

Economic convergence in the EU : stylized facts and new challenges after the financial crisis?

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ARE WE LOSING THE SOUTH ? *

* In french, "losing the north" means losing one's bearing or one's head.



Some futuristic quotes

- ▶ "True, if creditworthy members were to transfer resources to the uncreditworthy on a large enough scale, the eurozone might be kept together. But even if such a policy could be sustained (which is unlikely), it would turn southern Europe into a greater Mezzogiorno", Martin Wolf, *There is no sunlit future for the euro*, FT, October 18, 2011
- ▶ "Life is still far from easy in the peripheral states of the United States of Europe (as the euro zone is now known). Unemployment in Greece, Italy, Portugal and Spain has soared to 20%. But the creation of a new system of fiscal federalism in 2012 has ensured a steady stream of funds from the north European core. Like East Germans before them, South Europeans have grown accustomed to this trade-off. With a fifth of their region's population over 65 and a fifth unemployed, people have time to enjoy the good things in life. ", from Nial's Ferguson *2021 : The New Europe*



To put it differently...

- ▶ Are the difficulties currently experienced by some Southern European countries of a temporary nature ?
- ▶ Or, should we fear a more profound and lasting economic divergence between countries in the EA ?



Why does it matter ?

- ▶ It matters on its own sake for the countries concerned.
- ▶ It probably also matters for the conduct of monetary policy in so far as the absence of convergence would imply that the EA moves further from an optimal currency area.
- ▶ Finally, it matters politically to the extent that the European project and many European policies are at least implicitly based on the idea of deeper and deeper integration, which itself depends on some degree of convergence.



STYLIZED FACTS ON CONVERGENCE BEFORE THE CRISIS



A success story with some caveats

- ▶ Since its inception, the EU has experienced a robust convergence in GDP per capita between the "core" and the "periphery"
- ▶ This process has largely been driven by convergence at the **country level**
- ▶ Convergence at the **regional level** has been weaker, with some countries exhibiting regional divergence or sustained North-South or West-East divides
- ▶ The **correlation** between **unemployment** and **GDP** per capita is strong and persistent within some EU countries, while much weaker at the national level.
- ▶ Contrary to the US, intra-EU **migrations** play a relatively negligible role in the EU convergence dynamics.



Why do countries converge in the EU and not regions within countries ? (I)

- ▶ Why do we typically expect the Baltic countries, Slovakia and Slovenia to converge towards core EU countries in terms of GDP per capita... while we have gotten used to the fact that the Mezzogiorno is not converging to Northern Italy ?



Why do countries converge in the EU and not regions within countries ? (II)

- ▶ Part of the explanation has to do with **agglomeration economies** :
 - ▶ "The increase in economic disparities between regions belonging to the same country is the consequence of polarisation processes. Interestingly, the increase in regional disparities is deemed to be due more to the high performance of some regions, for instance capital and metropolitan ones, than to the sluggish performance of lagging regions." *
 - ▶ This observation is probably correct as far as developments in Eastern Europe are concerned, with economic growth typically concentrated around capital regions. The same is also true in more advanced countries for, say, the increasing GDP per capita of the Inner London region.

* EU Parliament (2007), *Regional disparities and Cohesion: What strategies for the future*, IP/B/REGI/IC/2006-201, p.iv



Why do countries converge in the EU and not regions within countries ? (III)

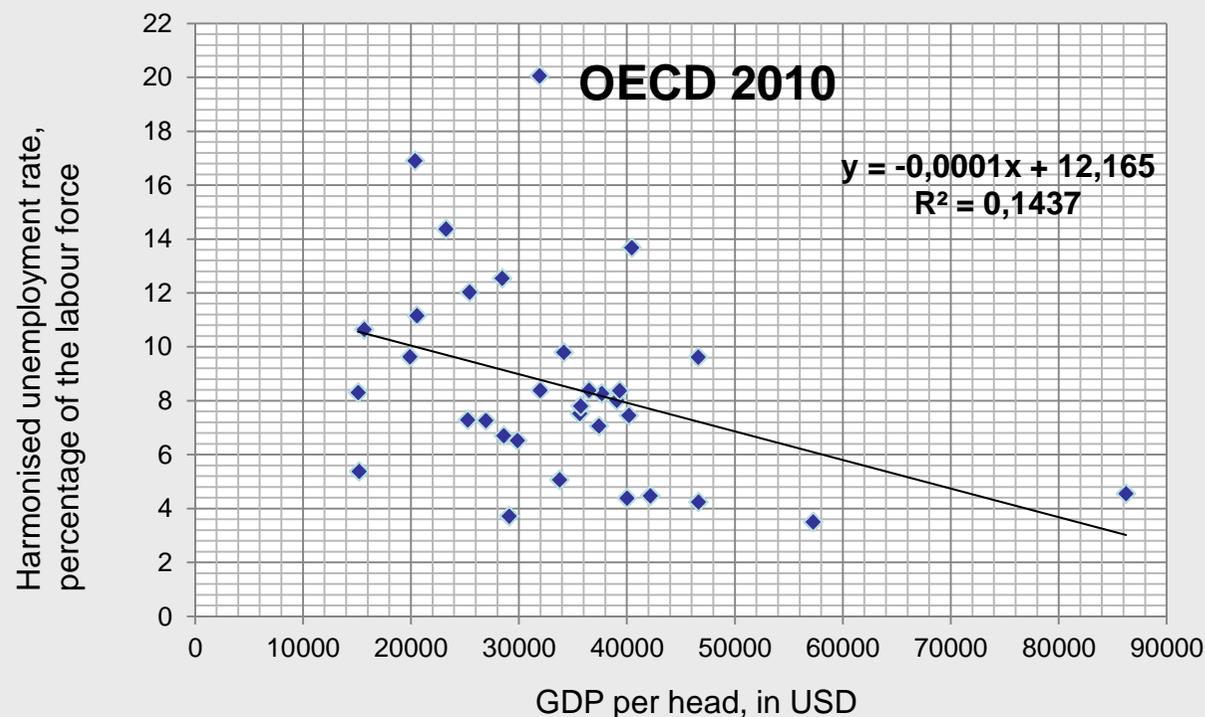
- ▶ But this "new economic geography" argument hardly explains the persistent "dualities" in some economies where low regional GDP per capita is highly correlated with unemployment rates
 - See North-South divide in Italy, Spain and Belgium
 - East-West divided in Germany

* EU Parliament (2007), *Regional disparities and Cohesion: What strategies for the future*, IP/B/REGI/IC/2006-201, p.iv



Why do countries converge in the EU and not regions within countries ? (IV)

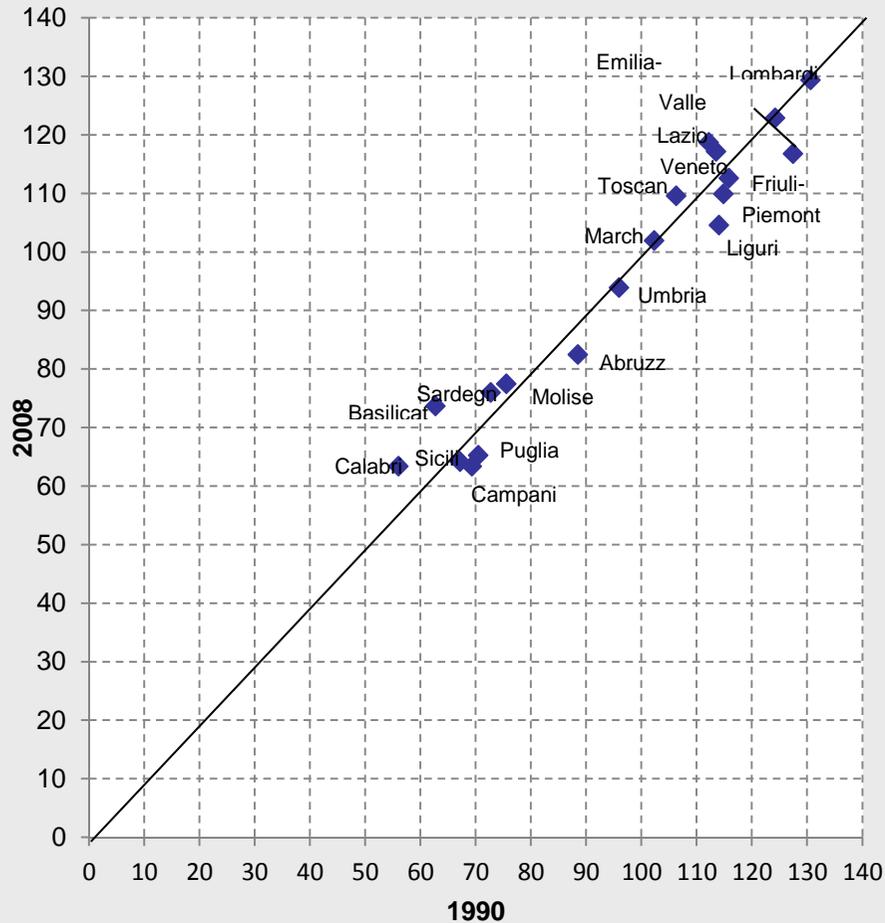
- ▶ Why do we tend to associate high unemployment and low GDP per capita at the regional level within countries...
- ▶ ... while the correlation between unemployment rates and GDP levels is much weaker - and inexistent over the long run - at the country level ?



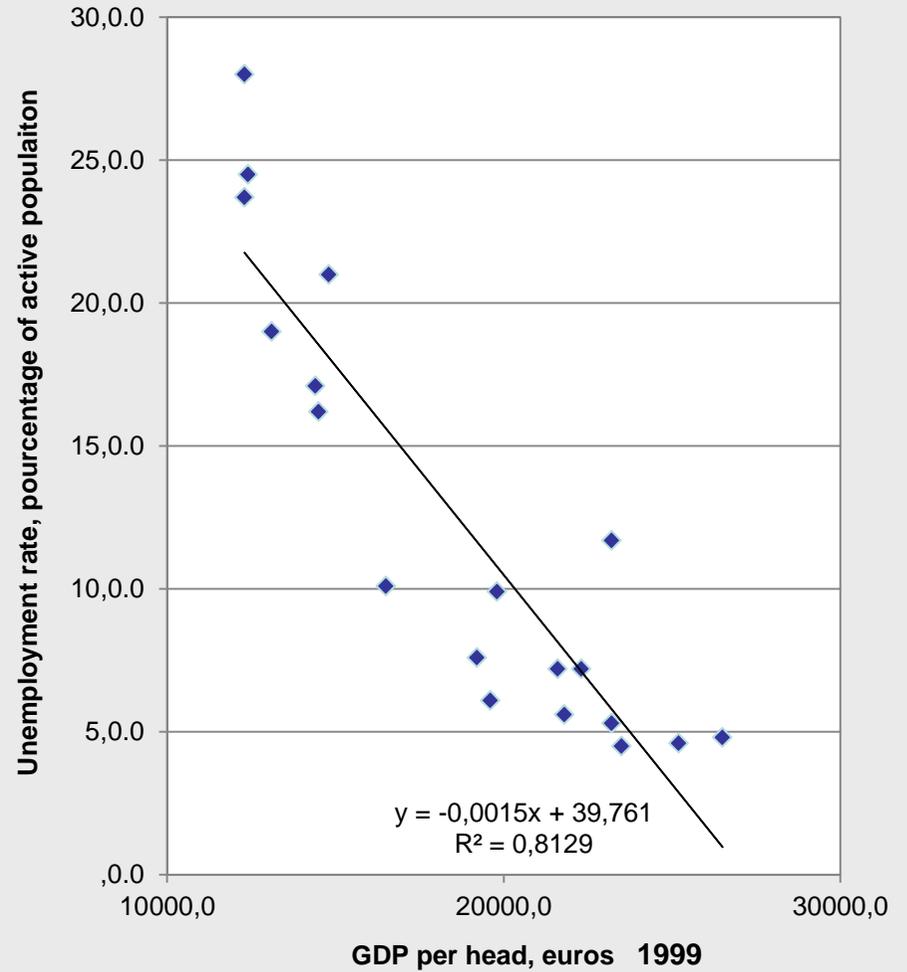
Source : own calculation based on OECD and Economy Watch data



Italy



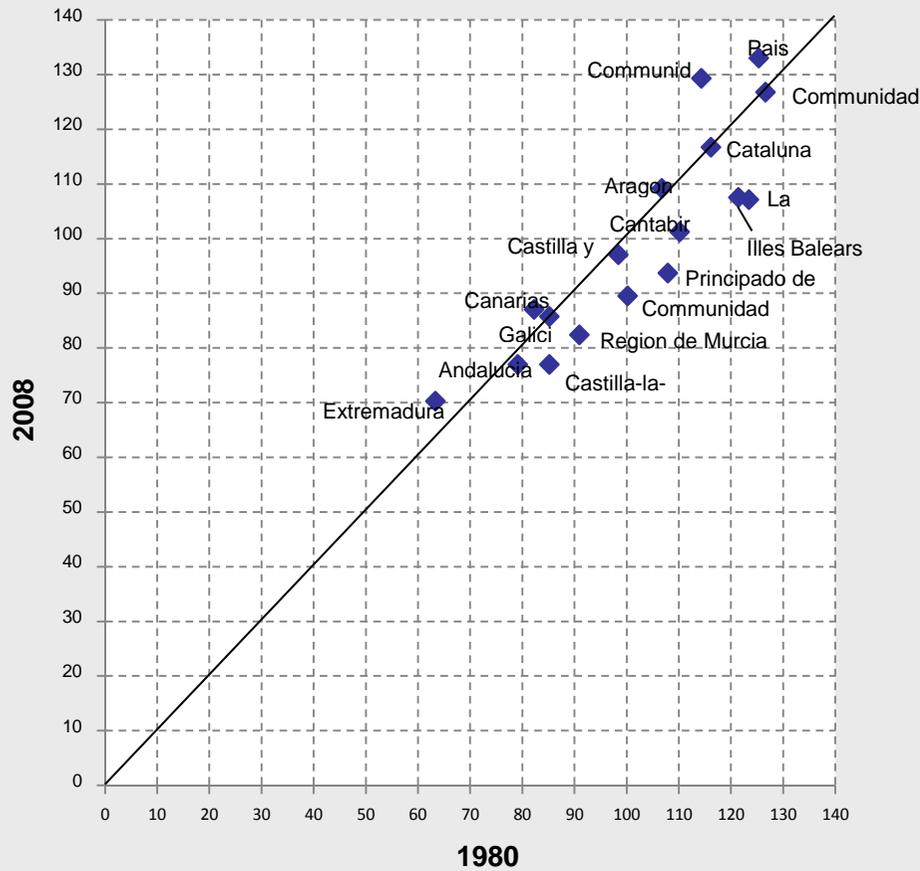
ITALY nuts2 - GDP per head
Country average = 100



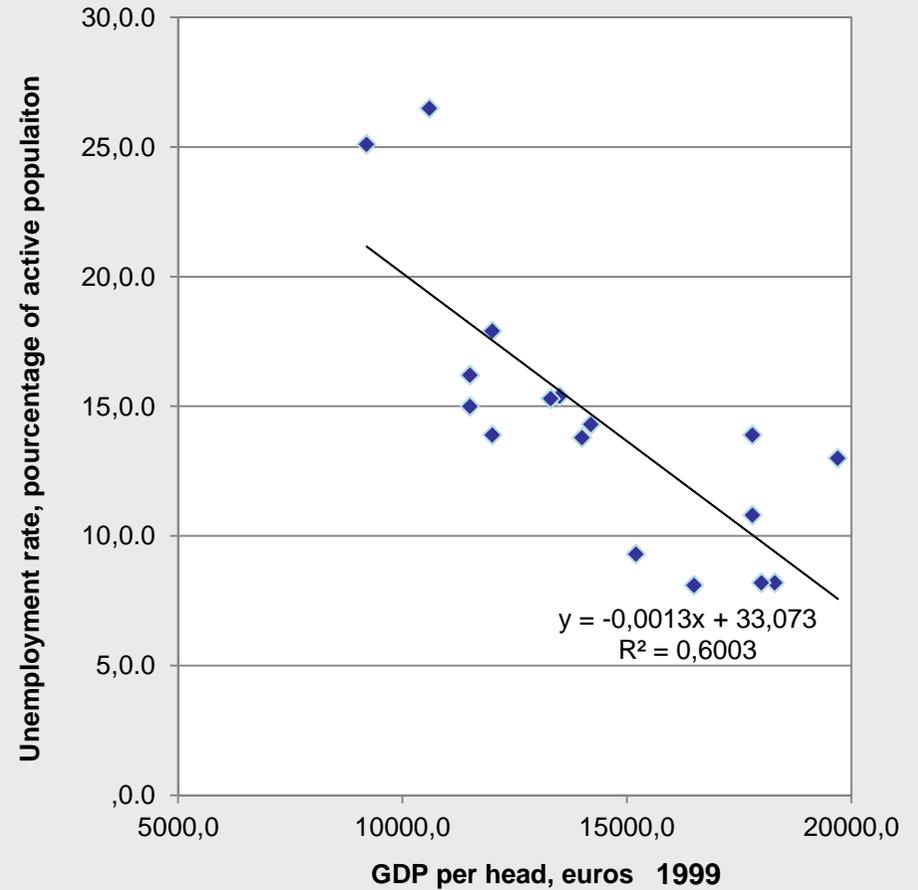
Source : own calculation based on Eurostat regional data



Spain



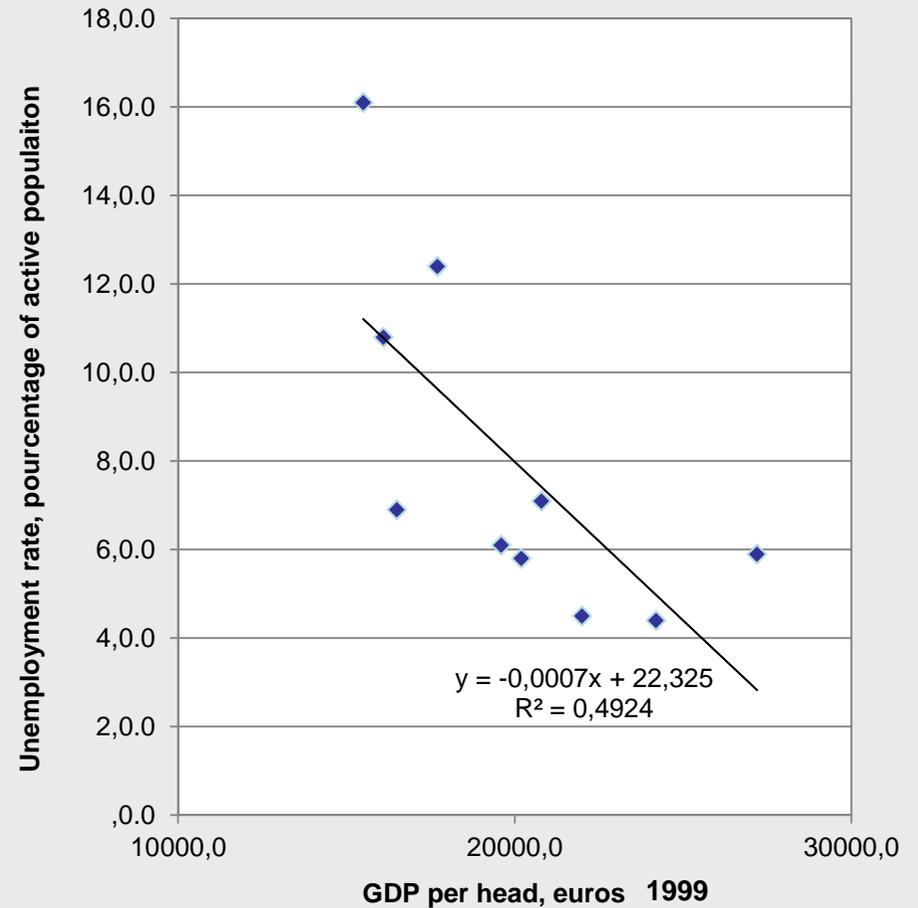
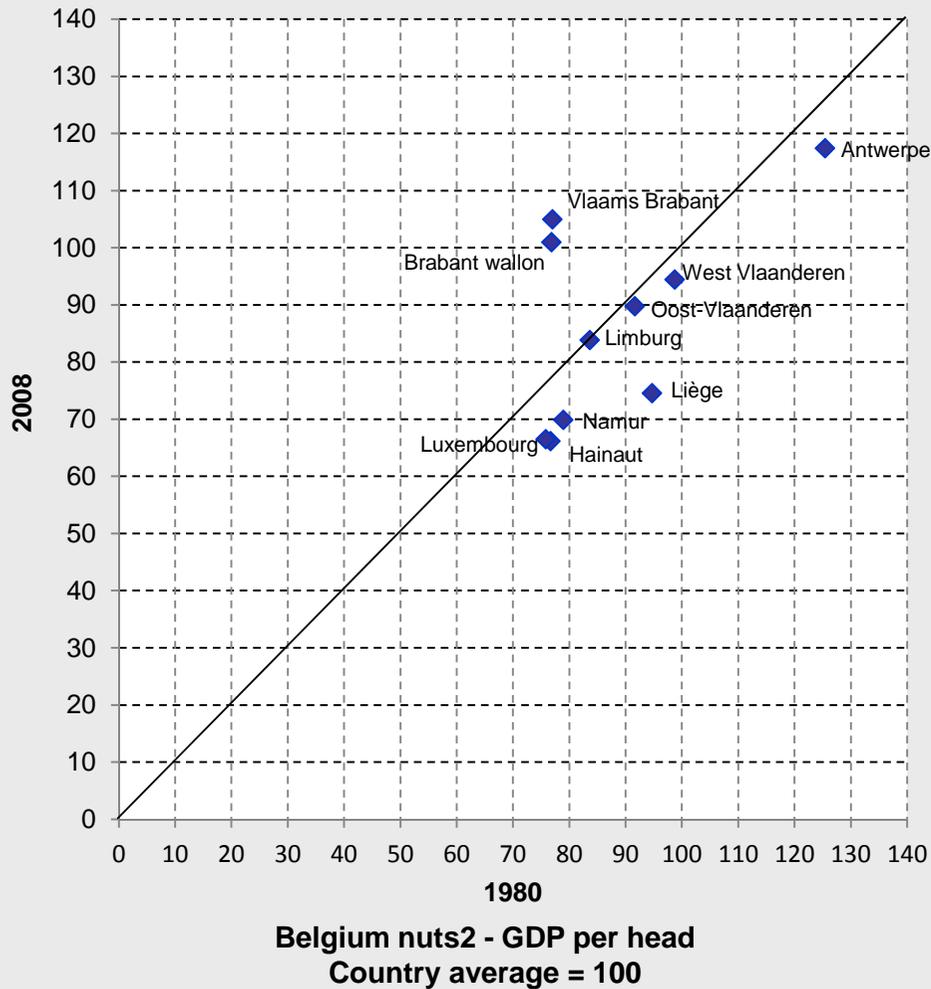
Spain nuts2 - GDP per head
Country average = 100



Source : own calculation based on Eurostat regional data



Belgium

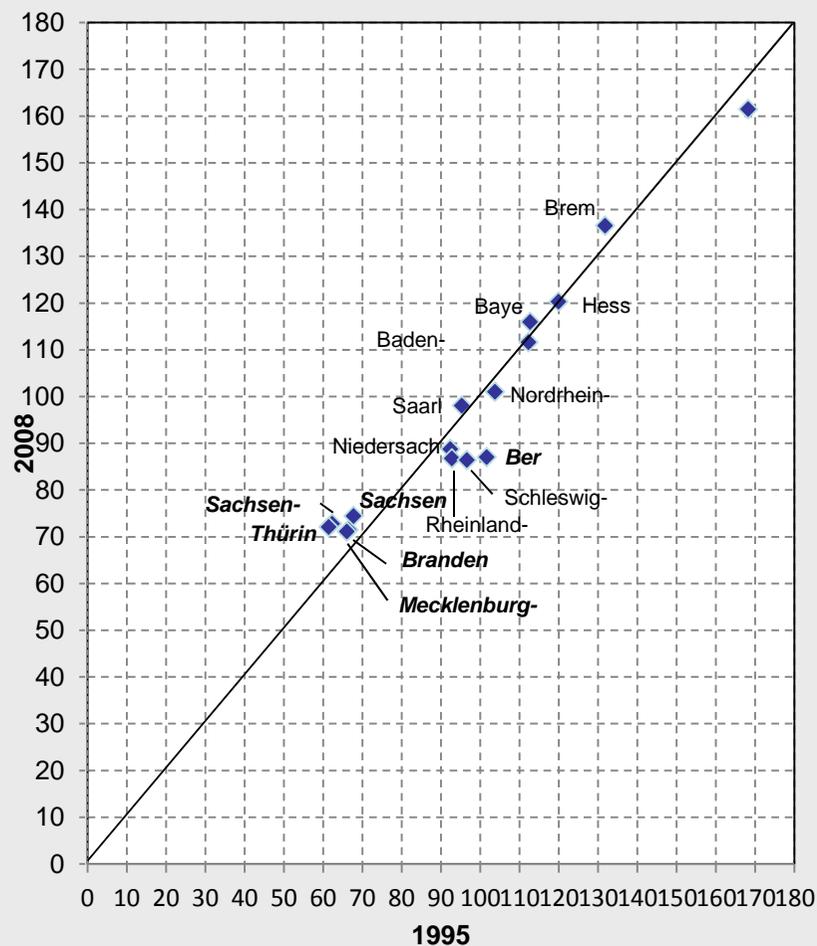


Rem. : data without the Brussels' Region due to impact of commuting



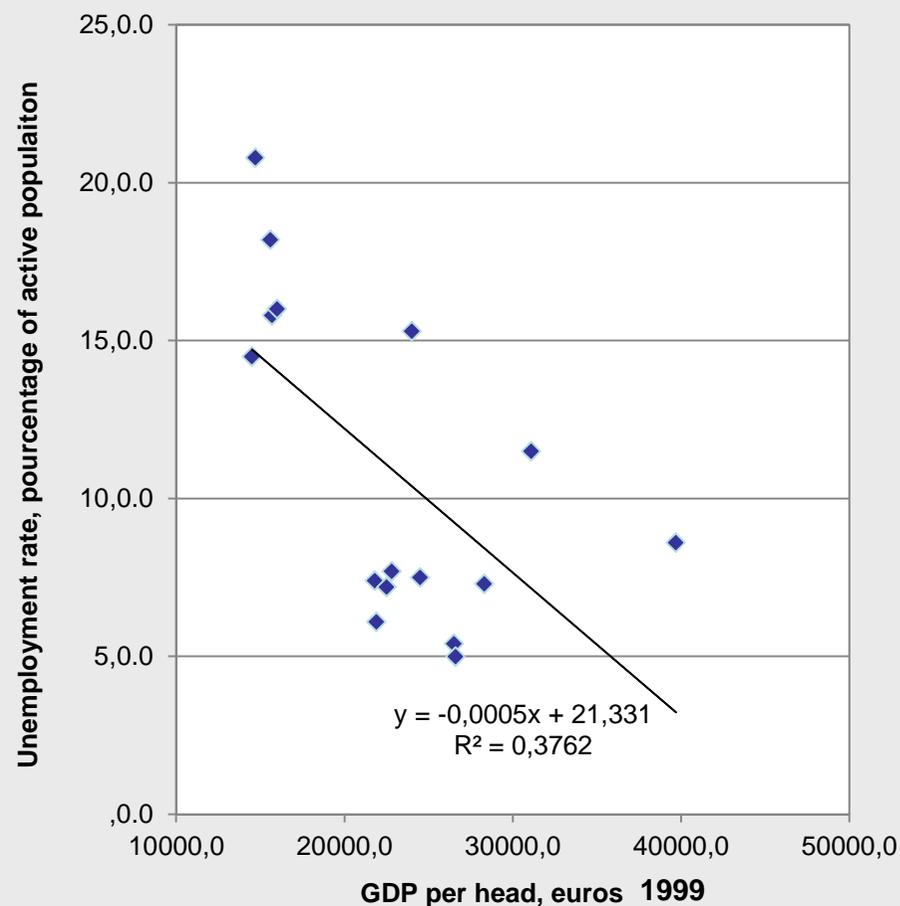
Source : own calculation based on Eurostat regional data

Germany



Germany nuts2 - GDP per head
Country average = 100

Source : own calculation based on Eurostat regional data



Rem. : the GDP/unemployment correction is entirely driven by East-West disparities, the correlation being positive inside the former West and East Germany



Focus on Germany

- ▶ After a fast initial convergence between 1992 and 1994, the East-West convergence process has stalled...
 - The construction sector was the main contributor to growth in the first half of the decade.
 - Real wages in the East have increased from 49% of the Western level in 1991 to 77% in 2000.
 - Unit labor costs in Eastern German have failed to reach competitive levels and unemployment has increased strongly.
- ▶ ... despite huge transfers
 - In 1999, net public transfers from the West accounted for roughly one third of Eastern Germany's GDP.

Source : *OECD Economic survey*, 2001 (in subsequent years, differences between East and West were not systematically reported anymore).



First tentative conclusions (I)

- ▶ The success of the European "integration machine" rested on a combination of :
 - Price and wage adjustments at the national level
 - Including through "second best" exchange rate movements
 - Access to the single market with :
 - competition in product markets
 - a common set of rules providing some degree of predictability and security to economic agents
 - (Limited) transfers at the EU level mainly focused on infrastructure
 - While the efficiency of cohesion funds is hard to prove due to a selection bias, improving transport infrastructure can hardly create perverse incentives.

- ▶ In any case, it worked quite well, even at times when "Solow-type" convergence was not as widespread as it is today



First tentative conclusions (II)

- ▶ The same conditions are not met at the regional level
- ▶ Price - mostly wage - flexibility is generally constrained by national schemes, preventing adaptation to economic fundamentals and/or adverse economic shocks
 - See wage formation processes and social minima.
- ▶ Intra-national transfers are higher than intra-EU transfers and typically more focused on reducing income inequalities than on fostering endogenous growth
 - With varying degrees of success in alleviating poverty without creating economic distortions, especially in labor markets.*
- ▶ Together, this would point to more constraints in the convergence process inside countries and probably also less incentives for reforms in the regions lagging behind
 - Irrespective of whether the country has a federal or more centralized political system.

* see for instance A. Sapir "Globalisation and the reform of the European social models", *Bruegel Policy Brief*, 2005/01.



First tentative conclusions (II)

- ▶ Trade-off between convergence and solidarity?
 - Non-targeted recurrent inter-regional transfers are certainly not a sufficient condition for convergence
 - In this regard, the German reunification provides a unique "natural experiment", with huge transfers apparently insufficient to make up for an inadequate exchange rate and wage setting process.
 - See also (and again) Italy, Spain & Belgium.
 - Some regional imbalances would clearly be unsustainable at country level
 - No country can live for decades with high structural current account deficits and very low employment rates, as observed in some poor regions of relatively rich countries.



First tentative conclusions (IV)

- ▶ Some national policies are more likely to foster convergence...
 - Education policies
 - Infrastructure expenditures
 - Schemes specifically focused at regional development.
- ▶ ... while others are associated with higher risks of creating regional "poverty traps"
 - National wage formation process and social minima if set without due attention to existing regional disparities
 - More generally, recurrent income transfers need to be associated with high labour market flexibility and "activation" of employment policies in order to avoid lasting divergence.



IMBALANCES BUILD-UP TO THE CRISIS



The problem is well known

- ▶ Interest rate convergence has contributed to unsustainable debt accumulation in various peripheral countries in the EA
 - But also in the UK and US
- ▶ A combination of higher growth in domestic demand and diverging price developments - both at the level of inflation and ULC - have then led to significant current account imbalances
- ▶ In Portugal and Italy, the loss in competitiveness was compounded by the so-called "China shock" *
 - Still, altogether, imbalances were driven more by endogenous than exogenous factors (while the literature on optimal currency areas tends to focus on exogenous shocks.)

* See A. Ahearne & J. Pisani-Ferry, "The euro : only for the agile", *Bruegel policy Brief*, 2006/01, p.2



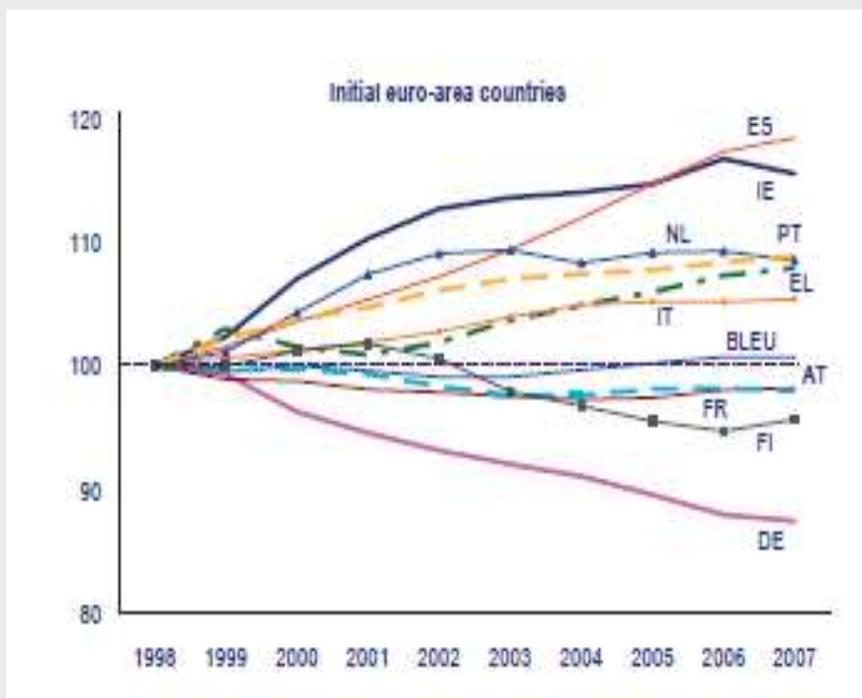
Part of the convergence proved not to be sustainable

- ▶ Retrospectively, what was initially perceived as a classical convergence process was not based on sound fundamentals, at least in some peripheral countries
- ▶ The increasing decoupling of savings and investments within the EMU did not lead to a more efficient capital allocation
 - Decoupling is desirable in theory if it leads investments to move from low to high investment opportunities areas
 - But too much of it went to real estate and other investments with low long term returns in terms of GDP growth.

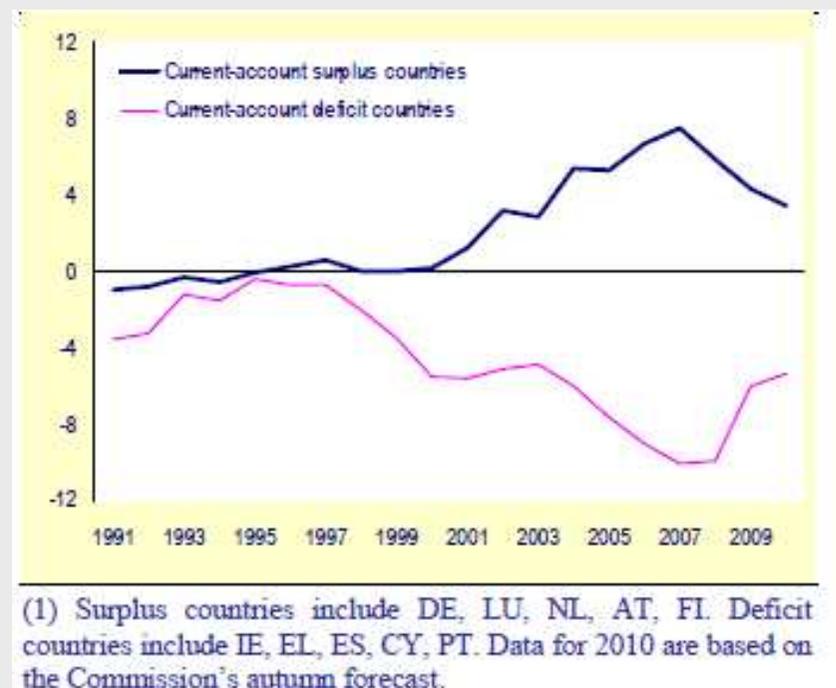


Imbalances had reached very high levels in 2008

Real effective exchange rates



Current account positions



- ▶ Peripheral countries real exchange rates diverged by between 20-40% vs. Germany
- ▶ Current account positions in deficit countries reached ~10% of GDP in 2008

Source : commission services



STYLIZED FACTS ON CONVERGENCE AND ADJUSTMENT SINCE THE CRISIS

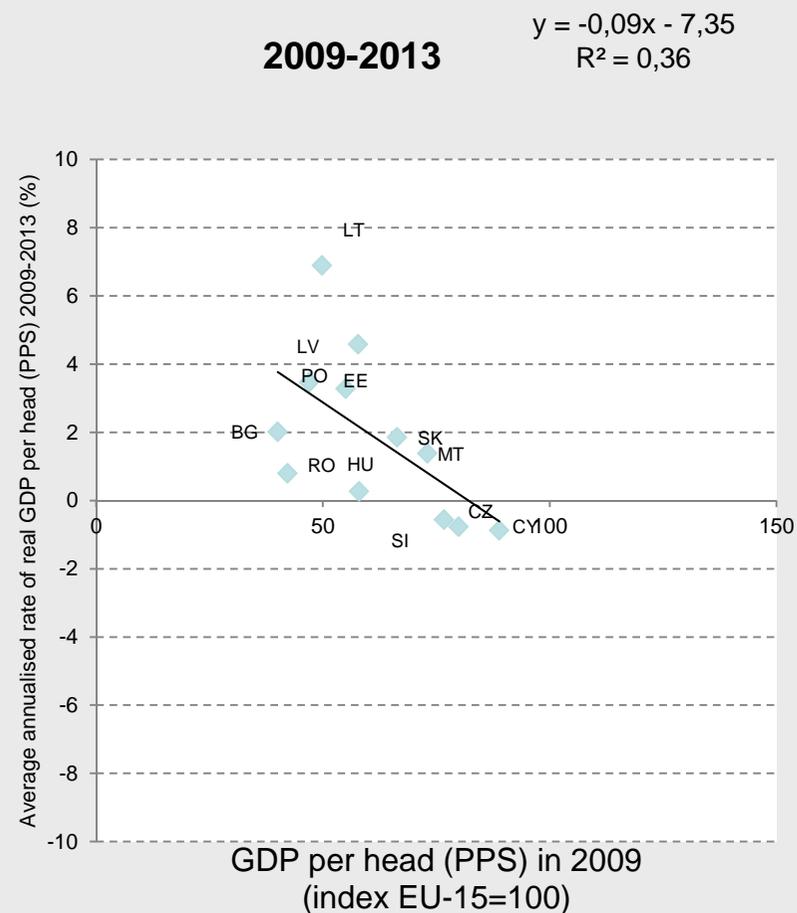
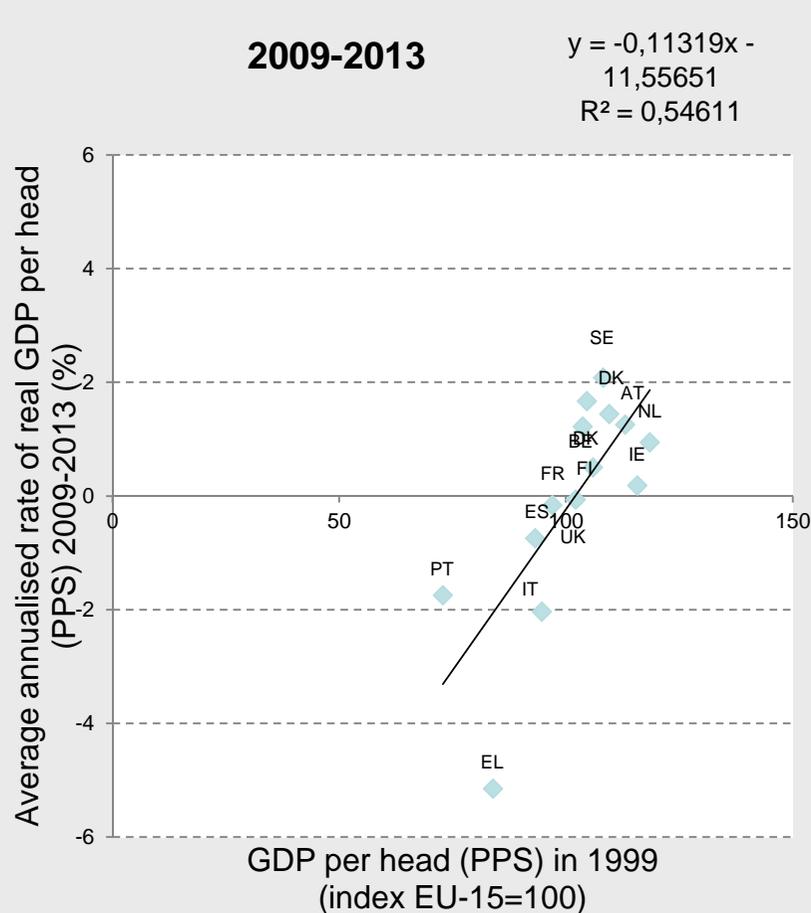


The South is diverging while the East is growing faster than the core

- ▶ "The convergence machine has brutally stopped in the southern part of the EU – and has moved into reverse in Greece, Portugal and Spain, with little chance of short-term improvement. Italy, meanwhile, has been falling behind since the early 1990s."
 - Z.Darvas & J. Pisani-Ferry, *Europe's growth emergency*, Bruegel policy contribution, 2011/13.
- ▶ The higher growth in Eastern Europe is to be found both in euro area and non euro area countries
 - Slovakia and Estonia
 - Poland and Latvia



Convergence has reversed for old member states but not for new ones

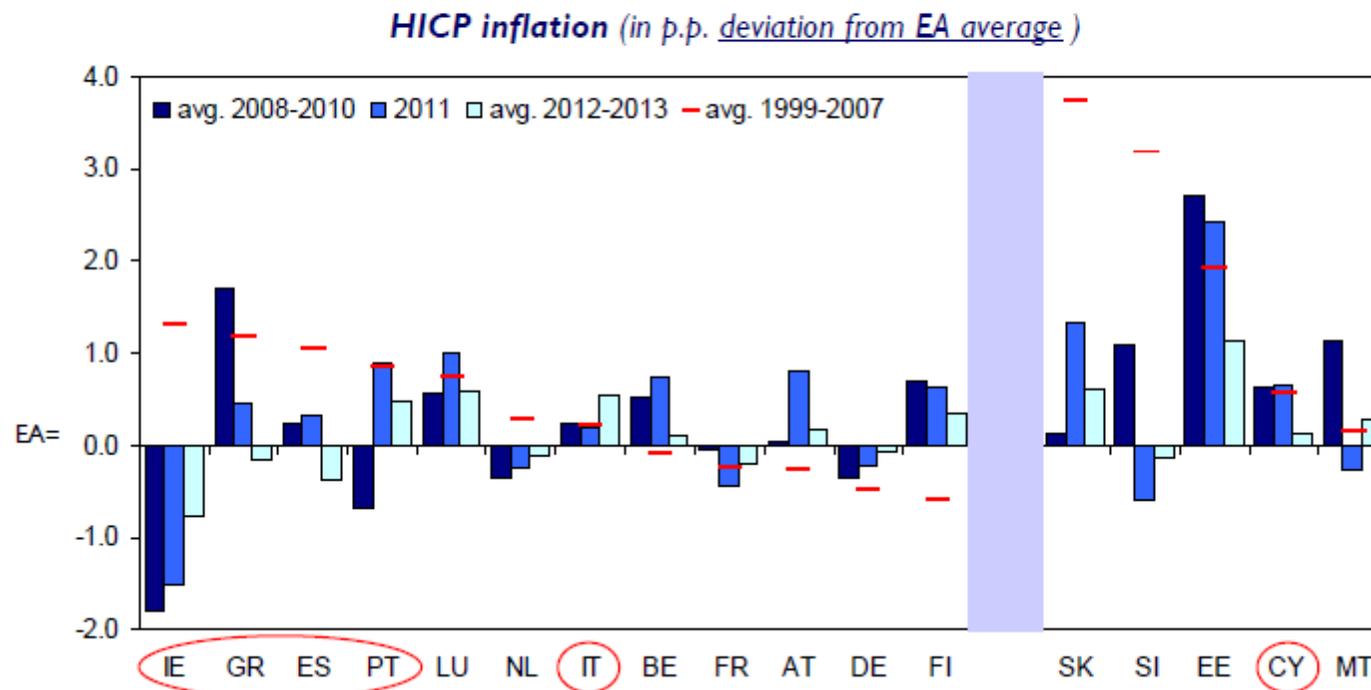


Since 2000, there is convergence between the EU-12 and the EU-15, as well as inside the EU-12.



The adjustment in relative prices is slow

Overall, **limited adjustment in relative prices so far**: only in **IE** significant decrease in prices relative to the **EA** average, limited adjustment in **PT** (only 2008-10). No adjustment in **CY** and **IT**, for **GR** and **ES** only in 2012-13.



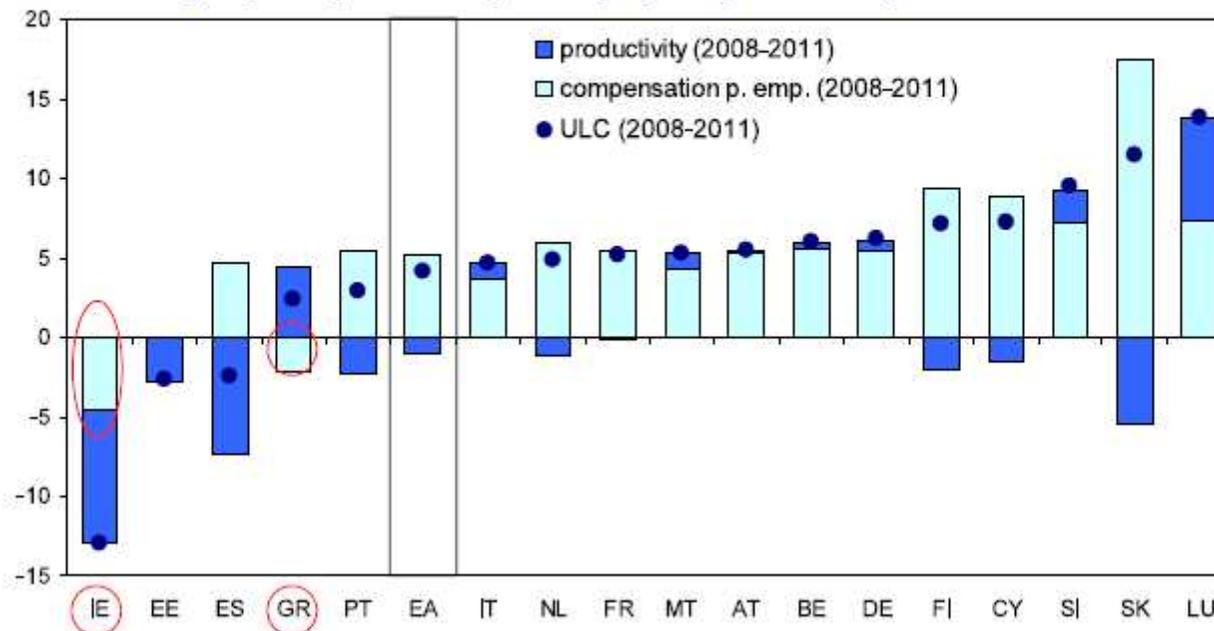
Source: December 2011 BMPE. Note: Countries are grouped in descending order of average HICP inflation (1999-07).



And mainly driven by productivity

ULC adjustment driven to a large extent by productivity. GR and IE are the only countries with cumulative wage decline.

Cumulative change of compensation per employee, productivity and ULC since 2008, (in p.p.)



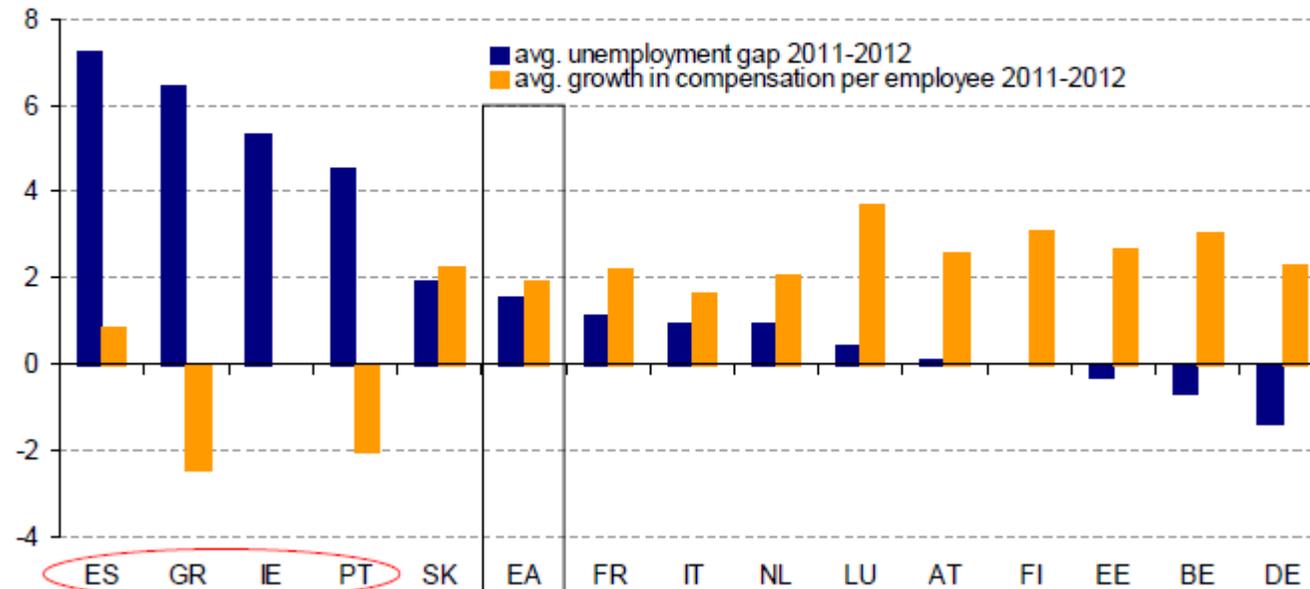
Source: European Commission Note: Countries are grouped in ascending order of the change in ULC (2008-11). Compensation and productivity are displayed as contributions to ULC growth, hence productivity growth has a reversed sign.



Leading to high unemployment rates

Adjustment in growth of compensation per employee is particularly limited in view of the **sizeable unemployment gaps** – especially in **ES**.

Average compensation per employee growth (2011-12) and unemployment gap (2011-12, in p.p.)

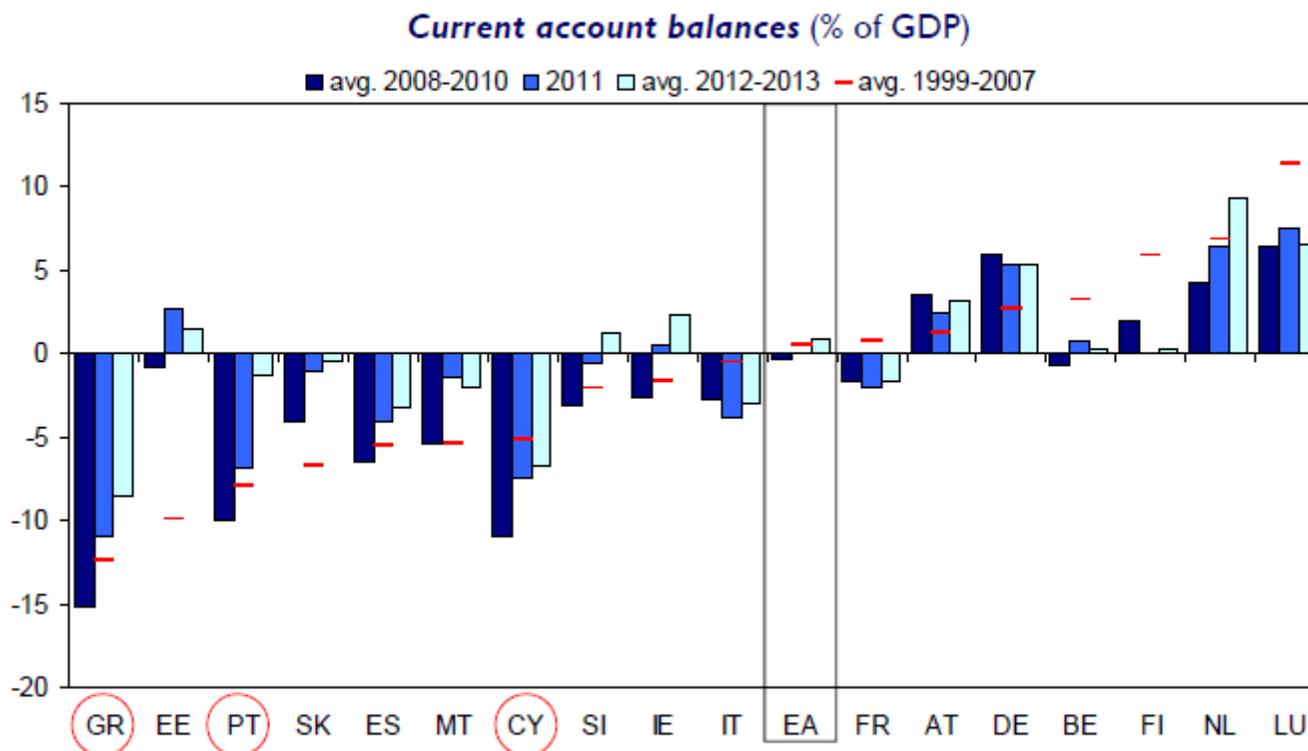


Source: OECD and December 2011 BMPE. Note: unemployment gap is actual unemployment minus NAIRU (avg. 2011-12). No NAIRU data available for CY, MT, SI. Countries are grouped in descending order of the average unemployment gap



Current account deficits are closing faster, especially in Ireland and Spain

Current accounts adjusting in most countries, but deficits remain very high in **Greece, Portugal and Cyprus**



Source: December 2011 BMPE. Note: Countries are grouped in ascending order of the current account balance (1999-2007).



So far, real devaluations appear to be only imperfect substitutes for nominal ones (I)

- ▶ It is partly a question of price stickiness and thus time
 - As Paul Krugman put it on his blog : "Europe has given us a dramatic demonstration of the reality of nominal wage stickiness"
 - See also the UK vs. Spain
- ▶ But it is also a question of nature
 - Nominal devaluations impact (nearly) all economic agents symmetrically and reduce external debts denominated in national currency
 - Even in Ireland, wage reductions seem to have been concentrated in the non-tradable sector, the adjustment in the tradable sector taking place through productivity gains*
- ▶ This makes labour reforms all the more important
 - But also all the more likely to be resisted by insiders who will try to keep their pre-crisis purchasing power in Euros

See Z. Darvas, "A tale of three countries : recovery after bank crises", *Bruegel policy contribution*, 2011/19



So far, real devaluations appear to be only imperfect substitutes for nominal ones (II)

- ▶ Deflation has a negative impact on the debt dynamics
 - We do not have a good way to assess the trade-off between the competitiveness and debt dynamics issues (models with stock and flow variables) in a stressed environment.
 - And therefore no good guidance on how fast the real devaluation should proceed (the markets say "fast" and then do not like what they see as a result)
- ▶ The market processes by which real devaluations take place are uneven and painful
 - Strong signal for sovereigns through market spreads
 - No sudden stop thanks to Target II system (ECB intermediation) but also leads to weaker signals
 - Slow reaction of wages and only after very high increases in unemployment rates !

See Z. Darvas, "A tale of three countries : recovery after bank crises", *Bruegel policy contribution*, 2011/19



**SO, IS THE SOUTH LIKELY TO BECOME
THE NEW MEZZOGIORNO OF EUROPE ?**



The situation is clearly challenging (I)

- ▶ "... southern European countries face special challenges. Their economic convergence has reversed, their unit labour costs have failed to improve following a steady rise in the pre-crisis period, and their current account deficits have hardly improved. Most southern European countries are under heavy market pressure and face a **vicious circle of low and even worsening confidence and weak economic performance**. This and the market pressure necessitate a greater fiscal adjustment, which again leads to a weaker economy, thereby lowering public revenues and resulting in additional fiscal adjustment.
 - ▶ " Z.Darvas & J. Pisani-Ferry, *Europe's growth emergency*, Bruegel policy contribution, 2011/13, p. 09.
- ▶ "In Europe, the path of [...] adjustments perhaps depends on **whether Germany tolerates a faster rate of growth/inflation** in its own economy thus allowing convergence with the weaker European countries without them needing to see outright negative growth. If Germany can't tolerate this or won't dramatically increase fiscal transfers, we think the weaker European countries will likely risk seeing negative growth for long periods over the next few years. If this scenario plays out, debt sustainability question marks will hang over the European market for many years to come."
 - ▶ Early Morning Reid : Macro Strategy, 13th Feb, 2012, Deutsche Bank - Fixed Income Research - Europe



The situation is clearly challenging (II)

- ▶ "... over the past decade several regional economies within the **United States** have been subject to large adverse shocks - shocks which have arguably been so large precisely because the US economy is so integrated - for which they have had essentially **no policy response** simply because the US already has the common currency that EMU is supposed to produce in Europe".
 - Krugman, P. "Lessons of Massachusetts for EMA", in *Adjustment and growth in the European Union*, ed. F. Torres and F. Giavazzi, Cambridge University Press, 1993, 241.
- ▶ " Being part of a currency union involves discipline, and for the export-dependent participants the loss of the exchange rate as an instrument for coping with economic shocks can be costly. In retrospect, a lesson from the first seven years of EMU is that those **disciplines and potential costs have been underestimated.**"
 - A. Ahearne & J. Pisani-Ferry, "The euro : only for the agile", Bruegel policy Brief, 2006/01, p.2



But the base case scenario remains a return to convergence (I)

- ▶ Prices - although sticky - are not set at the EA level
 - Real devaluations are still possible at the national level.
 - Attempts to harmonize wage and social benefits at the EA level should be resisted.
- ▶ In the absence of recurrent income transfers at the EA level, countries are still faced with strong incentives and market pressure to reduce imbalances
 - (At least, after they have become unsustainable.)



But the base case scenario remains a return to convergence (II)

- ▶ In a "World à la Solow", convergence should not be durably impacted by the financial crisis and the current divergence should only be limited in time.
 - All what is lost today should ultimately be recovered.
- ▶ Moreover, to the extent that market pressure would lead to structural reforms in adjustment countries, the net long run impact of the crisis could even be positive
 - see the arguments about *conditional* convergence.
- ▶ Support towards countries under adjustment should be focused on debt sustainability and, in some cases, temporary transfers related to investments in infrastructure



Still, other scenarii cannot be excluded (I)

- ▶ The financial crisis seems to have had a permanent impact on GDP levels in most countries, which is not easily explained by a Solow type model.
- ▶ There may be a difference between global convergence and convergence between higher income countries
 - See divergence between EU and US after years of convergence
 - See "middle income barrier"
- ▶ The fact that current account deficits are being closed faster than wage differentials may point to multiple current account equilibria
 - Some countries would have moved from low to high wage CA equilibria through labour shedding



Still, other scenarii cannot be excluded (II)

- ▶ A combination of unemployment hysteresis, lower capital accumulation and restrained access to capital markets could reduce a country's growth potential for some time even if the long run "steady-state equilibrium" is not affected (*by definition*).
- ▶ Endogenous growth models allow to capture broader sets of dynamics (even though being generally quite sensitive to model specifications)
 - Some models illustrate cases of "adverse specialisation" in tradable sectors with poor growth dynamics.*
 - Freely extrapolating from them, one could think of a scenario where the South would be stuck in a high wage (relative to pre-euro levels) - low growth "equilibrium", with revenues from tourism and maybe also remittances from workers moving up North closing the current account gap ?!

See for instance Lucas, R. "On the mechanics of economic development", *Journal of monetary economics* 22, pp. 3-42, North Holland, 1988.



Conclusions (I)

- ▶ Europe was a quite remarkable integration machine when Solow was not working well in other places
 - It would be a paradox that Europe would see divergence when Solow is making a come back at the World level
- ▶ Based on intra-country experience, moving to substantial income transfers between EA countries would probably increase the likelihood of a persistent divergence between North and South
 - Transfers should be targeted at policy areas that contribute to the growth potential of countries lagging behind
 - Money thrown at countries or regions with uncompetitive wage levels would most probably be lost
 - Ultimately, it is therefore essential that wage corrections take place in adjustment countries to levels compatible with full(er) employment and international competitiveness.



Conclusions (II)

- ▶ Our understanding of regional growth dynamics, especially inside currency unions, remains poor and should be improved
 - We tend to always come back to Solow because it is a simple model with no path dependency
 - But the sad truth is that we just do not understand well the complex interactions between the impact of financial crises, real devaluations with price-stickiness and medium to long run growth dynamics.
- ▶ And then of course, we are all dead in the long run.

