry meant high return on capital; at the same time, it did not induce much effort to overcome low labour productivity. Government, in spite of their alleged directive role, were unable to change this trajectory. One main reason is that the government's capability to control access to the most remunerative outlets of all major commodity chains, to provide the infrastructure and services required by core activities, and to create a political climate favourable to entrepreneurship is often limited by the interests of the ruling class, due to the way they extract their rents. Hence, the difficulty to supply real advantages to businesses induced policies (such as currency depreciation) aiming at maintaining the low wage-low productivity link or to warrant profitability high through weak rule enforcement (Rangone and Solari, 2012a).

In this regard, despite state intervention, the pattern of growth of SE economies was highly “spontaneous”, with very specific (non-technology driven) agglomeration effects for different territories, no labour mobility, and little redistribution between regions. In general, research and development, as well as the intensity of human resources, in the science and technology sectors have never been a central issue for governments, and are still scarce. Gambarotto and Solari (2009: 34-35) highlighted that the Mediterranean model of capitalism displays a regionally unbalanced mode of growth. Despite rather uneven population distribution, per capita GDP and employability are spatially concentrated, and low on average. R&D investments are also low and not much differentiated geographically. Household income and long-term unemployment differ greatly among regions even after the redistributing action of welfare institutions.

The Monetary Union was of some benefit first to SE countries through lower interest rates, but then it created a strong pressure to reform economic institutions in the direction of a more open and market-oriented set-up.⁴ Eventually, globalisation further diminished the fences protecting the local environment from low-cost-of-labour producers resulting in serious problems of competitiveness, due to their worse industrial specialisation. Deindustrialisation and high unemployment is the final step of this story.

The paper will discuss the effect of financialisation and Monetary Union on Southern economies in the second section. In the third, the effects of deflationary policies on Southern European industries will be highlighted. In the fourth section, the need of industrial policy will be discussed in general. In the fifth, feasible industrial policies will be analysed in the context of present day crisis and of the centre-periphery relationships in the Monetary Union.

³ In the late nineteenth century Germany succeeded to develop a robust and stable production environment thanks to a coordinated scheme involving the direct intervention of the banking system; seventy years later, Mediterranean countries were even in trouble to establish a stable structure of their economy.

⁴ European competition policy has increased competitive pressures, leaving a few policy options to defend local productions as it limited country-specific defensive institutional evolution.

B. MONETARY UNION AND FINANCIALIZATION

The European regulation and the configuration of the Monetary Union (EMU) represented a favourable environment for the process of financialization (Stockhammer, 2008; Lapavistas, 2011; 2013). Again, financialization in SE countries has shown a specific pattern. Neither financial actors grew much nor financial assets in companies' balance sheets rose significantly (Orsi and Solari, 2010). It rather took a peripheral road. In fact, there can be many ways to disembed capital, according to the different patterns of accumulation. Becker et al. (2010) and Becker and Jäger (2010) have developed a regulationist approach to explain accumulation regimes, and have highlighted three typologies.

The first is based on the distinction between productive and financialized accumulation, and it well accounts for the substitution of real investment with financial assets to maintain capital profitability. This financialized accumulation can be further divided into accumulation based on fictitious capital (different types of shares and securities) and accumulation based on interest-bearing credit. The latter is typical of peripheral financialization (recently, consumer credit). The second distinction defines extensive vs. intensive accumulation regimes. The distinction is based on the wider exploitation of production factors vs. the increase in relative surplus due to increase of productivity. The third kind of accumulation distinguished between extroverted and introverted accumulation. The former is a regime based on enlarging markets, while the latter is based on internal demand expansion. The extroverted regime can also assume the characteristics of a passive import-oriented regime.

Becker and Jäger (2012) underline that the difference in the accumulation regime between core and peripheral countries is based not only on the financial dimension of the national economic system but also on the export-import attitude of the country. Core countries such as Germany, the Netherlands, and the UK are export-oriented and very much based on the enlargement of the financial dimension of the economy, while peripheral countries such as Italy, Greece, Spain, and Portugal have economies that are centred on the domestic market or, with the euro and the consequent tendency to deindustrialization, are import-oriented. Moreover, SE countries developed finance based on credit, which is quite sensitive to interest-rate differentials.

The main aspects of SE's financialization can be summed up as follows.

- Firstly, it increased the liquidity and mobility of capital and allowed liquid capitals to seek higher returns in the periphery. Inflation, at that time from 1% to 3% higher than in Continental Europe, also represented an additional source of returns, as the currency was the same. The main target of financial investments was the real estate sector, causing a bubble.
- Secondly, this flow of capitals changed the business strategy of the banking system. Banks redirected credit from production to consumers. That induced massive investments in the real estate (causing a bubble, particularly in Spain), increased market demand and, above all, increased imports. Commercial banks, on the other hand, reacted to deregulation by reshaping their lending strategy towards more short-term and less labour intensive lending. That reduced credit to smaller firms and to industries more exposed to globalization.
- Thirdly, entrepreneurs facing globalization opted for investments in financial assets rather than strengthening their companies through investment. Many sold their business to foreign enterprises or relocated production. That helped to concentrate industry in Continental Europe. The financialisation of commodity markets (Newman, 2012) is instead less evident in SE.

We argue that the said effects of financial globalization have amplified the Southern capitalism fragilities depicted in the previous section, thereby weakening the industrial structure and igniting a process of de-industrialization that is difficult to reverse. Moreover, European stability policies aiming at 'internal devaluation', which practically consist of wage cuts and more precarious labour, actually do not help industrial restructuring and consolidation. Finally, the absence of a coordinated European industrial policy makes single national or regional actions difficult to implement or even to conceive.

Therefore, in the last 20 years, the regime of accumulation of SE economies has become financialized and passively extroverted. After the 2008 crisis, the closing down of production activities and the outflow of productive capital have been more intense in SE economies than before. Liquid capital has moved back to the core of Europe in Germany (and to some nearby urban agglomerates), where it has become concentrated despite the low rewards. Other capital has taken the road to the North, seeking locational and fiscal advantages (e.g. Fiat moved its headquarters to the Netherlands and to London). The denationalization and liberalization policies of the European Commission have made this process much easier.

C. OVER-APPRECIATED EURO, DEFLATIONARY POLICIES AND INDUSTRIAL STRUCTURE

The passive and extroverted financialisation made Southern European economies more fragile and exposed to both Eastern competition and macroeconomic shocks. At the end of 2000s, the European Central Bank restrictive monetary policy led the €/ \$ exchange rate to 1,30-1,40. As we argued above, this helped imports a lot while putting industrial activities in difficulty. Moreover, deflationary policies of the Monetary Union have induced a further phase of peripheralization causing the ‘bust dynamics’ after the boom induced by financialization. The effects of deflationary policies were manifold.

- Because of euro appreciation, imports from extra-euro areas became cheaper, and that had an intense impact on SE manufacturing which is more directly exposed to low-cost labour-intensive productions. Small firms have been hardly affected by the relocation of production that took place subsequently.
- Banks increased their capital-assets ratio by cutting their assets and therefore lending,⁵ thereby inducing a credit crunch. Banks became even more reluctant to especially finance industry exposed to Asian competitors or facing difficulties with demand. They cut both short and medium-long term lending. Even when the BCE increased money supply through the ‘quantitative easing’ no money flowed from banks to companies.
- ‘Internal devaluation’ called for wage cuts, thereby decreasing aggregated demand. Households permanently resized their lifestyle while uncertainty further induced a contraction of consumers’ demand.
- Aggregate demand also went down because public expenditure was reduced while taxation increased. Until 2008 SE countries’ budgets were in equilibrium, as high deficits were balanced by high growth. Recessionary measures made deficits and debt blow.

This deflationary shock had a tough impact on these economies, simply because growing internal demand was a condition to the competitive equilibrium of many sectors. The result has been a rapid de-industrialization, following the ‘Argentinian’ pattern. Services and non-traded goods were also affected by internal devaluation and falling demand, as fixed costs were reduced and the quality of services decreased accordingly. Sure many economists welcomed these policies in the hope they could induce a concentration of production in larger units and a capitalisation of companies; in fact, little positive effects in this direction can still be perceived.

Gambarotto and Solari (2015) drew attention to the ‘*peripheralization*’ of SE countries in the EMU area. Following Arrighi and Piselli, ‘*peripheralization*’ is a process whereby some actors or locales, that participate directly or indirectly in the world division of labour, are progressively deprived of the benefits of such participation, to the advantage of other actors or locales’ (Arrighi and Piselli, 1987: 687). As a consequence, countries that had already entered the perimeter of the core in the 1970s such as Italy (Arrighi, 1990), or Spain (in the 1990s) tend to be limited in their capability of remaining in

⁵ Many banks rose risk capital, but the required capital ratios of Basel II and III and the criteria imposed by EBA were difficult to achieve. Banks had to increase capital-assets ratio from an average of 4-5% to 12-13%. Moreover, for some unclear reason commercial lending was evaluated as more risky than holding financial securities.

such a position. Portugal and Greece are in an even worse situation, having partially failed the upgrading process in the sense of strengthening and stabilizing production structures.

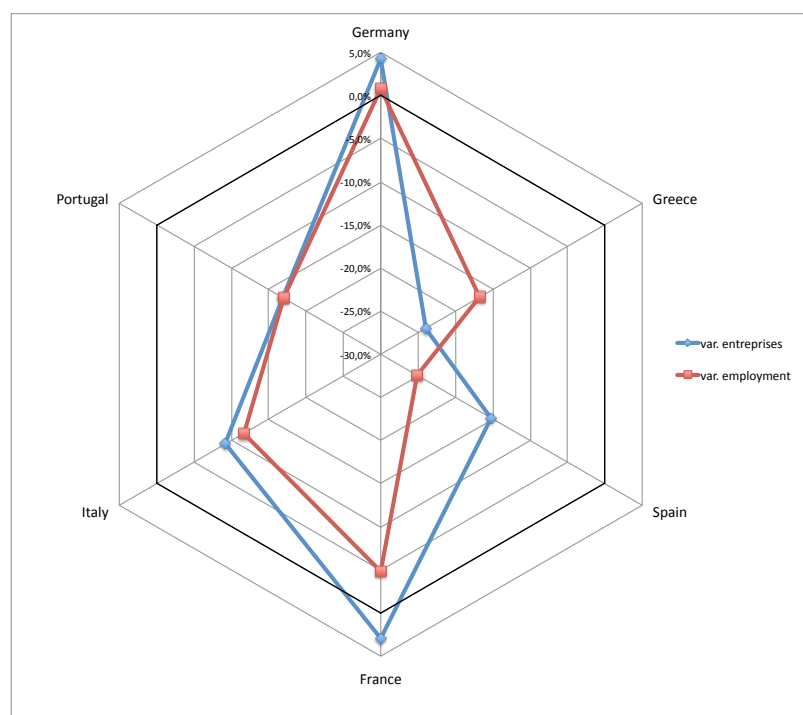
On the one hand, these economies had difficulty following the growth pattern of continental economies, such as Germany and France, whose production specialisation as well as the size of organizations is much more structured and services are stronger, incorporating higher technologies. This is particularly the case of Italy, Portugal, and Greece after the introduction of the single currency blocked the opportunity to seize depreciation gains. On the other hand, their labour intensive productions started facing direct competition from Eastern European industries and Eastern Asian low cost producers. At first, Spain and Greece have successfully caught up, but they have done so by following an unbalanced model of growth based entirely on debt and on the housing bubble. Portugal could not follow their example, although it successfully exploited EU regional funds to improve infrastructure (Reis 2010). Italy is also hit by the ageing of its population.

Another outcome is that these countries stopped taking the Continental model of capitalism as an example, embracing the “neo-liberal” one, which allegedly yields competitiveness through increased flexibility. But they could not rely on any of the standard policies fit to the situation.

D. DEINDUSTRIALIZATION IN THE SEMI-PERIPHERY

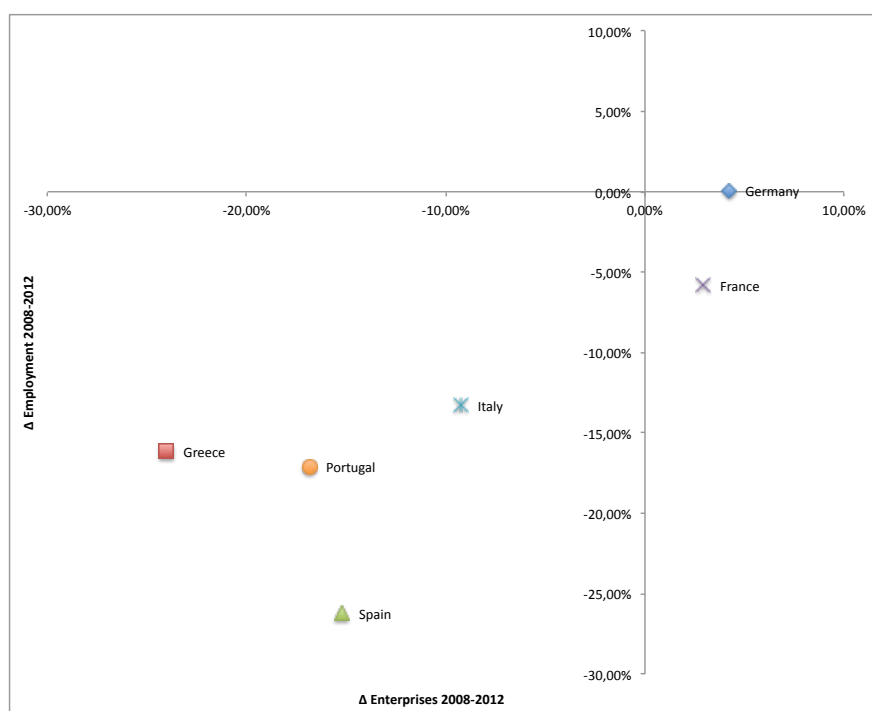
Southern European economies faced many difficulties in the EMU. At the beginning of the fixed exchange rates and with the euro, they suffered from inflation differentials with Continental Europe that made labour cost go higher in real terms. Then the appreciation of the euro caused their imports boom while slowing down export. The 2008 crisis and the consequent fall of demand led to a huge loss of employment and production. Finally, deflationary policies and the delay in lowering interest rates caused a further drop in production and employment.

Figure 1. Deindustrialization: Δ employment and firms, 2008-2012



Source: Eurostat

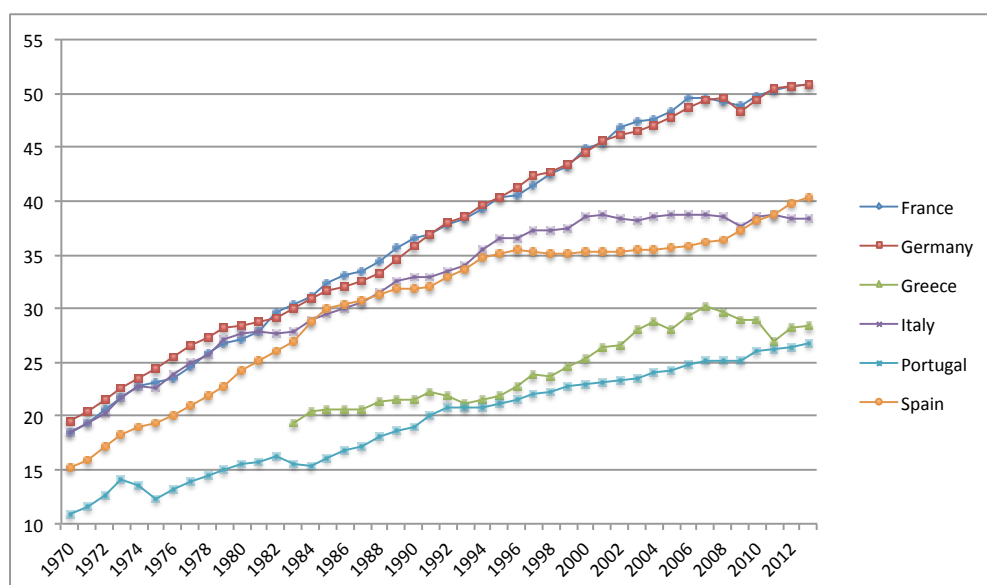
Figure 2. Deindustrialization, 2008-2012, full time equivalent jobs and firms



Source: Eurostat

In fig.1 we can perceive the different impact on industrial employment of the 2008-2012 crisis. In order to better evaluate the impact, fig.2 considers full-time-equivalent jobs. The group of Southern deindustrialising countries clearly appears as suffering both loss of firms and jobs, more jobs than firms in Spain, the opposite in Greece.

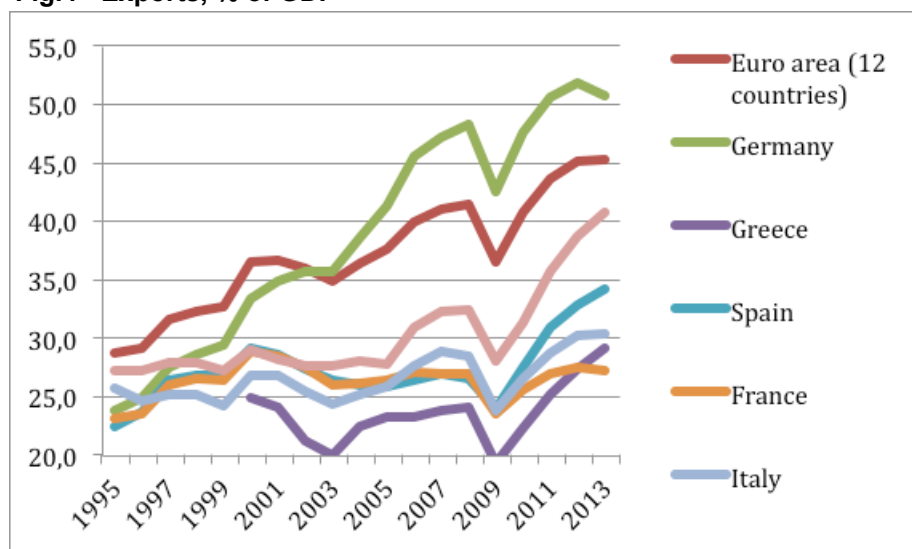
Figure 3. GDP per hour worked



Source: OECD

The sickness of Southern economies is also evident in fig.3 reporting the slowing down of GDP per hour worked. People work an increasing number of working hours (fig.5 annex) but produce less and less. The flexibilisation of the labour market is probably no stranger to this tendency. In the periphery of Europe, investing in higher productivity is no longer an option and any other policy is blocked; the main policy left is the reduction of labour costs and the increase in working hours. Working more for having less.

Fig.4 - Exports, % of GDP



OECD data

Tab.1 Composition of exports to Germany by technology content

Italy	1995	2001	2007	2014
HITECH: High-technology industries	6,0%	7,4%	6,1%	7,2%
MHTECH: Medium-high technology industries	33,5%	37,9%	42,2%	40,7%
MLTECH: Medium-low technology industries	20,0%	18,1%	24,6%	23,8%
LOTECH: Low technology industries	35,1%	31,4%	22,9%	23,8%
Greece				
HITECH: High-technology industries	5,6%	5,0%	22,3%	15,5%
MHTECH: Medium-high technology industries	5,8%	6,6%	11,4%	11,8%
MLTECH: Medium-low technology industries	9,9%	9,6%	14,6%	17,7%
LOTECH: Low technology industries	62,9%	61,2%	33,7%	42,9%
Portugal				
HITECH: High-technology industries	17,3%	20,5%	13,8%	11,0%
MHTECH: Medium-high technology industries	29,5%	37,0%	50,8%	45,3%
MLTECH: Medium-low technology industries	8,7%	9,3%	12,9%	17,6%
LOTECH: Low technology industries	42,6%	32,4%	20,6%	24,9%
Spain				
HITECH: High-technology industries	8,9%	10,8%	9,7%	8,0%
MHTECH: Medium-high technology industries	48,8%	47,4%	48,6%	51,7%
MLTECH: Medium-low technology industries	14,3%	14,3%	19,2%	14,5%
LOTECH: Low technology industries	15,5%	15,1%	12,1%	13,8%

OECD data

However, it would be wrong to affirm that Southern European industry is not responding to the crisis and to deflationary policies. Exports, in fact react, to internal devaluation and increase rapidly after 2008 (apart from France, fig.4). But this ricochet is in part due to the fall of GDP due to internal demand.

The composition of exports also change considerably (tab.1). Export of low-tech goods fall and the share of high-tech grows considerably. These figures (tab.1) display the deep structural change of SE economies during the euro period. Unfortunately, after 2007, with the crisis and the deflationary policies, high-tech share in exports falls again. That is a sign that internal devaluation is not helping the industrial restructuring of the South. On the other hand, tab.2 and tab.3 (annex) show how trade fell mainly within EMU and the reduction of imports of Southern countries affected mostly EMU countries.

These figures also show how the South of Europe suffered from a bad specialization, more exposed to the international competition. European Commission decisions on the WTO left these industries exposed to the competition from low-cost-of-labour countries, i.e. decided they had to be downsized in view of higher efficiency. But that meant imposing higher social costs to the South (Southern governments being notoriously 'distracted'). This highlights how the problem is a regional problem of a large regional area (Europe) and not simply a problem of single counties' macroeconomic or industrial policy. The South reacted by lowering the cost of labour and flexibilizing the labour market and this is a controversial measure. At the same time, the economy reacted by increasing the technological content of exports up to the point the economy was hardly hit by deflationary policies.

E. THE EVIDENCE OF INDUSTRIAL WEAKNESSES OF EUROPEAN SEMI-PERIPHERY

A structuralist approach devised to reinforce the economy thorough industrial measures needs two things:

- first, it requires to understand what is the economy suffering from;
- second, it requires to understand the existing relationships between the various European economic regions and the profitable exchange relations with non-European partners.

Between 2009 and 2012 (the longest period for which consistent data can be found) the industrial specialization of the relevant countries did not change much as a result of the crisis (table 7 annex). All countries have a relevant specialization in the manufacturing of metals and metal products. Such countries as Greece and Portugal have not developed relevant industrial activities beyond textiles, wearing apparel and the two mentioned above. Spain and Italy have a more diversified industrial structure, while French and especially German industrial structures are more specialized in machinery, transport equipment and chemistry. Although the share of employment in ITC and electronics industry is rather low even in France and Germany, there is a clear difference between Continental and Southern countries as to the systemic and pervasive role of technology in manufacturing.

Unfortunately recorded data show a general (final) loss of competitiveness of textiles and wearing apparel sectors in all countries, likely due to the WTO agreements. This had a higher impact on South Europe, particularly Greece, Portugal and Italy. Table 8 shows that Southern countries have been particularly hit in the textile and wearing apparel sectors as well as in the sectors pulled by housing investment (non metallic minerals, metal constructions, furniture...). Therefore, there is a special bad impact of the WTO and of the housing bubble driven by the passive financialisation. Besides that, there is a general picture of negative employment figures due to lack of demand.

The employment loss in some sectors has been uniformly spread over Europe. However, as table 9 points out clearly, in some sectors employment moves from the periphery to the centre, like in the car and transport equipment industry, rubber and plastic, chemicals, electric

equipment and others. Food industry is characterised by a great reduction of employment in the Iberian peninsula, while jobs increase in Germany and France: this is an interesting case of a tendency towards concentration.

Also trade data reveal some information on the competitive situation of industry. Tab.4 (annex) shows that Southern economies were specialized in household consumption goods; this industry was partly crowded out by Asian productions, and partly suffered from the reduction in consumer demand and, above all, from the reduction of prices. Table 5 (annex) displays the relative trade balance of Germany and of the Southern countries. The data reveal that except for ITC and consumer electronics, clothing and minerals, the German trade balance is in surplus, while in the case of Greece and of the Iberian peninsula, it is in deficit for nearly all sectors (Italy has a stronger industry though). With internal devaluation deficits tend to be reduced, but the intensity of this reduction is modest compared to the sacrifices made by these economies. This policy is more effective in the case of Italy. This fact reveals that there is not only a clear problem of specialization for the South. The issue is rather a general weakness in all the sectors.

Table 6 (annex) is even more impressive because it shows the 2009 and 2013 sectorial per-capita exports. Remarkably, Germany shows higher values in all sectors. Even the German export of both fresh and processed food shows higher and faster growing values than for other countries (except Spain). No comparative advantages emerge from this table. Rather, Germany seem to hold an absolute advantage in almost all sectors. The implications of absolute advantage have not yet thoroughly investigated by economists (Camagni, 2001). Nonetheless they represent a problem in an economic integrated area as it means that no balanced, although competitive, equilibrium can be reached between different regions of an economic space (European Union).

That can be explained by the fact that many consumer goods industries can no longer compete with imports from Asian, and that an impoverished population (both Southern and central European) increasingly buys from low-labour-cost countries rather than from local Southern European producers. Therefore even deflationary policies have only a short run positive financial effect on the balance of payment, leading to little improvement of Southern industrial productions.

This situation poses a problem of cohesion and eventually of identity and hence a big uncertainty in the policies to be enacted to achieve an external equilibrium between the different regions. Sometimes, a solution is to concentrate all economic activities in the central regions and let the periphery specialize in tourism and agriculture. This was, for instance, the case of France regions. Yet this solution would be harder to implement at the European level as entire countries are concerned.

F. THE DEMAND OF INDUSTRIAL POLICIES IN EUROPE: A SINGLE AGENDA?

The European economic base developed since the Marshall Plan is at a crossroad. The last decade of low productivity growth has critically shocked the EU but this cold shower did not induce a structural change of the European industrial system. In economic policy terms, the challenge may have two recipes: the first claims that industrial policies have to be “light”, horizontal and focused on providing appropriate framework conditions for investments and new entrepreneurial ventures; the second argues that State intervention is crucial to sustain investments and a balanced growth process (Mazzucato, 2014; Pianta, 2014).

This dispute is not new in the economic literature as well as among policy-makers, of course. It is particularly relevant now in the light of rising unemployment levels, productivity losses especially in mature industries, and a redefined core-periphery division of labour within Europe.

Looking at the European industrial strategy, we can see that goals, tools and coordination frameworks have been changed over time, radically. In the post-WW2 development phase, European countries engaged themselves to create national economic systems focusing on few

manufacturing industries, like the automotive or the shipbuilding, able to trigger many complementary activities. National policies followed a demand-based growth model using different tools of public intervention like subsidies, concessional credit and trade protection. Such intervention, with specific country effects, proved successful until the crisis of the seventies and allowed to reduce the productivity gap with the USA. However the raw materials crisis that produced high inflation and unemployment in the mid-seventies in all countries, drastically stopped the growth of the industrial model, especially in the European periphery, raising serious concerns for the European economic system (Aiginger, 2013). To face the slow down of manufacturing industries, European authorities reinforced coordination mechanisms. With the Davignon Plan (1977), the Commission supported sunset industries in adjusting their production capacity to the changed market conditions: it State aids and promoted the development of sunrise sectors addressing the importance of European cooperation for technological R&D to national institutions. The domestic economic effects of this new direction of European policy were tied up to the institutional framework and to the development level of the country. This meant that European countries reacted differently to the industrial restructuring opportunities offered by the Commission, according to the different capitalism models they referred to. The outcome was the creation of persistent structural differences between countries.

During the eighties, the European strategy moved definitively away from the Keynesian policies and embraced the free market perspective. The new growth strategy was based on monetary stability, no State intervention and deregulated markets. Public actions worked as horizontal (indirect) activities designed to create a right context for economic ventures and for increasing productivity. A policy that was still largely recommended twenty years later (Sapir, 2004). For the European semi-peripheral countries, this policy turnaround determined the stop of the “late development” process and the strengthening of familism and localism as the national institutional framework was unable to react pro-actively to the new growth strategy. By contrast, Germany planned an institutional re-shaping that promoted finance equity, high-tech investments, seeding new industries like bio- and nanotech and propelling entrepreneurial start-ups (Owen, 2012).

Although before the last financial crisis the European Commission tried to fix the core-periphery economic problems through the Cohesion Policy (a view that was reinforced by the Lisbon strategy), peripheral countries have found themselves even worse-off. Reduction of domestic manufacturing production capacity, stickiness of national finance systems and poor coordination of political actions are partial causes of the recent negative macroeconomic trends. The lack of an European industrial policy consistent with the variety of capitalistic models and the persistent devotion to the non-interventionist view are the weak pillars on which the unbalanced European economic system rest.

Looking at the European recession from a geographical standpoint, we observe that a declining periphery is actually contributing to the stability of the core economy, for production activities relocate from periphery to core countries (Pianta, 2013). The major macroeconomic risk in the periphery is now a deindustrialization process bearing with it higher unemployment, income inequality, poor investment and lack of innovation in manufacturing activities (Rodrik, 2015). The upshots of this process are poor European integration and concentration of power.

There is now a wide consensus about the need for a new European industrial policy. However, the debate on the policy design is mainly focused on the technology-pull or market-push choices.

The first one supports the need to create a technology and competence accumulation in public sector to renew policies mission-oriented (Cimoli et al, 2009); the second one claims that Europe has to drop the growth agenda based on the picking winners strategy and should rather invest on a new mix of industrial and competition policies (Aghion et al, 2011). In both cases, the geographical pattern of the European industrial structure is not the main concern. Emphasis is placed on sectorial/technological strategies to promote a new sustainable growth model for the whole European area, while little attention is paid to the concentration/distribution patterns

of industrial opportunities (and to thereby ensuing European dis-integration “side-effects” on the core-periphery structure of divergent varieties of capitalism).

A stimulating change in perspective might be to stress European social development (Aiginger, 2012) and to propose a new Europe-wide industrial policy (Pianta, 2014). The starting point of this view is the creation of a sustainable industrial system and of a stronger cooperative model both for R&D and production; it would have less concern for the Europe-USA productivity gap and more attention to the institutional transition towards a new, more balanced growth model. However the fundamental issues to face the core-periphery problem are still at stake.

G. CONCLUSION: INDUSTRIAL POLICIES IN A POLARISED ECONOMIC SPACE

As macroeconomic tools are out of reach of national governments, many economists now suggest to go back to industrial policy (par.F). There is no doubt, in accordance with Aiginger, Pianta and the many who ask for an European industrial policy that such measures should address firms’ technological improvement towards sustainability and a “greener” economy, whatever this means. Surely sustainability and the greening of the economy are goals big enough to transform the economy and increase employment. They involve a change in many sectors as agri-food, energy, and high-tech. Southern economies would also benefit from an industrial policy oriented at improving the systemic productivity and technology content of their productions. That would help to increase productivity, particularly of small firms, reduce the working hours and keep prices at a more remunerative level. The quest for policy rises, however, a number of questions:

- why increase industrial productivity if there is no demand?
- How would such industrial policy help a peripheral area, where industry is so weak?
- Can industrial policy sustain some regions, halting the centre-periphery drainage of resources, without contradicting the competition policy on state aid?

The first question has presently no answer except a mercantilistic policy (for demand expansion is excluded). The other questions simply recognize that European regions are proceeding with two speeds, with the South having clearly geared down.

Aiginger (2013; 2014) sets out a number of stimulating proposals, but his policies for the periphery do not differ much from the general strategy suggested for the whole European Union. Uniform industrial policy in Europe would simply increase the advantage of central regions, which have higher capabilities to take advantage of any new instrument or incentive. As a consequence, the development of a European framework for industrial policy can have good effects on the development of European industry, but would be unlikely to solve any of the problems of semi-periphery.

This issue has been considered by Puga, who argued that «inequalities between regions within each State have risen. European States have developed increasingly different production structures. And European regions have also become increasingly polarised in terms of their unemployment rates». (Puga, 2001, p.28). Increasing returns to scale and trade costs encourage firms to locate close to large markets or, more simply, firms located in central markets enjoy positive externalities such as lower demand uncertainty and grow better than the peripheral. This fact favours agglomeration of economic activities. Rising factor prices will induce immigration thereby furthering – contrary to the conventional view – agglomeration effects.

The European free trade policy has been conceived to help developing an open space. As Puga pointed out, «A better connection between two regions with different development levels not only gives firms in a less developed region better access to the inputs and markets of more developed regions. It also makes it easier for firms in richer regions to supply poorer regions at a distance, and can thus harm the industrialisation prospects of less developed areas» (Puga, 2001, p.29). Therefore, the economic space is naturally polarized and the removal of institutional

barriers tends to help the run to the centre. This may indeed be a source of increased productivity, on one hand, but it also produces high social costs in the periphery (Reinert, 2013; Reinert and Kattel, 2014) on the other. In our case, it produces a deindustrialization that is further accelerated by deflationary policies. Therefore, the centre-periphery problem is the real issue to be tackled by any industrial policy at European level. In fact, the worsening of the core-periphery polarisation makes uniform European policies of little help.

The real alternative that Europe faces now is therefore:

- developing a stronger coordination between centre and periphery, that means inducing a different and complementary specialisation of the different European regions through a certain amount of ‘planning’;

- allowing for a greater policy autonomy for peripheral countries to pursue their industrial policies even in conflict with European free competition policies.

The former option would imply a coordinated strategy of development between central regions and peripheral areas. Above all, this coordination has to define what peripheral areas should specialize in. The example of food industry abandoning Iberian regions to develop in France and Germany is relevant. Continental regions have no real comparative advantage in producing food (with the exception of some stuff). The actual situation is that the property and managerial activities of these industries, as is for fashion, transport equipment etc. move towards the continental central regions, while peripheral regions are left with lower value production activities, under the constant threat to be relocated elsewhere. Therefore, if the space is polarized, any general industrial policy would not benefit much the periphery. Coordination between centre and periphery means keeping the property and managerial activities of some industry as well as some higher level services in peripheral regions. The required planning ability of European institutions would be quite high. But we already have some planning at the level of strategic industries (weapons, aircrafts...) and that could be the model to be developed.

The latter option, increased national or regional autonomy, requires a reduction of effectiveness of the competition policy. That means a restructuring of competition rules. On the other hand, it can exploit more direct and higher quality information on the feasible policies at the regional level. That would go along some more spontaneous restructuring forces to be picked up at the regional level. However, this would be easier to be performed in developed areas of the South as Catalugna or Northern Italy and less easier in semi-desertified areas as Greece or Southern Italy. This strategy would stop the omogeneization of regulation models, increasing institutional diversity to fit the different context. Finally, this strategy would not grant the reduction of the political rent-seeking behaviour that has led some regions to the present state of disarray.

In both strategies some measure to increase the responsibility of policy-makers and managing authorities is badly needed. In the former strategy, based on European coordination, the responsibility would be shared. In the latter case, of greater regional autonomy, the responsibility would be local. In this case, some further central control – apart from democratic elections – from European Union would help improving the efficacy of policies.

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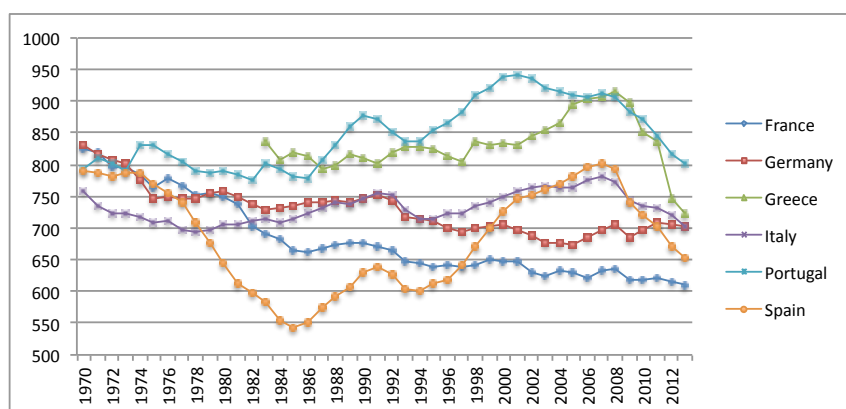
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Tab.2 Average annual growth rates of trade, rest of the world

Exports of goods and services				Imports of goods and services		
	1995-2001	2001-2007	2007-2013	1995-2001	2001-2007	2007-2013
EU15	8,5%	5,7%	2,4%	9,0%	5,8%	1,7%
Euro area (12)	8,4%	6,0%	2,6%	8,7%	6,1%	1,9%
Germany	8,1%	7,8%	3,2%	7,5%	6,0%	3,8%
Greece		7,1%	0,0%		7,6%	-6,2%
Spain	11,3%	6,5%	3,5%	12,9%	9,0%	-1,5%
France	7,4%	3,0%	1,7%	7,9%	4,7%	1,9%
Italy	7,2%	4,9%	1,0%	9,1%	5,9%	-0,6%
Portugal	7,5%	6,3%	3,6%	9,2%	4,7%	-0,6%
Exports of goods				Imports of goods		
	1995-2001	2001-2007	2007-2013	1995-2001	2001-2007	2007-2013
EU15	8,0%	5,3%	2,1%	8,7%	6,0%	1,6%
Euro area (12)	8,1%	5,9%	2,3%	8,4%	6,3%	1,7%
Germany	8,0%	7,7%	2,9%	7,4%	6,7%	3,7%
Greece		9,1%	2,3%		9,3%	-6,6%
Spain	10,7%	6,6%	3,8%	12,1%	9,0%	-1,8%
France	7,5%	3,2%	1,3%	8,3%	4,9%	1,8%
Italy	7,2%	5,1%	1,1%	9,3%	6,1%	-0,4%
Portugal	7,3%	5,3%	3,6%	9,8%	4,5%	-0,8%
Exports of services				Imports of services		
	1995-2001	2001-2007	2007-2013	1995-2001	2001-2007	2007-2013
EU15	10,3%	7,1%	3,1%	10,4%	5,2%	2,3%
Euro area (12)	9,6%	6,5%	3,8%	9,6%	5,1%	2,9%
Germany	8,6%	8,1%	5,4%	7,9%	3,1%	4,0%
Greece	0,0%	5,5%	-2,2%	0,0%	1,4%	-3,9%
Spain	12,7%	6,2%	2,9%	16,5%	9,1%	0,0%
France	7,0%	2,5%	3,2%	6,1%	3,8%	2,3%
Italy	6,9%	3,9%	0,2%	8,5%	5,2%	-1,4%
Portugal	8,5%	9,5%	3,5%	5,4%	6,6%	0,6%

Eurostat

Fig.5 Hours worked per head of population (persons/hours) OECD



Tab.3 Average annual growth rates of trade, with Monetary Union

	Exports of goods and services to members of the Monetary Union			Imports of goods and services		
	1995-2001	2001-2007	2007-2013	1995-2001	2001-2007	2007-2013
Germany	9,2%	7,8%	0,4%	7,1%	5,4%	2,9%
Greece		6,1%	0,9%		7,6%	-7,7%
Spain	9,3%	5,9%	1,6%	11,6%	7,5%	-4,6%
France	6,6%	2,7%	1,4%	6,8%	4,9%	2,2%
Italy	9,5%	4,4%	-0,8%	10,9%	5,1%	-1,3%
Portugal	7,6%	6,0%	1,8%	7,2%	4,7%	-1,5%

	Exports of goods and services to third countries and international organisations			Imports of goods and services from third countries and international organisations		
	1995-2001	2001-2007	2007-2013	1995-2001	2001-2007	2007-2013
Germany	13,5%	7,3%	6,1%	11,7%	6,5%	4,0%
Greece		10,5%	1,5%		10,0%	-4,0%
Spain	12,2%	6,5%	8,3%	13,4%	9,9%	1,7%
France	8,4%	2,1%	3,7%	9,6%	3,8%	2,8%
Italy	13,9%	4,4%	3,8%	16,2%	6,4%	0,3%
Portugal	6,9%	8,0%	8,3%	8,3%	4,2%	2,0%

Eurostat

Tab.4 Composition of export

	Germany			
	1995	2001	2007	2013
Intermediate goods	49,9%	47,5%	46,7%	48,0%
Household consumption	11,3%	10,6%	9,9%	11,6%
Capital goods	19,3%	20,0%	19,8%	20,2%
Mixed end-use	12,4%	17,2%	15,5%	14,7%
Passenger cars	9,3%	11,8%	10,4%	10,2%
Miscellaneous	7,1%	4,7%	8,1%	5,5%

	Greece				Italy			
	1995	2001	2007	2013	1995	2001	2007	2013
Intermediate goods	42,1%	41,1%	41,9%	30,4%	46,0%	45,0%	47,2%	46,3%
Household consumption	45,4%	39,4%	30,5%	22,5%	29,0%	28,1%	24,1%	25,2%
Capital goods	3,6%	4,0%	5,6%	3,0%	17,4%	17,7%	18,0%	16,4%
Mixed end-use	0,9%	4,2%	7,4%	4,6%	5,5%	5,7%	5,3%	6,6%
Passenger cars	0,1%	0,4%	1,4%	0,2%	3,5%	2,7%	2,3%	1,9%
Miscellaneous	8,0%	11,3%	14,6%	39,6%	2,2%	3,4%	5,4%	5,5%

	Portugal				Spain			
	1995	2001	2007	2013	1995	2001	2007	2013
Intermediate goods	43,5%	45,2%	52,4%	48,2%	44,3%	43,9%	45,2%	43,6%
Household consumption	39,8%	32,3%	25,4%	27,0%	24,1%	24,6%	22,5%	23,6%
Capital goods	8,2%	9,2%	8,7%	9,2%	10,7%	10,7%	11,1%	10,3%
Mixed end-use	5,6%	11,5%	6,3%	6,2%	18,7%	17,2%	15,2%	13,0%
Passenger cars	4,9%	10,0%	5,1%	3,9%	16,7%	14,6%	11,7%	9,4%
Miscellaneous	2,9%	1,7%	7,3%	9,4%	2,2%	3,6%	6,0%	8,4%

Tab.5 Relative trade balance, 2009-13 - International Trade Center

Relative trade balance (exp-imp)/(exp+imp)	2009 Germany	2013 Germany	2009 Greece	2013 Greece	2009 Italy	2013 Italy	2009 Portugal	2013 Portugal	2009 Spain	2013 Spain
Fresh food	-28%	-26%	-20%	-10%	-39%	-38%	-58%	-49%	9%	15%
Processed food	7%	10%	-26%	-7%	3%	9%	-9%	-5%	-2%	7%
Wood products	14%	10%	-74%	-61%	-16%	-12%	25%	34%	-6%	4%
Textiles	3%	2%	-23%	-18%	25%	22%	3%	3%	-3%	1%
Chemicals	16%	17%	-57%	-43%	-12%	-6%	-37%	-22%	-15%	-5%
Leather products	-27%	-27%	-75%	-63%	29%	34%	23%	23%	-5%	-2%
Basic manufactures	15%	9%	-17%	6%	18%	17%	-7%	5%	10%	22%
Non-electronic machinery	36%	36%	-66%	-41%	46%	50%	-31%	-5%	-11%	8%
IT & Consumer electronics	-20%	-21%	-77%	-63%	-52%	-47%	-38%	-27%	-60%	-64%
Electronic components	13%	14%	-52%	-34%	6%	11%	-15%	0%	-20%	-2%
Transport equipment	29%	39%	-86%	-76%	-10%	10%	-22%	1%	17%	24%
Clothing	-29%	-31%	-43%	-28%	11%	20%	13%	20%	-26%	-13%
Miscellaneous manufacturing	16%	16%	-67%	-43%	20%	27%	-23%	-1%	-30%	-20%
Minerals	-57%	-56%	-64%	-21%	-65%	-60%	-52%	-33%	-62%	-53%

Tab.6 Export per capita, 2009-13 - International Trade Center

Per capita exports	2009 Germany	2013 Germany	2009 Greece	2013 Greece	2009 Italy	2013 Italy	2009 Portugal	2013 Portugal	2009 Spain	2013 Spain
Fresh food	268.5	362.8	248.4	288.6	167.9	206.2	123.7	211.4	450.8	590.5
Processed food	561.8	738.9	246.7	344.2	406.3	524.6	350.1	491.5	360.6	489.6
Wood products	362.4	401.1	23.8	31.7	136.5	165.1	304.9	469.1	128.9	160.4
Textiles	147.6	176.8	54.2	43.0	195.9	220.7	144.9	201.7	78.2	93.6
Chemicals	2,225.1	2,843.2	264.2	312.3	805.4	1,118.2	380.9	670.1	721.5	990.1
Leather products	64.3	93.4	14.1	17.4	269.7	395.9	159.3	246.6	78.9	101.7
Basic manufactures	1,161.7	1,489.2	263.9	347.4	805.4	1,015.6	427.0	628.7	521.1	719.4
Non-electronic machinery	2,314.6	2,961.5	75.5	80.1	1,405.7	1,708.0	266.5	412.7	422.9	589.4
IT & Consumer electronics	421.8	516.0	35.1	37.1	97.6	106.5	146.7	150.7	80.9	63.4
Electronic components	1,005.3	1,326.7	60.0	79.9	344.4	388.3	209.4	308.2	187.9	266.1
Transport equipment	2,386.7	3,544.7	70.4	39.3	625.0	728.9	471.3	616.0	1,020.4	1,257.1
Clothing	201.3	232.2	97.6	85.9	325.9	389.2	252.6	322.0	166.4	248.5
Miscellaneous manufacturing	1,197.2	1,513.4	86.7	101.3	656.8	804.3	263.7	408.5	234.9	275.7
Minerals	385.7	659.2	202.5	1,344.4	271.5	419.4	275.7	730.2	269.4	560.7
http://www.intracen.org/itc/market-info-tools/trade-statistics/										

Tab.7 Industrial specialization Eurostat

MANUFACTURING EMPLOYMENT		Germany		Greece		Spain		France		Italy		Portugal	
NACE_R2/GEO	2012	Employees	% on total manuf.ing	Employees	% on total manuf.ing	Employees	% on total manuf.ing	Employees	% on total manuf.ing	Employees	% on total manuf.ing	Employees	% on total manuf.ing
Manufacturing		6.995.407	11,0	271.434	100	1.704.016	100	2.933.286	100	3.306.745	100	610.759	100
Manufacture of food products		772.021	11,0	70.146	25,8	299.234	17,6	534.063	18,2	309.977	9,4	85.463	14,0
Manufacture of beverages		68.262	1,0	8.970	3,3	44.620	2,6	50.900	1,7	32.517	1,0	13.405	2,2
Manufacture of tobacco products		10.494	0,2	1.526	0,6	2.745	0,2			531	0,0	615	0,1
Manufacture of textiles		75.821	1,1	8.018	3,0	36.405	2,1	40.793	1,4	116.872	3,5	38.011	6,2
Manufacture of wearing apparel		41.890	0,6	14.316	5,3	42.110	2,5	41.039	1,4	181.199	5,5	78.668	12,9
Manufacture of leather and related products		16.744	0,2	1.693	0,6	30.185	1,8	26.378	0,9	119.789	3,6	44.210	7,2
Manufacture of wood products		120.818	1,7	6.520	2,4	46.727	2,7	63.800	2,2	86.419	2,6	26.806	4,4
Manufacture of paper and paper products		142.701	2,0	6.944	2,6	44.546	2,6	67.595	2,3	68.400	2,1	10.518	1,7
Printing and reproduction of recorded media		151.127	2,2	8.520	3,1	56.840	3,3	64.107	2,2	69.360	2,1	15.315	2,5
Manufacture of coke and refined petroleum		19.074	0,3	3.884	1,4	9.199	0,5			15.681	0,5	1.852	0,3
Manufacture of chemicals and chemicals		332.207	4,7	10.749	4,0	80.140	4,7	149.522	5,1	106.785	3,2	12.009	2,0
Manufacture of pharmaceuticals		121.440	1,7	6.452	2,4	36.444	2,1	76.158	2,6	61.386	1,9	6.075	1,0
Manufacture of rubber and plastic products		402.652	5,8	12.984	4,8	87.647	5,1	164.649	5,6	168.790	5,1	23.362	3,8
Manufacture of other non-metallic minerals		231.474	3,3	16.095	5,9	98.251	5,8	114.600	3,9	164.826	5,0	39.054	6,4
Manufacture of basic metals		263.963	3,8	16.327	6,0	59.886	3,5	79.999	2,7	120.125	3,6	8.074	1,3
Manufacture of fabricated metal products		823.963	11,8	26.182	9,6	214.735	12,6	317.560	10,8	440.570	13,3	72.838	11,9
Manufacture of computer, electronic and optics		313.910	4,5	2.842	1,0	27.251	1,6	141.127	4,8	102.709	3,1	8.681	1,4
Manufacture of electrical equipment		503.899	7,2	7.371	2,7	62.245	3,7	115.694	3,9	153.420	4,6	17.284	2,8
Manufacture of machinery and equipment n.e.c.		1.066.756	15,2	12.451	4,6	96.762	5,7	177.960	6,1	423.000	12,8	20.315	3,3
Manufacture of motor vehicles, trailers		810.871	11,6	2.811	1,0	133.827	7,9	243.437	8,3	160.458	4,9	29.895	4,9
Manufacture of other transport equipment		118.569	1,7	4.406	1,6	43.829	2,6	135.440	4,6	82.058	2,5	3.966	0,6
Manufacture of furniture		132.213	1,9	9.327	3,4	56.555	3,3	48.459	1,7	119.948	3,6	27.338	4,5
Other manufacturing		235.904	3,4	4.909	1,8	31.936	1,9	72.702	2,5	81.461	2,5	11.160	1,8
Repair and installation of machinery and equip.		218.632	3,1	7.993	2,9	61.900	3,6	189.506	6,5	120.464	3,6	15.845	2,6

Tab.8 Impact of the crisis on industrial specialization *Eurostat*

2008-2012		Germany		Greece		Spain		France		Italy		Portugal	
NACE_R2/GEO		Var 2012/2008	share in total change	Var 2012/2008	share in total change	Var 2012/2008	share in total change	Var 2012/2008	share in total change	Var 2012/2008	share in total change	Var 2012/2008	share in total change
Manufacturing		0,8%	100,0%	-16,8%	100,0%	-25,1%	100,0%	-4,8%	100,0%	-11,6%	100,0%	-16,9%	100,0%
Manufacture of food products		5,5%	71,4%	7,0%	-8,4%	-6,9%	3,9%	11,7%	-37,6%	3,4%	-2,4%	-8,0%	6,0%
Manufacture of beverages		-6,5%	-8,4%	-2,2%	0,4%	-9,8%	0,9%	-	-	-	-	-5,3%	0,6%
Manufacture of tobacco products		0,4%	0,1%	-32,7%	1,4%	-21,5%	0,1%	-	-	-	-	-	-
Manufacture of textiles		-10,8%	-16,2%	-39,7%	9,6%	-33,5%	3,2%	-24,2%	8,8%	-22,8%	7,9%	-27,7%	11,7%
Manufacture of wearing apparel		-13,2%	-11,2%	-27,3%	9,8%	-44,6%	5,9%	-25,8%	9,6%	-17,2%	8,6%	-26,1%	22,3%
Manufacture of leather and related products		-6,0%	-1,9%	-46,9%	2,7%	-24,1%	1,7%	3,1%	-0,5%	-6,8%	2,0%	0,5%	-0,2%
Manufacture of wood products		-1,8%	-3,9%	-6,5%	0,8%	-41,6%	5,8%	4,4%	-1,8%	-17,1%	4,1%	-25,5%	7,4%
Manufacture of paper and paper products		0,2%	0,6%	-15,7%	2,4%	-15,9%	1,5%	-5,3%	2,5%	-3,7%	0,6%	-9,8%	0,9%
Printing and reproduction of recorded media		-9,5%	-28,0%	-9,9%	1,7%	-29,6%	4,2%	-21,3%	11,7%	-18,6%	3,6%	-25,4%	4,2%
Manufacture of coke and refined petroleum		-2,6%	-0,9%	-14,2%	1,2%	4,3%	-0,1%	-	-	-1,5%	0,1%	-	-
Manufacture of chemicals and chemicals		2,5%	14,5%	-17,2%	4,1%	-13,6%	2,2%	-4,2%	4,4%	-6,2%	1,6%	-14,9%	1,7%
Manufacture of pharmaceuticals		-3,4%	-7,5%	0,9%	-0,1%	-9,0%	0,6%	-9,5%	5,4%	-9,0%	1,4%	-1,9%	0,1%
Manufacture of rubber and plastic products		2,9%	19,8%	-11,1%	2,9%	-22,9%	4,6%	-20,8%	29,0%	-7,2%	3,0%	-5,1%	1,0%
Manufacture of other non-metallic minerals		-0,3%	-1,3%	-31,0%	13,2%	-44,7%	13,9%	-10,2%	8,7%	-21,4%	10,3%	-25,9%	11,0%
Manufacture of basic metals		-3,6%	-17,2%	-13,0%	4,4%	-20,6%	2,7%	-21,8%	15,0%	-11,1%	3,4%	-18,5%	1,5%
Manufacture of fabricated metal products		1,4%	20,1%	-27,4%	18,1%	-36,9%	22,0%	-2,5%	5,4%	-17,4%	21,4%	-15,4%	10,7%
Manufacture of computer, electronic and optics		-2,8%	-15,6%	-39,6%	3,4%	-30,8%	2,1%	-6,3%	6,4%	-13,2%	3,6%	-13,1%	1,0%
Manufacture of electrical equipment		1,8%	15,4%	-16,9%	2,7%	-24,9%	3,6%	-15,0%	13,8%	-10,3%	4,1%	-7,3%	1,1%
Manufacture of machinery and equipment n.e.c.		-1,5%	-28,2%	-26,6%	8,2%	-24,4%	5,5%	-16,0%	22,8%	-5,8%	6,0%	-17,2%	3,4%
Manufacture of motor vehicles, trailers		1,8%	25,6%	-34,8%	2,7%	-18,0%	5,1%	-6,2%	10,8%	-11,1%	4,6%	-17,2%	5,0%
Manufacture of other transport equipment		3,9%	7,9%	-41,1%	5,6%	-11,2%	1,0%	1,6%	-1,4%	-15,2%	3,4%	-52,5%	3,5%
Manufacture of furniture		-8,4%	-21,2%	-28,5%	6,8%	-45,6%	8,3%	-15,8%	6,1%	-21,4%	7,5%	-23,6%	6,8%
Other manufacturing		8,8%	33,6%	-27,0%	3,3%	-15,1%	1,0%	-1,7%	0,8%	-15,3%	3,4%	-10,0%	1,0%
Repair and installation of machinery and equip.		15,8%	52,6%	-17,1%	3,0%	-3,9%	0,4%	9,8%	-11,4%	-4,3%	1,2%	6,9%	-0,8%

Tab.9 Impact of the crisis on employment *Eurostat*

2008-2012		Germany		Greece		Spain		France		Italy		Portugal	
NACE_R2/GEO		Var abs. 2012/2008	weight on employment	Var abs. 2012/2008	weight on employment	Var abs. 2012/2008	weight on employment	Var abs. 2012/2008	weight on employment	Var abs. 2012/2008	weight on employment	Var abs. 2012/2008	weight on employment
Manufacturing		56.811	0.819%	-54.789	-16,795%	-571.965	-25,130%	-148.919	-4,832%	-434.686	-11,618%	-124.477	-16,930%
Manufacture of food products		40.572	0.585%	4.599	1,410%	-22.120	-0,972%	56.001	1,817%	10.249	0,274%	-7.458	-1,014%
Manufacture of beverages		-4.776	-0,069%	-202	-0,062%	-4.873	-0,214%					-744	-0,101%
Manufacture of tobacco products		43	0,001%	-741	-0,227%	-751	-0,033%						
Manufacture of textiles		-9.224	-0,133%	-5.273	-1,616%	-18.324	-0,805%	-13.056	-0,424%	-34.556	-0,924%	-14.563	-1,981%
Manufacture of wearing apparel		-6.344	-0,091%	-5.386	-1,651%	-33.885	-1,489%	-14.239	-0,462%	-37.556	-1,004%	-27.787	-3,779%
Manufacture of leather and related products		-1.071	-0,015%	-1.498	-0,459%	-9.583	-0,421%	785	0,025%	-8.710	-0,233%	241	0,033%
Manufacture of wood products		-2.234	-0,032%	-453	-0,139%	-33.237	-1,460%	2.715	0,088%	-17.779	-0,475%	-9.163	-1,246%
Manufacture of paper and paper products		316	0,005%	-1.293	-0,396%	-8.400	-0,369%	-3.756	-0,122%	-2.607	-0,070%	-1.149	-0,156%
Printing and reproduction of recorded media		-15.892	-0,229%	-937	-0,287%	-23.853	-1,048%	-17.375	-0,564%	-15.823	-0,423%	-5.216	-0,709%
Manufacture of coke and refined petroleum		-505	-0,007%	-643	-0,197%	376	0,017%			-234	-0,006%		
Manufacture of chemicals and chemicals		8.243	0,119%	-2.234	-0,685%	-12.659	-0,556%	-6.579	-0,213%	-7.107	-0,190%	-2.106	-0,286%
Manufacture of pharmaceuticals		-4.259	-0,061%	59	0,018%	-3.589	-0,158%	-8.003	-0,260%	-6.092	-0,163%	-117	-0,016%
Manufacture of rubber and plastic products		11.273	0,162%	-1.613	-0,494%	-26.061	-1,145%	-43.217	-1,402%	-13.165	-0,352%	-1.252	-0,170%
Manufacture of other non-metallic minerals		-723	-0,010%	-7.217	-2,212%	-79.355	-3,487%	-12.992	-0,422%	-44.941	-1,201%	-13.654	-1,857%
Manufacture of basic metals		-9.771	-0,141%	-2.435	-0,746%	-15.503	-0,681%	-22.272	-0,723%	-14.986	-0,401%	-1.832	-0,249%
Manufacture of fabricated metal products		11.393	0,164%	-9.905	-3,036%	-125.812	-5,528%	-8.074	-0,262%	-93.111	-2,489%	-13.290	-1,808%
Manufacture of computer, electronic and optics		-8.878	-0,128%	-1.865	-0,572%	-12.140	-0,533%	-9.545	-0,310%	-15.553	-0,416%	-1.303	-0,177%
Manufacture of electrical equipment		8.754	0,128%	-1.498	-0,459%	-20.595	-0,905%	-20.486	-0,665%	-17.668	-0,472%	-1.368	-0,186%
Manufacture of machinery and equipment n.e.c.		-16.038	-0,231%	-4.501	-1,380%	-31.184	-1,370%	-34.000	-1,103%	-25.897	-0,692%	-4.207	-0,572%
Manufacture of motor vehicles, trailers		14.524	0,209%	-1.500	-0,460%	-29.335	-1,289%	-16.030	-0,520%	-19.957	-0,533%	-6.205	-0,844%
Manufacture of other transport equipment		4.496	0,065%	-3.079	-0,944%	-5.529	-0,243%	2.081	0,068%	-14.693	-0,393%	-4.385	-0,596%
Manufacture of furniture		-12.055	-0,174%	-3.717	-1,139%	-47.320	-2,079%	-9.065	-0,294%	-32.726	-0,875%	-8.437	-1,148%
Other manufacturing		19.077	0,275%	-1.812	-0,555%	-5.695	-0,250%	-1.246	-0,040%	-14.740	-0,394%	-1.242	-0,169%
Repair and installation of machinery and equip.		29.888	0,431%	-1.643	-0,504%	-2.535	-0,111%	16.936	0,549%	-5.395	-0,144%	1.021	0,139%