A Southern Europe strategy based on vision and industrial policy

Este artículo defiende la necesidad de una estrategia de política industrial en los países del sur de Europa para recuperar competitividad y estabilidad. Esa estrategia debe ser diferente del pasado, más sistémica, y debería incluir estrategias de innovación y vías para actualizar la educación. Debería adoptarse la competitividad del mercado nacional e internacional como motores del cambio. Deberían crear y apoyar las zonas industriales y los *cluster*, que podrían ser la base para la transferencia de tecnología, la inversión extranjera directa y el aprovechamiento de la globalización. Las nuevas políticas industriales deberían priorizar los sectores donde la sociedad tiene intereses a largo plazo, por ejemplo las energías alternativas o el turismo de salud. En resumen, la política industrial es un elemento estratégico necesario en una época de consolidación presupuestaria, especialmente para los países de la periferia del sur de Europa.

Autoreak Europako hegoaldeko herrietako politika industrialen estrategia zehatza beharrezko jotzen du lehia eta egonkortasuna berreskuratu nahi badugu. Estrategia horrek iraganean egindakotik desberdina behar du izan, sistemikoagoa, eta berrikuntza-estrategiak eta heziketa eguneratzeko bideak ere kontuan hartuta. Nazio barruko nahiz nazioarteko merkatuaren lehiakortasunak izan behar luke aldaketaren funtsa. Industrialdeak eta klusterrak sortu eta sustatu behar dira, teknologia-transferentzien, atzerriko zuzeneko inbertsioen eta globalizazioaren aprobetxamenduaren oinarri izateko. Politika industrial berriek gizarteak epe luzerako interesak dituen sektoreei eman beharko liekete lehentasuna, adibidez, energia alternatiboei edota osasun-turismoari. Laburbilduz, politika industriala elementu estrategiko gakoa izango da aurrekontuaren finkotzea helburu dugun garai honetan, bereziki Europako hegoaldeko periferiako herrialdeetan.

This paper argues that an industrial policy strategy is needed for the southern European countries for regaining competitiveness and stability. That strategie need to be different from the past industrial policy, more systemic, and should include innovation strategies and ways to upgrade education. They should embrace competition on national and international markets as driver of change. They should create and support clusters and industrial zones, which could then be the basis for technology transfers, foreign direct investment and for making use of globalisation. New industrial policies should emphasise on sectors where society has a long term interest, e.g. alternative energies or health tourism. In short, industrial policy is a necessary strategy element in times of budget consolidation especially for the southern European periphery.

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Palabras clave: Competitividad del sur de Europa, periferia europea, nueva política industrial, consolidación para recuperar el crecimiento, sistemas económicos.

Keywords: Competitiveness of Southern Europe, European periphery, new industrial policy, growth oriented consolidation, socioeconomic systems.

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1. INTRODUCTION AND OUTLINE

The Southern European countries all face serious economic problems. This holds true for Greece, Portugal and Spain, but also applies to southern Italy. The problems came to a head after the financial crisis in 2009, but they were lingering around for at least a decade. They are, to some degree, surprising since the geographical position of these countries should have enabled them to make use of the fast growth in non European countries on their doorstep (from Turkey to North Africa) but also including South America and Asia.

This paper describes the catching up process of this periphery in the last 50 years, and its sudden grinding to a halt in the last decade. Several hypotheses are proffered for the current problems ranging from the loss of price competitiveness to inefficiencies in innovation, education and regulation. We claim that reforms need to

[1] We acknowledge critical comments by Kurt Bayer, David Bailey, Lisa De Propris, Elisabeth Großschädl, Peter Huber and Gunther Tichy and the research assistance of Dagmar Guttmann and Eva Sokoll. The paper has been written in the context of WWWforEurope, a research project for DG research and innovation (SSH 2011.1.2-1). See WWWforEuope (2011).

be based on a vision and a strategy. They had of course to follow some rules but different ones from those currently being endorsed. The strategy and the reforms need to be «nationally owned» and need to include a component of industrial policy. Industrial policy is back on the agenda for high income as well as for developing countries, but surprisingly it has neither been applied nor indeed even recommended for the southern periphery.

2. THE SPECIFIC PROBLEMS OF THE SOUTHERN PERIPHERY IN EUROPE

2.1. Catching up and falling behind

Over the past fifty years the southern periphery successfully caught up with the core of Europe. This process was described as «bumpy» by Aiginger (2004), since sub-periods of divergence had been experienced before e.g. from 1970 to 1985 in Greece and Spain and convergence was not particularly quick.

The catching up of low income countries is predicted in economic growth theory. For neoclassical economists this is an absolute truth. In the new growth theories it is conditional on e.g. education or institutions. Economic integration and more complex financial markets are predicted to spur on integration. Historical studies describe the conditions necessary for these economies to take-off. These conditions differ from country to country and define when laggards will start to grow sufficiently fast to be able to close the existing gap with the leading countries. Economic geography suggests that integration (modelled as reduced «transport cost» in the widest sense) initially leads to a regional concentration of activity in the core of a large region like Europe or the US and then to decentralization (U-curve). The second phase which could correctly explain the catching up of the periphery, is powered by lower wages and congestion costs in the periphery (Krugman, 1990). The past fifty years confirm, in general, that the southern peripheral countries could be on the second part of the U-curve. Sweden and Finland, the Nordic periphery, went through a difficult phase in the nineties (with a lack of price competitiveness, high budget deficits and turmoil in the recently liberalized financial sector), but overcame it through a strict consolidation program (with a fair burden sharing and promoting investment into education and research despite the crisis).[2]

We concentrate in the following paper on three countries Greece, Portugal and Spain, and where appropriate and feasible we also refer to Italy, whose southern part would also qualify as a southern European periphery. If we describe the development of the three countries jointly, we call this P3 (Periphery 3) and use unweighted averages (in order as to prevent Spain dominating the results).

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[2] See Aiginger and Guger (2006), Aiginger, (2012) Sweden and Finland could devalue their currency and more easily restore competitiveness in an environment where their neighbouring countries were growing. Today the Nordic countries have an above average GDP, are leading in education and innovation and enjoying globalisation.

The experience of catching up was essential to improve the applications of Greece, Spain and Portugal to join the Euro zone although there were warnings from OCA theory[3] and from empirical evidence of a somewhat «bumpy convergence» (Aiginger, 2004) and from a history of loosing price competitiveness from time to time (and solving this problem by devaluation).

P3 started with a GDP per capita (at PPP) of only 54% of the EU 15 in 1960. By 1974 the P3 reached 78% of the EU level, but the relative position of P3 fell back to 72% (1995; (see figure 1). In the late nineties and the first years of the new century the southern peripheral countries succeeded to outgrow the EU 15 again to arrive at a surprising 82.5% of EU GDP/capita in 2008. Since the financial crisis dropped to 76.7%, a level attained in the early seventies.

Let us look at the development of GDP per capita in the individual countries (see figure nº 1).

- Spain had 62.5% of EU 15 per capita income in 1960 and is the country nearest to the EU average. GDP per capita reached 84% of EU 15 in 1975, then the relative income dropped to 76% in 1980 before the catching up process was resumed. The point nearest to the EU average was 94% in 2007; since 2008 its output declined by 4% giving an estimate of today's gap of 10%, which is one third of the gap in 1960.
- Greece had 57% of the EU per-capita-income in 1960; after a dramatic catching up process in the sixties it came nearest to the EU average in 1978 with 93.4%. Then the gap widened to 29% in 1999. Convergence was resumed in 1999 and this trend was extended as a result of large infrastructure programs funded by inter alia the European and Structural Funds and the Olympic Games up to the start of the crisis. Part of the convergence was due to increasing public expenditure (for a bureaucracy, and a third layer of civil servants see Katsoulakis, 2012). Since 2008 economic output decreased by 20%, widening the gap with the EU-15 from 16.5 % (at the start of the crisis) to 30%. This gap is similar to the gap existing in 1995 (and 1965). It is still smaller than in 1960 (43%), but the overall catching up in fifty years is modest (from 68% to 71.6% of EU-15).
- Portugal started with by far lowest relative income (42.8% relative to the EU 15 per capita income) in 1960; the catching-up process was relatively smooth, but had –similar to the other countries, but to a lesser extent– a period of stagnation or falling slightly behind between 1973 and 1985;. The catching up then remained moderate between 1995 and 2008, the stage nearest to the EU 15 was reached with 72.7% in 2010. Since 2010 output

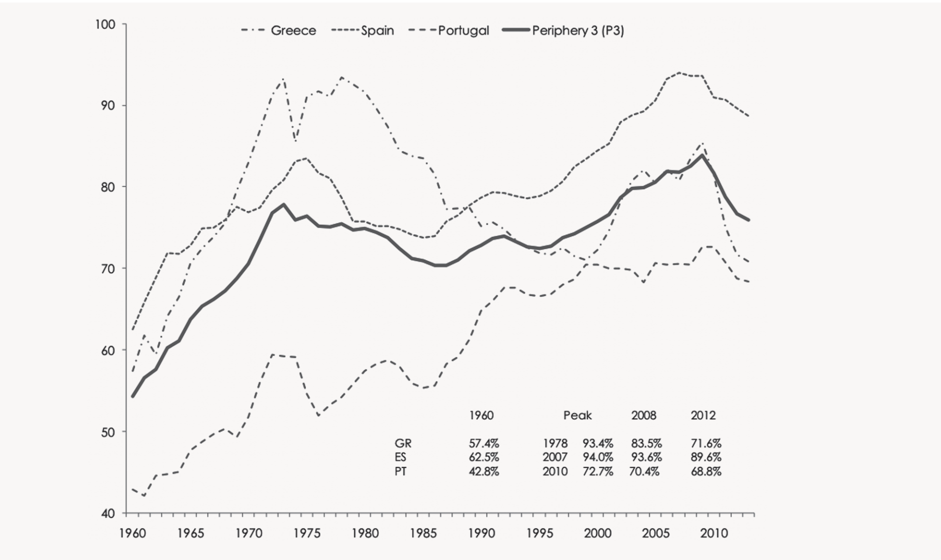
[3] OCA suggests that countries should not be too different and industries supporting convergence had to be available in a currency union.

declined by 4% giving a estimate of today's gap of 30%: This is half of the gap in 1960, rather similar to Greece´s position and not so far from its best position in the past. Catching up was thus stronger, starting from the lowest position and somewhat smoother than in the two other countries,

– Italy is the richest southern economy in Europe with 92% of EU 15 GDP per head in the sixties, it surpassed the EU 15 in 1979 and increased its lead up to 105% in 1989, but then fell back to 94% in 2008 and now it is at 89%. Since estimates for GDP per capita in the South is €17000 this means that southern Italy has a GDP per capita less than Greece.

Figure nº 1. **THE CATCHING UP OF SOUTHERN PERIPHERAL COUNTRIES (P3) RELATIVE TO EU 15**

GDP per capita at PPP



Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).

Source: Eurostat (AMECO).

2.2. Loss of price competitiveness

Catching up in wages but not in productivity

One of the reasons for the negative development of the periphery countries is that they gradually lost price competitiveness before the crisis had even started and therefore accrued deficits in their trade and current accounts.

Wages increased in P3 between 2000 and 2008 by 3.9% p.a., while they increased in the core by only 2.5% and in Germany by1.1%. The catching up of per capita wages is, however, a normal process for countries with low GDP per capita. Furthermore, nominal wage increases of 4% were seen as reasonable, since they were much less than experienced in earlier periods with higher inflation.

The real problem was that catching up in wages was not accompanied by a catching up in productivity. Productivity increased between 2000 and 2008 in P3 by 0.9%, the same as in the EU 15 (and in Germany). Consequently unit labour costs increased by 3% in the periphery countries while increasing by only 1.5% in the core countries (and not at all in Germany). The loss of competitiveness for P3, measured as the increase of unit labour costs, amounted to 1.5% p.a. in comparison with the EU 15 and 3% p.a. in comparison with. Germany. If accumulated this was 7% for P3 vs. the EU 15 and 26% vs. Germany.

The loss of competitiveness was approximately similar for each of the three southern countries. The loss was a bit more severe in Spain with unit labour costs rising by 3.4% p.a. Here the driving force of rising unit labour costs was the lack of any growth in productivity (due to increasing labour force participation, immigration from South Africa and flexible contracts). Greece had some progress in productivity (1.9% vs. 0.9% in the EU 15), but allowed extraordinary wage increases of 4.9% per annum).

Regaining competitiveness vs. EU but not vs. Germany

Looking at the period since 2008 we see a considerable improvement in the price competitiveness of P3 vs. the EU 15. Wages decreased by 0.4% p.a. in P3, and increased by1.4% in the EU 15. The productivity increase remained meagre at 0.7% p.a. in P3 but was at least slightly above the EU 15 (0.2%). Consequently unit labour costs decreased by 1.1% p.a. in P3 and increased by 1.2% in the EU 15, giving an improvement in price competitiveness of 2.3% annually and 9% cumulatively. The correction of price competitiveness of P3 in the four years was thus higher than the loss in the eight years before, resulting in a somewhat better position for the periphery countries versus the (un-weighted) average of the competitors in the EU 15 in 2012 as compared with. 2000. Across countries this improvement is specifically high in Greece, followed by Portugal. All three now have a better cost position relative to productivity than in 2000 as compared to the average of the EU 15 countries. Spain had no improvement, but no loss either; Italy deteriorated by ten points in 2012 relative to 2000.

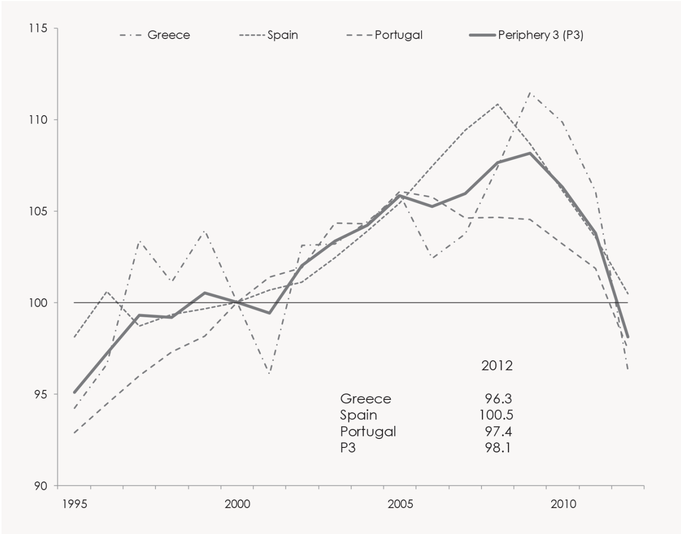
This improvement in price competitiveness compared to the EU 15 is not evident when compared with Germany[4]. There is also an improvement in the last four years, but it is much less than the decline in the previous eight years, leading to

[4] And due to the size of Germany not relative to the unweighted EU 15 data.

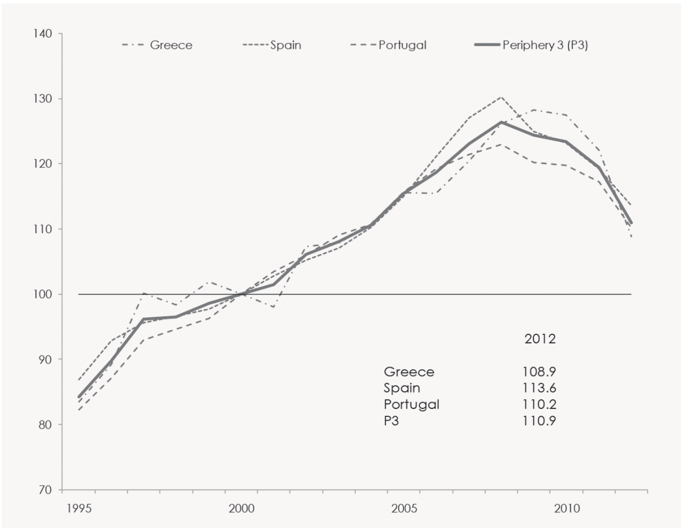
a position less favourable for the periphery in 2012 by about 11% (relative to 2000). This holds for all three peripheral countries. Closing the gap vis a vis. Germany by instrument of wage restraints in the periphery appears impossible.

Figure nº 2. **UNIT LABOUR COSTS IN THE PERIPHERAL COUNTRIES (P3) VS. EU 15 AND VS. GERMANY**

Vs. EU 15 (unweighted average); 2000 = 100



Vs. Germany



Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).
Source: Eurostat (AMECO).

Two tentative policy conclusions

While the loss of price competitiveness of the southern European periphery is denounced in many analyses, two important facts are overlooked.

Table nº 1. **PRICE COMPETITIVENESS OF PERIPHERAL COUNTRIES VS. EU 15 AND GERMANY SPLIT INTO WAGE AND PRODUCTIVITY COMPONENT (TOTAL ECONOMY)**

	2000/2008	2008/2012	2000/2012	2000/2008	2008/2012	2000/2012
		ø in % p. a.			Cumulative	
Greece						
Wages/capita	4.9	-2.7	2.3	46.5	-10.5	31.2
Productivity	1.9	-1.2	0.8	16.2	-4.8	10.6
Unit labour costs	2.9	-1.5	1.4	26.2	-6.0	18.6
Spain						
Wages/capita	3.5	1.3	2.8	31.8	5.5	39.0
Productivity	0.2	2.6	1.0	1.3	10.9	12.3
Unit labour costs	3.4	-1.3	1.8	30.2	-5.0	23.8
Portugal						
Wages/capita	3.3	0.0	2.2	30.0	0.2	30.2
Productivity	0.7	0.6	0.7	5.7	2.6	8.5
Unit labour costs	2.6	-0.6	1.5	23.0	-2.4	20.0
Periphery 3 (P3)						
Wages/capita	**3.9**	**-0.4**	**2.4**	**36.1**	**-1.6**	**33.5**
Productivity	**0.9**	**0.7**	**0.8**	**7.7**	**2.9**	**10.5**
Unit labour costs	**3.0**	**-1.1**	**1.6**	**26.4**	**-4.4**	**20.8**
Italy						
Wages/capita	2.6	1.1	2.1	22.6	4.3	27.9
Productivity	-0.3	-0.5	-0.3	-2.1	-1.9	-4.0
Unit labour costs	2.8	1.6	2.4	25.2	6.3	33.1
Germany						
Wages/capita	1.1	1.9	1.4	8.9	7.9	17.5
Productivity	1.1	-0.2	0.6	8.9	-0.9	7.9
Unit labour costs	0.0	2.2	0.7	0.0	8.9	8.9
EU 15						
Wages/capita	**3.0**	**1.4**	**2.4**	**27.0**	**5.8**	**33.7**
Productivity	**0.9**	**0.2**	**0.7**	**7.8**	**1.0**	**8.9**
Unit labour costs	**2.0**	**1.2**	**1.7**	**18.0**	**5.0**	**23.3**
P3 vs. to EU 15						
Wages/capita	*0.9*	*-1.8*	*0.0*	*7.2*	*-7.0*	*-0.2*
Productivity	*0.0*	*0.5*	*0.1*	*-0.1*	*2.0*	*1.5*
Unit labour costs	*0.9*	*-2.3*	*-0.1*	*7.1*	*-9.0*	*-2.0*
P3 vs. to Germany						
Wages/capita	*2.8*	*-2.3*	*1.1*	*25.0*	*-8.8*	*13.6*
Productivity	*-0.1*	*0.9*	*0.2*	*-1.0*	*3.9*	*2.4*
Unit labour costs	*3.0*	*-3.2*	*0.9*	*26.4*	*-12.3*	*10.9*

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).
Source: Compiled by the author and Eurostat (AMECO.

– First, increasing wages in countries with low income is an essential part of the catching up process. What did not work, and resulted in increasing relative unit labor cost and trade disequilibria was the lack of catching up in productivity.

– Secondly, the total loss of relative competitiveness of the periphery countries was compensated for in the following four years (by restraining wages, and to a lesser extent through a slightly better productivity performance). Relative to the average of the EU-15 partners P3 is now in a better position in price competitiveness than in 2000. This is however not the case vis a vis Germany, where a deterioration by11 % exists[5].

Catching up

Catching up in productivity should in general be the dominant strategy to further improve competitiveness and increase investment, and also to attract new firms and inward FDI. The absolute level of productivity is still much lower in the southern periphery and the catching up process was very slow in the last decade. Increasing the productivity is, in the long run, the most promising way to increase exports and attract foreign direct investment, even if this strategy is not easy in a time in which production is falling and labour potential is heavily underused.

Secondly it is absolutely impossible to bridge this difference through wage decreases in periphery countries alone. Boosting productivity via technology transfer or stimulating domestic demand in Germany (higher wage increases and/or social and ecological investment in Germany) are necessary components of an adjusted strategy in the periphery.

2.3. **Deficits in the trade and current accounts**

Amounting deficits in the trade and current accounts up to 2008

Deficits in the current account as well as the trade balance were the consequence of the decreasing price competitiveness and the meagre catching up process in productivity.

The deficit in the current account of P3 increased from 4.2% in 1990, to 8.9% in 2000 and then to 13.4% in 2008. It is highest in Greece at 18% of GDP in 2008 (up from only 3% in 1990, with the increase divided between the nineties and the first 8 years of this century). The deficit in the current account balance climaxed at 12.6% in Portugal and 9.6% in Spain (which had no deficit in 1997).

The trade deficits are similar to the current account deficits, on average 1-2 percentage points higher (where the difference is as a result of tourism, other services have trade deficits too). In Portugal trade deficits are higher for intra EU trade, in Spain from EU external trade, in Greece both intra EU and EU external trade deficits were the same. In Greece and Spain the increase in trade deficits from

[5] This is not evident in weighted data of the EU-15 which are dominated by Germany.

2000 to 2008 originates from EU external trade, in Portugal from intra EU trade. This indicates that specifically Greece and Spain failed to make gains from globalisation. Portugal reduced its EU external trade deficit from 4.2% of GDP to 3.6% by increasing its EU external exports from 3.8% to 5.8%). EU external exports relative to GDP is lowest and declined from 3.5% to 2.7% in Greece, an extremely low value for a country at the periphery in a fast growing economic neighbourhood.

Italy has no problem in its current account balance, though its deficit increased slightly from 0.2% in 2000 to 2.9% in 2008. Intra EU trade is positive and slightly increasing. EU external trade is responsible for the deficit.

Table nº2. **EXTERNAL POSITION OF THE THREE PERIPHERAL COUNTRIES (RELATIVE TO GDP)**

	1990	2000	2008	2012	2008-2000	2012-2008
Greece						
Total trade balance of goods	-12.5	-17.2	-19.3	-9.5	-2.1	9.8
Current account	-2.9	-12.0	-17.9	-7.8	-5.9	10.1
Spain						
Total trade balance of goods	-6.2	-7.0	-8.7	-2.8	-1.7	5.9
Current account	-3.8	-4.0	-9.6	-2.0	-5.6	7.6
Portugal						
Total trade balance	-11.1	-13.3	-14.7	-6.2	-1.5	8.5
Current account	-5.9	-10.7	-12.6	-3.6	-1.9	9.0
Periphery 3 (P3)						
Total trade balance of goods	**-9.9**	**-12.5**	**-14.3**	**-6.2**	**-1.8**	**8.1**
Current account	**-4.2**	**-8.9**	**-13.4**	**-4.5**	**-4.5**	**8.9**

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).

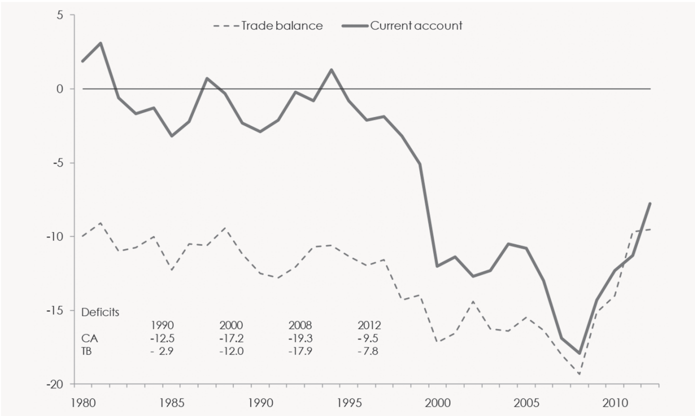
Source: Eurostat (AMECO).

Improvement since the crisis

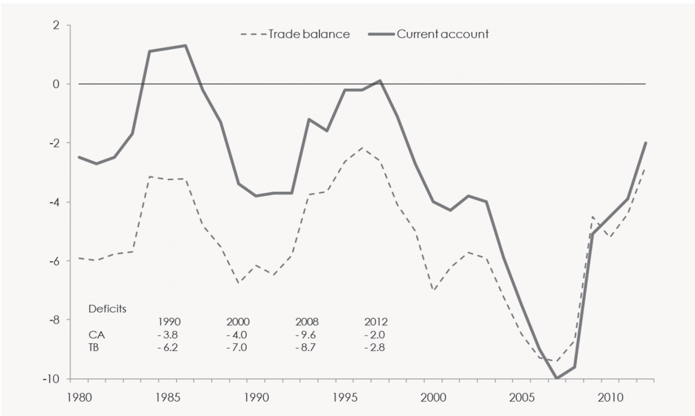
Between 2008 and 2012 a considerable improvement has been achieved. The current account deficit of the three southern periphery countries returned to 4.5% from 13.4% in 2008. The current account balance thus improved by 9 percentage points. The deficit is now lower than in 2000, and nearly back to its 1990 level. The progress stems from the trade balance, due more to the intra EU trade than the EU external trade (4.9 points and 3.2 points respectively) and is due slightly more to reducing imports than from increasing exports. Imports decreased by 4.2 points of GDP while exports increased by 3.9 percentage points between 2008 and 2012.

Figure nº 3. **CURRENT ACCOUNT AND TRADE BALANCE RELATIVE TO GDP**

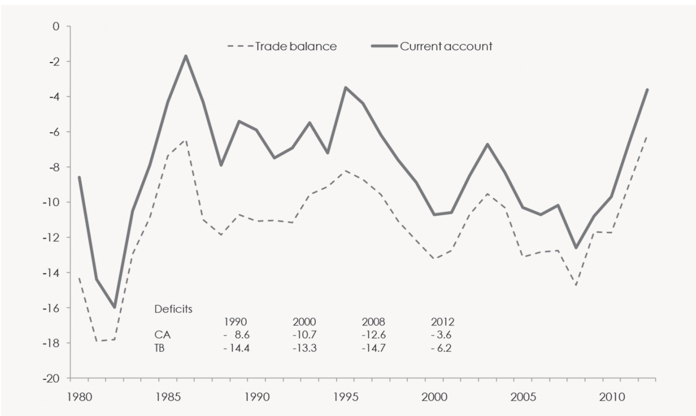
Greece



Spain



Portugal



Source: Eurostat (AMECO), European Commission.

Improvement was strongest in Greece (by 10 points), but with the highest remaining deficit in the current account (7.8%). This improvement originated from the trade balance (9.5 points), divided equally between internal and external trade. The import ratio of goods was reduced by 5.6 points. The export ratio increased by 4.1%, but we have to keep in mind that GDP fell by more than 20%. In absolute figures exports (of goods and services) in 2012 are still below 2008 (€ 53.2 bn. vs. € 56.2 bn.

The second largest improvement occurred in Portugal which reduced its current account deficit to 3.6%. This is much less than in 1990 (5.9%). Intra EU trade was the source of the improvement between 2008 and 2010 (in the long run EU external trade is steadily closing its deficit), and import shares (4.4 points) decreased slightly faster than exports 4.1 points.Spain is now near to a balanced current account (-2%), internal EU trade has dramatically improved now yielding a small surplus, while external trade remains in deficit with a smaller improvement.

Tourism

For tourism in periphery countries the last decade was a «lost decade». The surplus (net exports) of P3 decreased from 3.8% of GDP in 2000 to 2.8% in 2008 erasing the increase achieved since 1995. Only a tiny improvement can be seen since 2008 with imports as well as exports «improving» by 0.1%. Spain decreased its export surplus from 4.1 percentage points of GDP to 2.6, also falling behind relative to 1995. The disappointment arises from the income from tourism and these figures continued to be disappointing up until 2011.

Tourism income from abroad decreased strongly relative to GDP also in Greece (from 7.2% to 5.1%; after a positive development in the nineties) and the negative trend continues after 2008. Portugal is slowly but steadily increasing its income from tourism (from 4% in1995 to 4.75% in 2011).

Income per night from international tourists is low in Greece and Spain (€192 and. €179 respectively) as compared to €348 in the EU 15. It has been falling in Greece since 2006. In Portugal it is higher with a distinct upward trend. Portugal comes nearest to the EU 15 with €298 /night (relative to €348 /night in the EU 15). In Greece revenue per person and per night decreased between 2000 and 2010, and increased in Spain and Portugal. In all countries revenues increased faster than in the EU 15, but with gaps remaining of between 48% and 14%.

Summing up, tourism income (called exports in the statistics) makes up for 4.1% of GDP in 2008 for the three periphery countries and after a small decline in 2009 and 2010 reaches about this level again in 2011. This is only about one percentage point higher than in the EU-27 and two points higher than in the EU-15 and lower, for example, than in Austria (5.2%). Since imports are a little above 1%, net income is about 3%. Given the potential of these countries from their climate, history and geography the net income from tourism is smaller than its potential.

Table nº 3. **TOURISM: LOST DECADE FOR PERIPHERY**

	1995	2000	2008	2011	2008-2000	2011-2008
Greece						
Exports in % of GDP	2.8	7.2	5.1	4.9	-2.1	-0.2
Imports in % of GDP	0.9	3.6	1.2	1.1	-2.4	-0.1
Tourism balance in % of GDP	1.9	3.7	4.0	3.9	0.3	-0.1
International receipts per night in EUR (2010)		210.2		192.4		
Spain						
Exports in % of GDP	4.2	5.1	3.9	4.0	-1.2	0.1
Imports in % of GDP	0.7	1.0	1.3	1.1	0.3	-0.1
Tourism balance in % of GDP	3.4	4.1	2.6	2.5	-1.5	-0.1
International receipts per night in EUR (2010)		138.3		179.2		
Portugal		0.457		0.52		
Exports in % of GDP	4.1	4.5	4.4	4.7	-0.1	0.4
Imports in % of GDP	1.8	1.9	1.7	1.7	-0.2	0.0
Tourism balance in % of GDP	2.3	2.6	2.6	3.0	0.1	0.4
International receipts per night in EUR (2010)		220.7		297.7		
Periphery 3 (P3)		0.730		0.86		
Exports in % of GDP	**3.9**	**5.4**	**4.1**	**4.2**	**-1.2**	**0.1**
Imports in % of GDP	**0.9**	**1.5**	**1.3**	**1.2**	**-0.2**	**-0.1**
Tourism balance in % of GDP	**3.0**	**3.8**	**2.8**	**3.0**	**-1.0**	**0.2**
International receipts per night in EUR (2010)		**189.7**		**224.9**		
Italy						
Exports in % of GDP	2.8	2.5	2.0	1.9	-0.5	-0.1
Imports in % of GDP	1.4	1.4	1.3	1.3	-0.1	0.0
Tourism balance in % of GDP	1.4	1.1	0.7	0.6	-0.4	0.0
International receipts per night in EUR (2010)		212.6		175.7		
EU 15						
Exports in % of GDP	**1.9**	**2.2**	**2.1**	**2.1**	**-0.2**	**0.0**
Imports in % of GDP	**1.9**	**2.3**	**2.1**	**2.0**	**-0.2**	**-0.1**
Tourism balance in % of GDP	**0.0**	**-0.1**	**-0.1**	**0.1**	**0.0**	**0.1**
International receipts per night in EUR (2010)		**302.4**		**347.6**		

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).
Source: Eurostat (AMECO).

Summing up: external balances improved but not for tourism

Looking at the trade balances the periphery countries made considerable progress since 2008 and were able to eliminate their accrued deficit. Both trade deficits and current account deficits were halved between 2008 and 2012 and are much lower relative to GDP than in 2000. This was partly from shrinking imports due to declining production and consumption, but exports increased nearly as much as imports fell. This result may be slightly optimistic if imports rise again in recovery and the «necessity to export» at low prices decreases. Trade is the main source of the deficits up to 2008 and of the improvements since.

Missed opportunities exist for exports out of the EU, which are far below their potential, given the geographical position of the countries. Tourism is playing too minor a part and could be a source of much higher revenues; net revenues (the balance of exports minus imports) relative to GDP stagnate between 2000 and 2011.

2.4. **Declining manufacturing, structure, FDI (Foreign Direct Investment)**

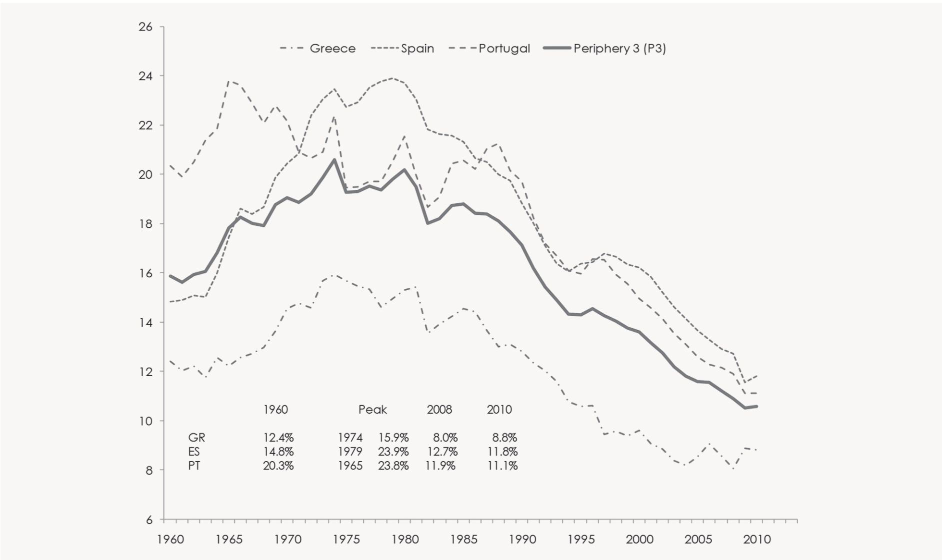
Declining share of manufacturing

The three southern peripheral countries have a small and declining share of manufacturing. It made up about 16% in 1960 and reached its peak of 20% in 1975. Since then it declines practically from year to year and is about 10% in 2010.

The trends are rather similar in the three countries, with an even lower share in Greece. Here manufacturing peaked at of 15.9% in 1974, and the share is now oscillating between 8% and 9%.

Spain had a share of manufacturing of only 12% in 2010, but had had 16% in 2000. The seventies were the heyday of the manufacturing sector in Spain –the share increased from 15% in the early sixties to a maximum of 23% in 1974– at that time surpassing the share of manufacturing in the EU 15.

Figure nº 4. **SHARE OF MANUFACTURING IN NOMINAL GDP; SOUTHERN PERIPHERAL COUNTRIES (P3)**



Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).
Sources: Eurostat (AMECO).

Portugal had less fluctuation and a rather stable share of 20% throughout the seventies and eighties. It fell to 15% in 2000 and declined further to 11% in 2008.

This implies that an already small share fell by nearly one quarter within a decade and that now the share of manufacturing relative to GDP is only half of what it was in the seventies and eighties.[6]

Summing up the share of manufacturing in nominal terms decreased for P3 from 17% (1990) to 14% (2000) and then further down to 11%(2010). The lowest share is now in Greece (9%), but the share of manufacturing is not much higher in Portugal (10%) and Spain (11%).

Structure according to factor inputs and skills

Peripheral countries (specifically P3) have a very different industry structure as compared to the EU 15.

- Labour intensive sectors produce 18.6% of value added in the EU-15 (2007), the share for the three southern countries is 24%, ranging from between 22% and 23% in Greece and Spain and 27.5% in Portugal. Technology driven sectors produce 21.7% of value added in the EU 15, but only 9% in the three southern peripheral countries, ranging from 6.5% in Greece to 11.6% in Spain.
- All have a large marketing driven sector (including food). Here the dominant country is Greece with 36.7%, and it is 25.3% in Portugal as well as in Spain. The capital intensive sector is somewhat larger than in the EU-15, namely ranging from 15% to 17% for P3, while it is 13.7% in the EU 15.

Table nº 4. **R & D EXPENDITURES AND INNOVATION PERFORMANCE**

	R&D expenditures			Innovation index		Firm investments		Human resources	
	2000	2010	2010			Scoreboard index 2011			
	In % of GDP		Rank		Rank		Rank		Rank
Greece	0.62	0.58	26	0.34	20	0.22	27	0.48	19
Spain	0.91	1.39	16	0.41	18	0.25	24	0.44	24
Portugal	0.75	1.59	14	0.44	16	0.32	19	0.45	22
Periphery 3 (P3)	**0.76**	**1.19**	**19**	**0.40**	**18**	**0.27**	**23**	**0.45**	**22**
EU 15	**1.91**	**2.09**		**0.54**		**0.44**		**0.56**	

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average). - Ranking among EU 27.

Source: Eurostat; INNOVATION UNION SCOREBOARD 2011.

[6] For EU 15 the share fell by approximately two percentage points each decade and is now 13%.

- As far as change is concerned, the share of labour intensive sectors in value added increased in Greece between 1995 and 2007, while that of technology driven industries decreased. The specialization in marketing driven industries increased, while the share of capital intensive industries plummeted. Portugal slowly upgraded its structure by lowering labour intensive industries and increasing technology driven industries, with little change in the share of the others. Spain, however, increased the share of labour intensive industries and reduced that of technology driven industries.

Decreasing flows and insufficient dynamics of inward FDI

Foreign investment is a crucial instrument of technology transfer and was, to a large extent, responsible for the catching up process of the periphery countries up to 2000.

The stock of inward investment relative to GDP in the P3 countries increased from 6.7% in 1980 to 10.8% in 1990 and then doubles to 21.8% in 2000. It reached its maximum of 35.9% in 2007 and since then declined to 32.3% in 2011. This increase in P3 was faster than for the EU-15 (in which inward stock increased from 17% in 1980 to 39% in 2000 and 54.5% in 2008), but the share of GDP from the stock of inward investment is much lower. The highest shares of FDI relative to GDP are in the core countries (66% of GDP).

Portugal has the highest share of FDI stocks/GDP with a maximum of 49.8% in 2007 and now it is 45.7%. Spain started in the eighties with very little foreign investment stock (2.3%) but has now reached 42.1%, which is even slightly higher than before the crisis started. Greece had its maximum share in the eighties with a ratio of up to 18%. This fell below 10% in the nineties, recovered to 17% in 2007, only to drop to 9.2% in 2011, well below investment stocks in GDP in the eighties.

Since 2008 the share of inward stock to GDP is further increasing in Spain and Portugal, but actually dropping from its already low position in Greece (from 11.2 percentage points to 9.2%).

In 1993 The Eastern and Central European Countries started with a share (6%) half of that of P3 but can now boast shares larger than 50% of GDP since 2006; annual figures since the start of the crisis are volatile, with a decreasing trend. Core European countries have the highest share of inward FDI stock with 69%. This drops for one year in 2008 but then recovers.

Inward flows in FDI were only 0.8 percent of GDP for P3 in 1980. They increased to 4.5% in 2000, but then declined to 2.7% by 2009. Between 2008 and 2011 it further declined to 2.3%. In Greece inward flows are fluctuating at a meagre 1% of GDP all the time, and then halved from 2008 to 2011. Spain and Portugal, which actually started at a lower rate in 1990, reached a share of about 5 % in 2000, which then shrank even before the crisis. Since then it was further reduced in Spain but recovered slightly in Portugal.

Inward FDI flows are now much higher in central and eastern European countries and they increased to 5.9% of GDP in 2008. They were half of that ratio in 2011. Inward stocks in Central and eastern European countries amount to 52% in 2011 (as compared to 32.3% in P3).

In summary, inward investment was a crucial part of the catching up process in the periphery countries. This source weakened even before the crisis. FDI flows halved between 2000 and 2008 in P3 (stocks increased relative to GDP but were less dynamic than in the eighties and nineties). At the same time FDI stocks and flows increased strongly in eastern and central European countries (stocks from 28% to 52% of GDP). Greece always had a much lower share of inward FDI than Portugal or Spain, and this source of technology transfer decreased further from 2008 so that inward FDIs are practically non-existent (stocks 9% of GDP, flows 0.6 in 2011 as compared to 64% and 5% in EU-15- Portugal and Spain have inward investment stocks of half of GDP, which dried up in Spain more than in Portugal.

Table nº 5. **INWARD FDI FLOWS AND STOCKS IN COUNTRY GROUPS**

	1980	1990	2000	2008	2011	2008-2000	2011-2008
Inward FDI flows			In % of GDP				
Greece	1.2	1.1	0.9	1.3	0.6	0.4	-0.7
Spain	0.7	2.6	6.8	4.8	2.0	-2.0	-2.9
Portugal	0.5	3.7	5.7	1.9	4.3	-3.8	2.5
Periphery 3 (P3)	**0.8**	**2.5**	**4.5**	**2.7**	**2.3**	**-1.8**	**-0.4**
Central and Eastern Europe	–	–	*5.6*	*5.9*	*2.8*	*0.3*	*-3.2*
Core Europe	0.6	1.9	14.6	8.6	5.1	-6.0	-3.5
EU 15	**0.7**	**1.7**	**11.4**	**5.0**	**5.2**	**-6.4**	**0.2**
Inward FDI stocks							
Greece	8.3	6.0	11.1	11.2	9.2	0.1	-2.0
Spain	2.3	12.7	26.9	36.9	42.1	10.0	5.1
Portugal	9.5	13.6	27.4	39.7	45.7	12.3	6.0
Periphery 3 (P3)	**6.7**	**10.8**	**21.8**	**29.3**	**32.3**	**7.5**	**3.0**
Central and Eastern Europe	–	–	*27.7*	*47.1*	*51.8*	*19.3*	*4.8*
Core Europe	5.8	14.6	41.4	65.7	69.4	24.3	3.7
EU 15	**16.9**	**16.1**	**39.1**	**54.5**	**63.8**	**15.4**	**9.3**

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).

Source: Eurostat (AMECO).

Table nº 6. **VALUE ADDED SHARES OF SECTORS IN TOTAL MANUFACTURING (%)**

	2000	2007	2007-2000	2000	2007
	Share in %		Absolute change	vs. EU 15	
Greece					
Mainstream industries	19.7	17.5	-2.2	-4.8	-7.9
Labour intensive industries	15.4	22.4	7.0	-2.5	3.9
Capital intensive industries	22.8	16.8	-6.1	8.4	3.1
Marketing driven industries	34.1	36.8	2.7	12.4	16.1
Technology driven industries	8.0	6.5	-1.5	-13.7	-15.2
Spain					
Mainstream industries	22.2	23.3	1.1	-2.3	-2.1
Labour intensive industries	22.3	22.6	0.3	4.4	4.0
Capital intensive industries	17.4	17.2	-0.3	3.1	3.5
Marketing driven industries	25.0	25.3	0.3	3.4	4.6
Technology driven industries	13.0	11.6	-1.5	-8.6	-10.1
Portugal					
Mainstream industries	21.2	22.4	1.2	-3.3	-3.0
Labour intensive industries	29.0	27.5	-1.4	11.1	8.9
Capital intensive industries	15.6	15.1	-0.5	1.2	1.4
Marketing driven industries	23.9	25.3	1.4	2.2	4.6
Technology driven industries	10.4	9.7	-0.7	-11.2	-11.9
Periphery 3 (P3)					
Mainstream industries	**21.0**	**21.1**	**0.0**	**-3.4**	**-4.3**
Labour intensive industries	**22.2**	**24.2**	**2.0**	**4.3**	**5.6**
Capital intensive industries	**18.6**	**16.4**	**-2.3**	**4.3**	**2.7**
Marketing driven industries	**27.7**	**29.1**	**1.5**	**6.0**	**8.5**
Technology driven industries	**10.5**	**9.3**	**-1.2**	**-11.2**	**-12.4**

Source: Eurostat (SBS).

3. INNOVATION, REGULATION, GLOBALISATION

Low pressure for change

The southern periphery countries are underinvesting in R&D and underperforming in innovation in general. They have a stricter regulation of product and labour markets. Empirical literature suggests that this is a bad combination especially once you have reached a medium level of development. Innovation depends on a competitive market, and specifically risky innovations need a climate where business start-ups are easy and incumbents cannot prevent entry. Consumption share in GDP is much higher in Greece and Portugal than in the EU 15.

Innovation outlays and performance

R&D expenditures in P3 were one third of the EU-15 average in 2000, with the lowest share in Greece (0.62) and the highest in Spain (0.91). In Portugal the share doubles up to 2010 and for Spain the increase is also encouraging and stronger than in the EU-15. In Greece R&D fell even relative to a decreasing GDP. In the broader European innovation score, all three countries made almost no progress over the last years. The distance in the indicator human resources is less than for other countries and, the number of innovators is larger in Greece and Portugal than for the EU, which may characterize the large number of micro firms, which never manage to take off to become small or medium sized firms.

Regulation

Greece is a leader in product market regulation. According to the OECD's index it was 3 in 1998 and fell to 2.4 in 2004, but this is still much more and is still a slightly increasing if questionable «lead» over the EU 15. In Portugal and Spain product markets were strictly regulated in 1998 and are now more liberal, partly slightly less partly more regulated than EU15. State control as well as state ownership is very high in Greece and Portugal (2008), while it is below average in Spain.

Table nº 7. **PRODUCT MARKET REGULATION**

	Overall product market regulation			State control of business enterprises			Public ownership		
	1998	2008	Ranking 2008	1998	2008	Ranking 2008	1998	2008	Ranking 2008
				Indices from 0 to 6					
Greece	3.0	2.4	15	4.8	3.8	15	4.6	4.0	14
Spain	2.5	1.0	4	3.7	1.6	4	3.7	2.2	4
Portugal	2.2	1.4	11	3.9	2.7	14	4.3	3.7	13
Periphery 3 (P3)	**2.6**	**1.6**	**10**	**4.2**	**2.7**	**11**	**0.0**	**3.3**	**10**
EU 15	**2.1**	**1.3**		**3.2**	**2.1**		**0.0**	**3.0**	

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).
Source: OECD Indicators of Product Market.
Regulation Homepage: http://www.oecd.org/eco/pmr.

All three southern periphery countries have strict regulation of their labour markets with an average index of 3 (vs. 2.2 for EU 15). Labour market regulation was loosened between 2000 and 2008 in Greece and Portugal, while it remained constant in Spain according to the OECD Regulation Index. This is despite the dual labour market coming into existence. Dismissing employees on regular contracts is very difficult in Portugal. Temporary contracts are very strongly regulated in Greece and even more so in Spain in 2008 but less so in Portugal. If the «ability/ functionality» of labour markets (strong regulation for regular contracts, low regulation for temporary contracts) can be measured by different scores in the OECD index duality is strongest in Portugal, while in Greece and Spain temporary contracts are highly regulated (relative to other countries. A caveat is that the data refer to 2008, and regulation has changed since then.

Table nº 8. **LABOUR MARKET REGULATION**

	Overall regulation			Regulation of regular contracts			Regulation on temporary contracts		
	2000	2008	2008	2000	2008	2008	2000	2008	2008
	Indices from 0 to 6		Rank	Indices from 0 to 6		Rank	Indices from 0 to 6		Rank
Greece	3.5	2.7	17	2.3	2.3	9	4.8	3.1	4
Spain	2.9	3.0	18	2.6	2.5	11	3.3	3.5	3
Portugal	3.7	3.2	20	4.3	4.2	21	3.0	2.1	6
Periphery 3 (P3)	**3.4**	**3.0**	**18**	**3.1**	**3.0**	**14**	**3.7**	**2.9**	**4**
Italy	2.5	1.9	7	1.8	1.8	5	3.3	2.0	7
EU 15	**2.1**	**2.2**		**2.2**	**2.3**		**2.0**	**2.0**	

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).
Source: OECD Indicators on Employment Protection - annual time series data 1985-2008.

Aggregate Demand

The three southern periphery countries have a share of consumption in GDP larger than in the EU. This had already been extreme in Greece in 2000 (69.9%; more than ten percentage points above the EU average). Consumption share reached 75% in 2012, this is now 17 percentage points above the EU-15. Consumption share in Spain is relatively stable and near average and in Portugal it is increasing and the difference to the EU is less than 10 points.

The investment share is now lower in all four countries than for the EU-15. In the first eight years of this century it had been higher (boosted by public and EU programs); this was the case including 2008.

Exports relative to GDP are more than 10 percentage points lower than in the EU-15 (32.1% vs. 43.3%) and stagnated. In the same period the export share in GDP increased by five points in the EU-15 between 2000 and 2008. They are specifically low in Greece; Portugal enjoys the highest export ratio and it is increasing.

Table nº 9. **SHARE OF INVESTMENT, CONSUMPTION AND EXPORTS**

	Investment			Private consumption			Exports in a broader sense		
	2000	2008	2012	2000	2008	2012	2000	2008	2012
	In % of GDP								
Greece	22.5	22.1	13.8	69.9	72.6	75.0	25.7	24.1	26.2
Spain	25.8	28.7	20.4	59.7	57.2	58.5	29.1	26.5	31.9
Portugal	27.7	22.5	16.6	63.6	66.8	66.0	28.9	32.4	38.2
Periphery 3 (P3)	**25.3**	**24.4**	**17.0**	**64.4**	**65.6**	**66.5**	**27.9**	**27.7**	**32.1**
EU 15	**20.5**	**20.7**	**18.2**	**58.5**	**57.0**	**58.1**	**35.4**	**40.2**	**43.3**

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).

Source: Eurostat (AMECO).

Government expenditure relative to GDP was slightly less than for EU-15 (it is lower for countries with lower income per capita). It has increased on average by three percentage points between 2000 and 2008. It has not fallen between 2008 and 2012 (in fact it decreased by less than 1 point in Greece and increased in Portugal and Spain).

Tax rates relative to GDP are lower in all 4 courtiers than in the EU-15 with decreasing shares before the crisis in Greece and Spain, and a slightly increasing trend in Portugal. This indicates low tax compliance which generates a public deficit.

Table nº 10. **PUBLIC SECTORS: EXPENDITURE AND TAXES**

	Expenditure			Taxes		
	2000	2008	2012	2000	2008	2012
	In % of GDP					
Greece	47.1	50.6	49.7	43.3	40.7	42.4
Spain	39.2	41.5	42.4	38.2	37.0	36.0
Portugal	41.6	44.8	47.7	38.3	41.1	43.0
Periphery 3 (P3)	**42.6**	**45.6**	**46.6**	**40.0**	**39.6**	**40.5**
EU 15	**44.9**	**47.6**	**49.7**	**45.6**	**45.2**	**45.8**

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).

Source: Eurostat (AMECO).

Table nº 11. **BUDGET BALANCE AND PUBLIC DEBT**

	Balance			Debt		
	2000	2008	2012	2000	2008	2012
	In % of GDP					
Greece	-3.8	-9.9	-7.3	104.4	113.0	160.6
Spain	-1.0	-4.5	-6.4	59.4	40.2	80.9
Portugal	-3.3	-3.7	-4.7	48.4	71.6	113.9
Periphery 3 (P3)	**-2.7**	**-6.0**	**-6.1**	**70.7**	**74.9**	**118.5**
EU 15	**0.7**	**-2.3**	**-3.9**	**63.2**	**65.0**	**89.2**

Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).

Source: Eurostat (AMECO).

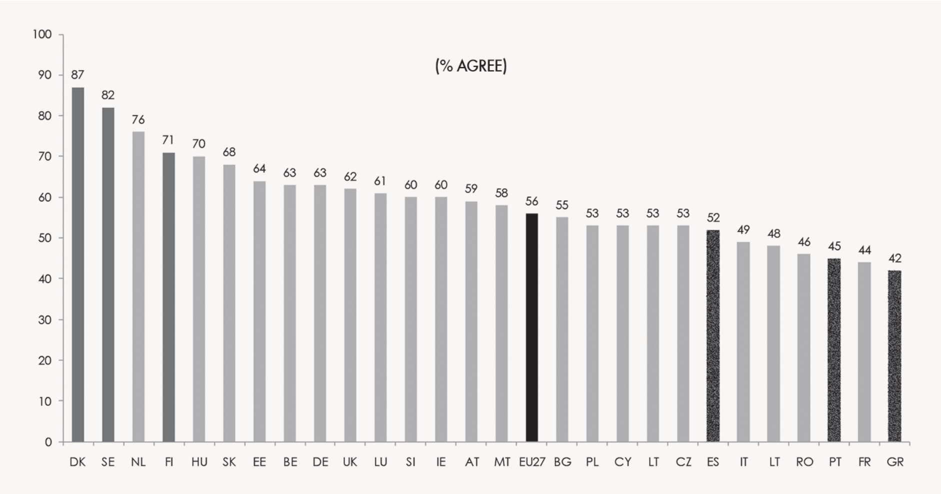
Globalisation

Periphery countries did not use the advantage of globalization despite their location by the sea and their history of global trade connections. We demonstrate this for the BRIC countries. Exports to BRICs increased from only 2.2% to 3.4%, while the same ratios for the EU-15 were 2.9% and 6%; the same advances were made by Spain (from 2.2% to 4.4%) and Portugal (from 1.1% to 2.8%) while the Greek export share to BRICs even fell slightly, being now half that of the EU average.

The southern periphery countries are critical of the chances provided by globalization. Asked whether globalisation is a chance for higher growth (see figure nº 5) Greece is the most sceptical country in the EU 27 with just 42% supporting this hypothesis. Portugal (45%) is the third most sceptical country, Italy is in sixth place (49%) and Spain in seventh (52%). This element cannot be underestimated and begs to be analysed and discussed given that the four periphery countries are indeed bridges between Europe and the non European countries. Such bridges could and should be a great opportunity. But the economic policy, knowledge and capabilities of a country need to make active use of globalization. Of course periphery countries are often also the harbour for imports from other countries and also an entry point for unwarranted migration into Europe.

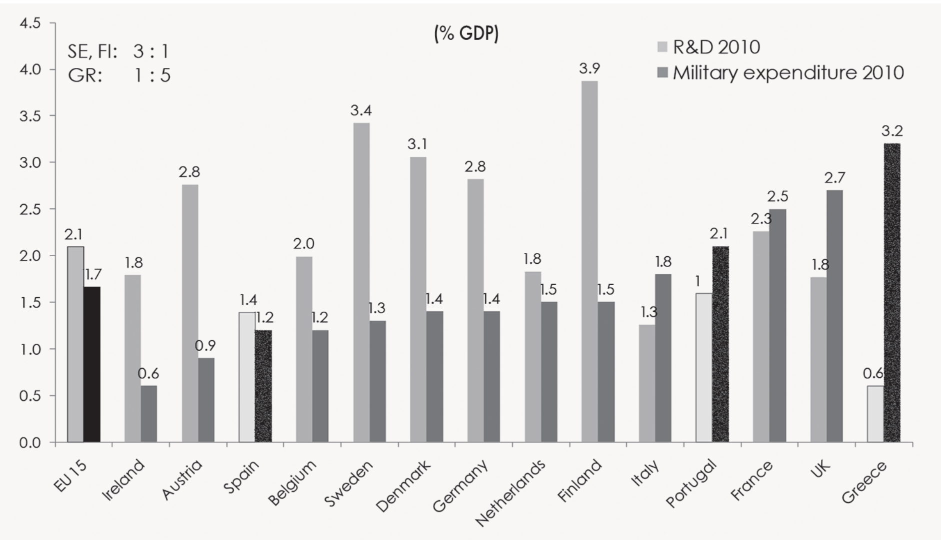
Consequently economic policies and political discussions, which address the globalization issue, are of the upmost importance for the periphery countries. Globalisation cannot be prevented in the long run, but it can either harm domestic firms and sectors or enable them to export or invest in more dynamic countries, thus stimulating the peripheral economies. The countries with a positive attitude, namely Denmark (87%), Sweden (82%), the Netherlands (76%) and Finland (71%) (see figure nº 5), also lie on the sea but have much higher wages than the periphery countries and use their organisational and technological knowledge to profit and grow via globalisation.

Figure nº 5. **ATTITUDE TO GLOBALISATION: GLOBALISATION IS AN OPPORTUNITY FOR ECONOMIC GROWTH**



Source: Eurobarometer.

Figure nº 6. **MILITARY EXPENDITURES RELATIVE TO R&D**



Source: Eurostat, SIPRI Military Expenditure Database.

The military sector

To some extent the share of military expenses is representative of whether a country believes it can benefit from globalisation or whether it sees this as a threat, Greece, Portugal and Italy are among the five countries with the highest military spending in relation to GDP with 3.2%, 2.1% and 1.7% respectively.

In Greece, Portugal and Italy military expenses are furthermore much higher than R&D expenditure, (0.6%, 1% and 1.3% respectively).

4. CURRENT REFORM STRATEGIES

4.1. The «Memorandum of Understanding»

The reform strategies in the deficit countries were enacted after a looming problem became intolerable. The last push for reform came either from a banking crisis, a property bubble or from public deficits exploding. The crisis, often a double crisis in both public debt and the current account, then led to rising interest rates for government bonds. All periphery countries first tried to solve the problems internally, but then reluctantly sought help (Spain up to October 2012 only for its banks). The conditions for accessing low interest credit were formulated by the ECB, the Commission and the IMF. The conditions were discussed with, but not really shaped by national governments. They do not particularly differ across countries (with the exception of Spain which up to now only applied for money for its banks). These «foreign owned» rather homogenous conditions were then pushed through national parliaments using emergency procedures, arguing that this was the only way to prevent insolvency and that the conditions were unalterable and dictated by the «troika».

The measures requested by the memoranda are actually rather broad. They contain not only deficit reduction goals but also stipulate the reform of labour market regulation, wages and pension schemes, competition laws, licensing procedures, privatisation etc. Some of the reforms called for in the memorandum had also been written into the national reform strategies which countries had to provide for the Europe 2020 strategy and which were evaluated by the European Commission in the European Semester.

However there are important blind spots in the memoranda:

– There is nearly no reference to the importance of research and development and of the need to make better use of or upgrade education and lifelong learning. This is despite of the fact that the failure to catch up in productivity was the decisive and unexpected component of rising unit labour costs. If the memoranda refer to education and innovation thy stress efficiency losses, not insufficient expenditures.

- Strategies to boost exports or to make use of the chances of globalisation are neglected in the memorandum, despite the low share of exports to globalized markets and the negative attitude towards globalisation.
- No strategy is called for to make the seaports more efficient or to turn the southern countries into a trade hub with fast growing countries. The European periphery is not addressed as an entry point into Europe or a logistics centre in Europe for Asian or South American firms (through the use of special zones, less administration).
- Policy measures to boost alternative energy and to save imports of coal and gasoline are not mentioned.
- Demands for changes to the expenditure structure from expenditure into the past (military sector) to expenditure into the future (like combating high youth unemployment) are very rare. In the Greek memorandum the more intensive use of structural funds or money of the European Investment Bank is mentioned. Military spending and specifically imports of new weapons are not criticised.
- Distributional questions are not raised, although periphery countries have higher shares of poverty, a larger income spread, and a lower wage rate.[7]
- No memorandum mentions industrial policy. There is no proposal to foster or upgrade existing clusters to create of industrial or software parks, to define of industries in which countries had current or future strongholds.
- There is no critique of the European Structural Funds only providing one-sided finance for infrastructure (roads, airports) without supporting the creation of new firms and employment. There are a few measures to increase innovation and education.

Even if the memoranda address issues regarding promoting growth or increasing the level of funding from the European Structural Funds there are no quantitative targets for these goals. No qualitative goals are set for the volume of projects to be financed from structural funds or the EIB, and no goals are set for the level of employment to be generated by new firms or inward direct investments (FDI). All quantitative goals refer only to cuts in expenditure (and raising revenues, including through privatisation receipts).

Not surprisingly the attention of governments and the media concentrated on the issues of cutting deficits and wages. These two strategy elements are the most visible ones and they are monitored particularly closely. Thus the passive and

[7] Interestingly the Portuguese memorandum raises distributional questions directly. It clearly recommends distinguishing between cutting low and high wages, low and high pensions, and it advocates an increase in property taxes, and the elimination of tax exemptions specifically those effecting high income.

restrictive parts effectively dominate; and thus become overvalued in the public discussion, which in turn reduces confidence and long run investment.

A reform strategy should rather be based on an analysis that addresses the specific problems of the country, its comparative and competitive advantages and its weaknesses. Based on these analyses a vision should be developed of how the country should look in 2030, embedded in a globalized world, given the resources and trends in social, ecological, health systems, and demography. We come back to this in section 6.

Table nº 12. **INCOME DISTRIBUTION IN PERIPHERY COUNTRIES**

	GINI			Poverty rate			Wage share		
	1995	2005	2005 Rank[1]	Mid 90s	Mid 2000s	Mid 2000s Rank[1]	1995	2007	2007 Rank[1]
Greece	0.336	0.321	18	21.7	19.6	19	40.9	47.7	24
Spain	0.371	0.319	17	18.6	21.0	23	62.1	65.6	12
Portugal	0.354	0.385	25	22.1	20.7	22	66.0	73.1	2
Periphery 3 (P3)	**0.354**	**0.342**	**20**	**20.8**	**20.4**	**21**	**56.4**	**62.1**	**13**
EU 15	**0.284**	**0.295**		**16.1**	**16.4**		**66.2**	**65.6**	

[1] Within EU 27. - Periphery 3 (P3): Greece, Spain, Portugal (unweighted average).
Source: Eurostat (AMECO); OECD; The Standardized World Income Inequality Database.

5. A NEW INDUSTRIAL POLICY: GENERAL CLAIMS AND A DEFINITION

The biggest blind spot in current reform programs is the lack of an industrial policy and a lack of focus on which industries and sectors the periphery countries actually want to specialize in and excel at. The small and declining manufacturing sector is one reason why the crisis came about and why current account balances were so much in the red. Furthermore, the structure of manufacturing is weak and makes the countries vulnerable to the competition from low cost producers.

In this chapter we address why in general there is a renewed interest in industrial policy, how industrial policy performed in the past, and which new concepts exist.

Renewed interest in industrial policy

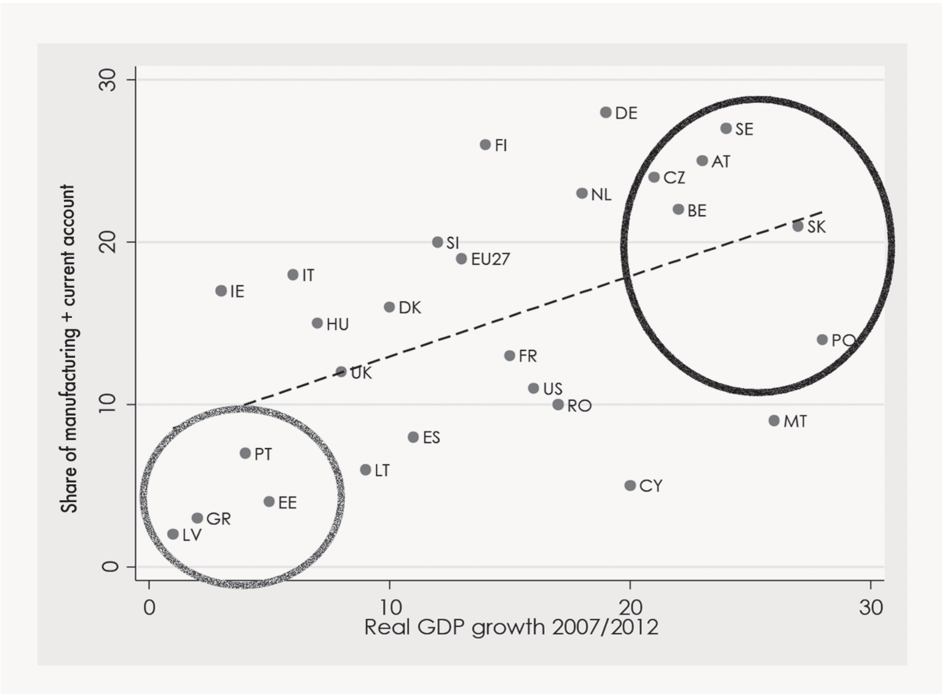
The renewed interest in industrial policy came about due to different challenges and disappointments.

– One reason for the renewed interest is the increasing competitive pressure from emerging countries (globalization), and the inroads of some countries specifically from Asia on the world market (with high exports to industrialized countries). In Asia the manufacturing sector has a high priority. Governments proactively set goals, provide industrial zones and parks, and support their (Asian style) industrial policy.

– A second reason necessitating a new look at industrial policy specifically in Europe was the persistent technology lead of the US, and the inability of Europe to achieve the so-called Lisbon Agenda goals e.g. raising research and development expenditures to 3% of GDP.

– But the call for a new industrial policy was raised also in the US. Here it was specifically fuelled by the large and increasing trade deficits in general and specifically with China . Without an industrial base, relying on exports of services alone, analysts think that trade and current account deficits cannot be narrowed.

Figure nº 7. **DEPTH OF THE CRISIS VS. INDUSTRIAL BASE RANKS FOR PERFORMANCE AND INDUSTRIAL BASE**



Remark: industrial base = share of manufacturing/GDP 2007 plus share of current account; the sum is ranked (low rank = 1); output performance = change in real GDP growth (lowest rate = 1).

Source: Eurostat (AMECO).

– Industrial policy was further encouraged during the recent financial crisis. Initial empirical evidence shows that *the lower the manufacturing base was in a* country the more it was hit by the crisis , and that the more this sector had been eroded over the previous years the larger the current account deficit at the start of the crisis (Aiginger, 2011). Countries with a large and stable industrial base and positive current accounts like Sweden (see figure nº 7, on the right) and Austria had less deep declines in GDP.[8]

– Last but not least, industrial policy has been spurred on by pressing new challenges and societal needs. This relates to the need for technological solutions to environmental problems, climate change, and resource shortages (peak oil), but also for health issues and ageing.

The content and failures of industrial policy in the past

Industrial policy was executed differently in Europe across time and across countries.

As far as the time-line is concerned industrial policy started with the Community for Iron and Steel. Then for a long time Industrial Policy remained primarily a national policy, which had at first a more sectorial approach (French style, large project, national champions). This was followed by a period of horizontal policies for competitiveness (German style, general «measures» not discriminating between sectors). The EU followed mainly the horizontal approach since the first treaty did not mention industrial policy at all. In the nineties it then even looked as if industrial policy was a dying breed (Aiginger, 2007), but then it re-emerged in a «matrix type» approach. This was mainly horizontal but acknowledged that horizontal measures impacted differently across sectors and had to be complemented by sector specific measures. This developed into an «Integrated Industrial Policy» (EU Communications, 2010), which addressed issues of globalisation and climate change and tentatively put forward a list of sectors of specific importance for Europe.

As far as actual policy instruments are concerned, empirical analyses of previous strategies reveal that countries relying on state aid and regulation as their main instruments of industrial policy displayed inferior macroeconomic performance (as measured by a set of indicators on economic dynamics, employment and the stability of the economy), while countries focusing on an industrial policy based on promoting positive externalities had superior macroeconomic results (Aiginger and Sieber, 2006). A group of Scandinavian countries (Sweden, Finland, Denmark) invested heavily into R&D and education and specifically focused on ICT industries and produced and executed an industrial policy which had the goal of promoting a knowledge driven economy (Aiginger and Sieber, 2006).

8 Budget deficits and debt/GDP ratio were far less able to explain country differences during the crisis.

Ten elements for a new industrial policy proposed by literature

The renaissance of industrial policy after a period of less importance will and should not be a mere revival of old industrial policy and specifically it should avoid its past failures. It needs to be broader, greener, have less focus on specific firms and be better interlinked with other policies and societal goals.[9]

The following elements seem to be characteristic for the new approach. A new industrial policy should:

- be a state of mind and a discovery process creating a climate of cooperation between the government and the private sector. It should generate positive spill overs to other sectors and not be based on purely financial incentives or picking winners (Rodrik, 2011);
- rebalance the economy away from the financial sector and towards non financial sectors such as manufacturing (Johnson, 2009);
- target activities and broad sectors, not just firms; it should promote new activities rather than preventing exit, and should follow markets instead of leading them;
- diversify economies and create new comparative advantages, and stimulate exports not prevent imports;
- be pro-competitive instead of being the adversary of competition policy. Industrial policy should not protect national rents or vested interest (for which older industrial policy was often criticised).
- The government should only intervene where it has a lasting interest (not only for short run goals like retaliation or to rescue employees in distressed regions or to lessen the depth of a recession); it has to be connected with societal needs. The winners from an industrial policy should be society not firms (Aghion, 2011A, 2011 B; or Rodrik, 2008, 2011);
- The state is an important source of new technologies; procurement policy should actively promote innovation, specifically also innovation in a non-technical direction i.e. social innovation and ecological innovations. The vision of an entrepreneurial state pushing new generic technologies may be a little overoptimistic, but government decisions are important if big changes in technology or society are to happen, due to path dependency (Mazzucato, 2011);
- Industrial policy is necessary to prevent «lock in» situations in the sense of investing in old technologies. Producers of «dirty products» tend to

[9] See Rodrik (2011), Johnson (2009), Großschädl (2012), Aghion (2011).

innovate in «dirty programs». In a nutshell Agion et al. (2011) claim that new research follows old paradigms and firms invest where they had been strong in the past. The task of industrial policy is to prevent decisions being dependant on following a conservative path.

– Industrial policy should no longer be an isolated policy. It has already merged with innovation policy, it further needs to build up and be supported by education policy. It needs to be systemic, pushed by competition and pulled by beyond GDP goals (Aiginger, 2012);

– There should be benchmarks and criteria for both success and failure, which depend on productivity and exports; if goals are not attained with policy support, subsidisation should end according to clear predefined rules.

Of course there are caveats. Procurement policy with specific goals can result in protectionism in disguise. «Following the market» versus «concentration on new activities» can be a trade off; enforcing exports can be an argument for preventing imports with some mercantilistic background etc. And we know that firms will behave strategically and lobby for public support, maybe by overstating current and future advantages for society etc.

Whatever the new features are, however different they can be from those in previous policies, the current mood is one greedy for a new industrial policy. There are already discussions in this regard in the US, in the UK and of course in France (albeit here with an open anti globalisation spin). The European Commission is going for an Integrated Industrial Policy, and the IMF and the World Bank endorse its use in developing countries.

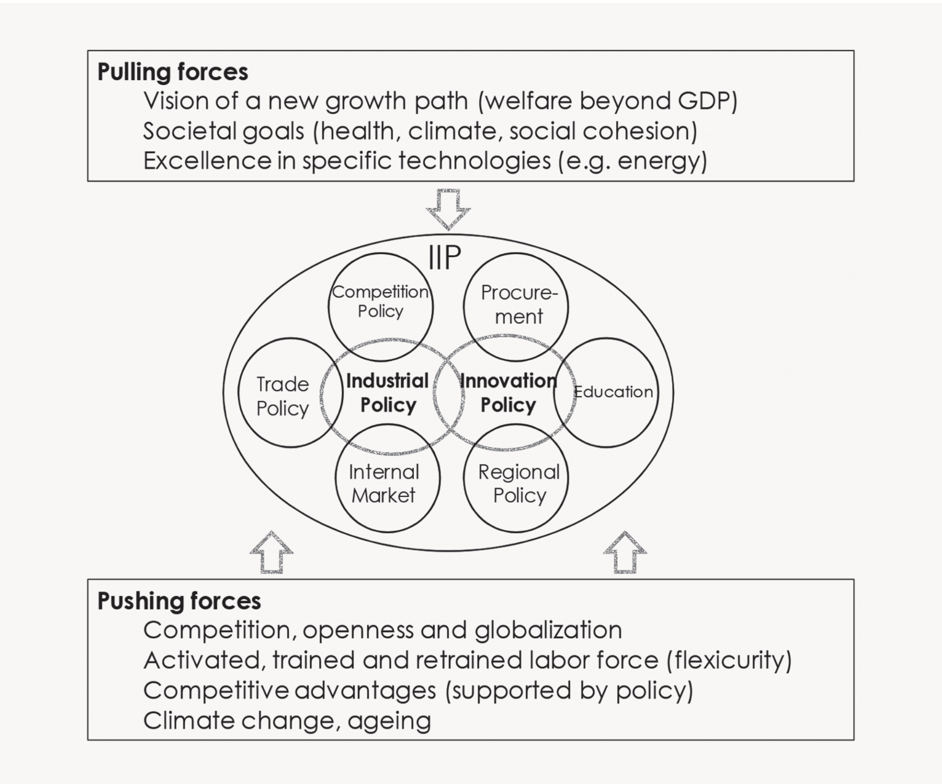
A systemic industrial policy according to Aiginger, 2012

The new ideas about a future oriented industrial policy can be best summarised by trying to define a «systemic» policy, and given that industrial and innovation policy are about to merge, at least for developed countries, we could actually call it a «Systemic Industrial and Innovation Policy» (SIIR).

A future oriented industrial policy has to start from the challenges revealed by globalisation and from the financial crisis. It has to be based on research and education, and needs to merge with innovation policy. It has to encompass small as well as large firms, and promote close ties between firms and universities and cooperation between firms and universities (clusters). The education policy needs to be able to provide equal opportunities at the outset as well as promoting lifelong learning. Innovation systems are superior if they actively draw from the common international knowledge pool, thus integrating international researchers and also migrants and newcomers is important. The manufacturing sector remains competitive if an economy is open to imports and inward FDI so that it can make use of the division of labour along the value chain. A new industrial and innovation policy fosters competition and grasps the advantages of globalization. An eagerness to understand different cultures, languages and business attitudes are all essential.

Industrial policy has to be systemic in the sense that it is derived from the goals of the society as a whole. If the welfare function of a European citizen places a high value on rising incomes, social inclusion (less wage dispersion), regional equilibria, a stable financial system and sustainability, then industrial policy has to promote these goals e.g. by shifting innovation towards social and ecological innovation, while keeping competitiveness and the potential for rising incomes. Furthermore, industrial policy should make use of those forces which promote change, and foster higher incomes, such as competition and globalisation. Thus a Systemic Industrial Policy is pulled by vision and pushed by competition (see figure 8).

Figure nº 8. **THE SYSTEMIC INDUSTRIAL AND INNOVATION POLICY (SIIP) IN A NUTSHELL**



Source: Designed by the author.

6. THE SPECIFIC NEED FOR AN INDUSTRIAL POLICY IN THE PERIPHERY

6.1. Missing element

A surprising feature of the renewed interest for industrial policy is that the discussion is lively in highly industrialized countries (US, UK, F); it is present in policy recommendations from international organisations for developing countries (World Bank etc.) but it is next to non-existent in the southern periphery countries. Not one sentence about industrial policy exists in the Memoranda of Understanding, very few attempts to formulate an industrial strategy exist in the countries themselves either before or after the crisis.

Ironically though many of the arguments which lead to a renaissance of industrial policy in industrialised countries specifically apply to the periphery. The share of the manufacturing sector is decreasing rapidly in this area and is now below 10%. Services and specifically high value added services are unable to fill the gap today or in the near future. This results in a negative current account balance. We summarise in the next section arguments specifically supporting the use of an industrial policy in the European southern periphery.

6.2. Specific need for the periphery

Forward looking specialisation is needed

For periphery countries there is the danger of a dynamically wrong specialization in industries in which competition is defined predominantly by low labour costs. Given today's competitive advantage the southern periphery would specialize in low wage industries. This has happened in the past (see high share of apparel and shoe industry). But low cost competitors (from Eastern Europe and Asia) will substitute exports from southern Europe sooner or later. Low wage competitors are expected to permanently enter the market over the next few years; maybe from the Black Sea Area, Central Asia, Africa, India or South America. Industrial policy must help to upgrade existing low skill industries and to induce firms and foreign investors to invest only in niches, or in the highest segment of the value chain in which a country with European wages can compete in the medium and long run, thus preventing the «development trap» (a term used in development economics to indicate specialisation of countries in industries with a low income elasticity).

Closing the productivity gap

Periphery countries have deficits in innovation, in education and training. These activities are crucial for competitiveness even for medium income countries, and are necessary for provide spillovers, they are the constant upgrading of existing firms. The innovation system in the wider sense is shaped by the government even in advanced countries, and specifically in lower income countries. Periphery countries were, over the past 10 years, unable to close the technology gap with the core countries. They need much higher Inward Foreign Direct Investments, which has to be supported by an industrial policy.

The high share of expenditures on the past (pensions, military), the high statutory taxes (which lead to less than average tax receipts). A large informal sector and low tax compliance are all problems for new firms and foreign investors. High statutory taxes and administrative hurdles have to be compensated for using fast track procedures and subsidies in the short run (which are eliminated in the medium run).

Infrastructure, regulation, housing

Infrastructure is all-important for growth in a medium income country. While investment in highways was strong, the complementary investment in industry or software parks and the restructuring of the ports was neglected.

Competition laws and licensing are rather restrictive and insiders are often favoured over newcomers. Furthermore, labour laws are restrictive for permanent contracts and often provide insufficient security for irregular contracts (e.g. so as to motivate training).

Housing is dominated by private ownership and therefore built in the informal sector. The former lowers mobility (as compared to rented houses) and the second tends to make use of traditional instead of energy saving techniques.

Alternative energy

New technologies inter alia in alternative energies are heavily subsidized in other countries, and many firms leading in these technologies use their home market for the learning phase in which unit costs decrease up to the point when the new technologies become viable without subsidies. China is starting to be a competitor for standard parts for new technologies since it started with large quantities on the domestic market. Southern Europe would be an excellent region for testing technologies using sun and wind. However, the investment in southern Europe is too low (with exception of Portugal). Few firms exist and from those only a few actually then make the break through to a medium size and to exporting. In addition consumers are not demanding niche solutions (see Michael Porter's argument of sophisticated consumers being a driving force).

6.3. **Four pillars of a «Southern Industrial Policy»**

An industrial policy in periphery countries would look somewhat different to that for a country with a high per capita income.

- One pillar has to be to attract inward foreign direct investment in order to accelerate technology transfer. Given the reluctance of firms to invest in a region with low productivity and insufficient infrastructure, there must be special programs to attract firms, ranging from image building strategies, to investment zones, to the temporary elimination of red tape and lower taxes. The rules of the Common Market are not necessarily compatible with some of these measures. However, the rules for temporary programs to attract investors could be a component in the contracts between the southern countries and the troika. International organisations like the EIB, the Worldbank or the IMF could offer help to make investment by multinational firms in the southern periphery more attractive.
- A second pillar could be transfer institutions, which close the gap between industry and education. Education may not be optimal in southern countries, but it is much better than in other countries which are attractive for FDI (scores are about OECD average in Pisa study). But the education system is not connected to firms, so that qualifications supplied differ from those actually needed. In order to reduce youth unemployment, which is about 50 % in the three countries, a system of apprenticeship is needed.
- A third pillar has to be the entry and growth of new firms. Many businesses are created in the southern periphery, but firms do not grow. Most small firms are micro firms without employees or only with a single employee. Some institutions guarantee cheap credit and venture capital is needed to be able to take the step from a small firm to a medium sized one. However, lowering administrative hurdles and support with business services are also essential. Software houses and industrial parks in which young entrepreneurs can share services necessary to make this leap and form a micro to a small one or «gazelle» could be provided.
- The low export shares and the reluctance to use the advantages of globalisation should be addressed by a fourth pillar. Exports can be promoted by offering export services or shared marketing activities in foreign markets.
- In summary industrial policy is specifically needed in the southern periphery, but it does not exist and neither is it promoted by governments nor by international institutions. The reason probably lies in previous negative experiences with subsidies and cosy relationships between governments and ailing firms. Subsidies had been concentrated towards large firms (*Neto*, 2012), which run into problems, after missing market opportunities thus effectively saving losers. Such a strategy goes little way towards promoting necessary change and indeed detracts away from the need to focus on innovation. «Saving the losers» or picking one large firm (with close relations to the government) as presumed «winner» have been particularly pronounced in the southern socio economic systems.

7. TOWARDS A STRATEGY FOR THE SOUTHERN PERIPHERY

Analytical results

The problems of the three southern periphery countries do contain different elements, but the countries share common elements.

– Spain, Greece and Portugal (and southern Italy too) have lost price competitiveness in the period prior to the financial crisis. This happened partly since wages were rising faster than the European average, which is to some degree to be expected for low income countries. The main part of lost price competitiveness was the result of productivity failing to catch up. This is unusual for low productivity countries, specifically in a region of strengthening economic integration.

– The three countries tried to regain price competitiveness by lowering wages over the past four years, and are now back with relative unit labour costs at their 2000 level relative to most European countries. This was, however, not the case relative to Germany, which followed a low cost strategy quite unusual for a leading GDP per income country (Aiginger, Leoni, 2012). Even if wage restraints initially seemed necessary to cope with the extra costs of German unification, it now leads to large surpluses in the current accounts which cannot be compensated for by a low wage strategy in the periphery.

– The current account balances of southern Europe were deeply in the red in 2008. In addition to the loss of price competitiveness, consumption and public expenditure were extremely high thus boosting imports. Exports and investment shares in GDP were below European average. The current account deficits were reduced to a large extent over the last four years (less so in Greece), but it is not clear whether this correction will be sustainable if the economies recover.

– The periphery countries have structural problems. The manufacturing sector is small and declining and it is concentrated on labour intensive and low skill industries. Its exports to rapidly growing countries are small specifically relative to its geographical location. Globalisation is seen as a threat and not an opportunity. Tourism is missing many changes. Foreign direct investment is low (specifically in Greece), the same holds for research expenditure. Education is not linked to the needs of the economy and labour and product markets are regulated. Institutions do not favour change.

These findings lead to the conclusion that the transfer of technologies, changes to industrial structure, the promotion of new firms and their growth and the reform of institutions are all important for periphery countries. All these aspects can and would be covered in an Industrial Policy Strategy; however, one differing from the cosy relation between large firms and administration which in the past has been typical in the southern periphery. But surprisingly, although discussions regarding a new interest in industrial policy for industrialized countries as well as for developing countries have begun, no such strategy is so much as mentioned let alone actually discussed for the southern European periphery. We therefore put industrial policy at the top of ten proposals for a strategy for reform in the peripheral countries.

(1) *The role of an active, forward looking, systemic industrial policy*

Industrial policy in the traditional sense of supporting ailing industries, decelerating structural change and preventing exit is out (and that is positive). Industrial policy in the sense of promoting new firms, allowing market entry, and business start-ups is non-existent. Cluster policies do not exist; tax incentives are not planned (partly out of budgetary considerations but probably also due to an existing system of high statutory taxes and low compliance). Fostering education/ innovation is not a priority due to a shortage of money and because they are thought to only have long-term effects.

While industrial policy in rich countries is being revisited there is nothing similar for those economies catching up. For rich countries the motivation behind new policies are (i) that countries with a low share in manufacturing and a current account deficit suffered more severely in the financial crisis, (ii) that industrialised countries are losing market shares to China and other Asian countries which are promoting industries and exports in an active way (with emphasis on some sectors), (iii) that a free market without state intervention, specifically in low interest regimes, shifted resources from manufacturing to bubble prone «non tradables» with low long-run productivity (real estate, construction, finance) and shifted the focus from innovation to speculation, (iv) that the current situation is that innovation is used as a stick and it does not embrace changes in societal priorities (e.g. danger of climate change or social and ecological innovations).

A forward-looking industrial policy should be proactive, fostering innovation and competition at the same time, and activities with positive spillovers. No concept of industrial policy is available for peripheral industrializing countries with a high productivity gap (or those falling behind after a period of catching up). Concepts for developing countries do exist and in a nutshell focus on education and selective FDI with complementary national policies for endogenous firms and suppliers. These measures should prevent «persistent core-periphery patterns and the development trap».

(2) *Strategies have to be empirical based, and nationally «owned»*

At the start of the reform process there needs to be an analysis of the problems faced by a particular country including how they arrived at their current situation.

These analyses are, in principle, already available in publications by many renowned economists, by the EU Commission and the OECD. The strategy applied, has to be nationally owned, this means that the government of a country develops a strategy in the interest of its own country, and not because an outside organisation demands the reforms. A strategy developed by international experts is often more heavily opposed than a home grown strategy (and it is different from a nationally developed strategy). This does not mean that the strategy can ignore some limits (e.g. in public debt), but within these limits there is room for manoeuvre.

(3) ***A strategy starts from a vision where a country wants to be in 2030***

Based on the analysis of its present status, the first step for planning reform should be to develop a vision where the country wants to be in 20 years, after the consolidation process. The vision essentially has to come from the country itself, taking into account the goals of Europe, such as those outlined in Europe 2020, and also the challenges of globalisation, new technologies, welfare reforms, climate change and ageing. Europe needs to move towards a more dynamic, inclusive and sustainable model. The periphery countries should define their role within this new model (as envisaged in the WWWforEuroe project, tendered by the DG Research and performed by 33 institutes lead by WIFO).

(4) ***An active component in the consolidation period is necessary and feasible***

This vision will deeply influence the structure of the short and medium-term reforms, even if these by necessity will be restricted shortage of money. It is essential that short-run measures are designed with the perspective of longer run goals and the position a country will take in the globalising world of tomorrow. The restriction in the aggregates necessary for budget consolidation (e.g. lower public expenditures and higher taxes) has to include structural shifts (structure of expenditure and taxes), which lower the dampening impact on effective demand in the short run. Expenditure should be shifted from administrative expenditure (preventing activities and business starts) to growth promoting expenditure (and those with high employment content); taxes should be shifted from those specifically negative for growth to those less negative for growth and employment. By increasing (i) the confidence of agents, (ii) attracting neighbours and partners to invest in the country and (iii) assessing their own advantages, the long-run effect of consolidation could be higher growth and achieving the goals for society. Structural effects may outweigh aggregate effects (or at least dampen them in the long run).

Today the periphery countries are completely stuck in reverse gear. The over-arching goal is to save money and to cut deficits. There is no sign of a proactive component, no vision about what should be done to develop new industries and services, to create and support competitive firms and help clusters to grow.

(5) ***To complement «internal» devaluation by boosting productivity***

It is important for European periphery countries, which have lost competitiveness, to undergo some internal devaluation (making production cheaper as to boost exports). But it is not sufficient to cut wages, specifically if the low increase in productivity was the reason for rising unit labour costs. It is evident that sheltered sectors and specifically all layers of government paid excessive wages and hired too many people. But wage restraint, cuts in pensions and dismissing civil servants is the easier part of a strategy. The forward-looking part involves reforming administration, increasing tax compliance, and using the European Structural Funds more intensively and more effectively.

Labour costs were rising faster than in other European countries up to 2008. But the catching up of wages is a natural process for countries with lower incomes. The exceptional problem was that productivity failed to catch up; this is the real cause of higher unit labour costs. Since 2008 the periphery countries are moving in the direction of an «internal devaluation». Wages did not increase, while productivity increased a little bit leading to lower unit labour costs specifically as compared with their European partners. In 2012 relative unit labour costs returned to their position in 2000 for the (unweighted) average of the European partners.

(6) ***Help from surplus countries can not only be financial transfers***

The periphery has regained competitiveness to the level of 2000 relative to most of its other European partners. The exception is Germany, in relation to which a gap of 11% remains between the position in 2000 and 2012. This results from an exceptional strategy by Germany to regain competitiveness after the costs of German unification by dampening wages, cutting social expectations and cutting social expenditures (Aiginger - Leoni, 2012). Thus strategy has been continued after its cause (high labour costs) had been eliminated and Germany now accrues a large surplus in its current account balance. It does not make sense for the periphery to unilaterally close this gap through additional wage restraint. Low wages increase poverty and reduce consumption as well as reduce the pressure for structural change. Disequilibria have to be eliminated from both sides, especially if one country applies a low cost strategy- usually not fitting for a country with high income in the past.

(7) ***Reform of innovation system, education, regulation***

The southern periphery countries suffer from closed shops, low product market competition, regulated labour markets with insider/outsider problems, large administrative costs, and an abundance of rules and restrictions for doing business. Reducing these barriers would have a similar effect to internal devaluations.

Structural funds were underused by periphery countries due to administrative failures. Funds were channelled into large tangible infrastructure such as highways and airports. The funds should be fully exploited and the money should be rechanneled into industrial zones, business start-ups, and training and retraining. There is still the danger, that the pro-active component of the June meeting («130 bn €» growth compact) is once again used for large projects, which have a low impact on production and exports.

The Southern periphery countries have low expenditure on R&D, and consequently a low output for innovation. Innovation in very small firms are reported, but these firms do not grow into medium sized firms. There is expenditure on education comparable to other EU-15 countries, but the overall level of education is low and the countries rank low in the Pisa ratings. Investment in lifelong training is low and active labour market policy is underdeveloped. Labour markets are heavily regulated and characterized by insider/outsider problems and higher wages in the public sector. Pension systems are different with Greece having net pensions higher than income from work.

(8) ***Closing the export deficit and changing attitudes to globalisation***

It is incredibly surprising that the southern periphery countries have exports 10 percentage points lower than landlocked countries and that globalisation is seen as a threat and not an opportunity. Historically periphery countries led the way in the globalisation process. Other European countries at the periphery have much higher exports in general and to non European countries and a positive attitude to globalisation (Ireland, Sweden). Promoting exports would close the deficits in current accounts and is especially needed in a period of consolidation in other European countries. The southern European countries could be the bridge between Europe and the dynamic economies in Black Sea Area, in the Arabic World and North Africa, and (at least those in Portugal or Spain) South America and Asia. The existing harbours have the potential to become logistic centres for imports as well as industrial areas for export intensive industries.

(9) ***Upgrading tourism***

Income from tourism is stagnating relative to GDP and receipts are lower per tourist than in other European countries. The southern periphery is losing shares in the world tourism market and makes no use of the chances from an ageing society in Europe, and the opportunities from health tourism.

(10) ***The periphery could become a centre for alternative energy***

The economies are still based on the imports from oil, gas and on the use of coal. They could however become a specific centre for developing alternative technologies, where these are «going down» on their cost curve. The use of solar or wind energy would be much easier in these countries than in most other European countries. Portugal is moving in this direction.

A new strategy is necessary and feasible

In summary there are chances for the periphery to switch back to the catching up process, which worked up to the nineties. The southern European countries underestimated the changes needed in a globalizing world, as other low cost countries made inroads in the sectors in which they had competitive advantages. The way back to the catching up trajectory is not easy in a period of budget consolidation, but it has to start in this period, otherwise the economies will not return to growth and become politically destabilized. A large dose of industrial policy is necessary, since many of the problems are connected with a small declining manufacturing sector, specialized in industries where the competitive advantage is being eroded. In a wider sense this industrial policy will include quality tourism and high value added services. An industrial policy for periphery countries will look different to that of high income countries, and it hopefully will build on competition and innovation, not on subsidies for a small number of large ailing firms.

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