

A Structural Explanation for the Eurozone Crisis and a Model

Η ΕΛΛΑΔΑ ΣΤΗΝ ΟΝΕ

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- The difficulty in resolving the Eurozone (EZ) crisis has deep-seated structural-institutional causes.
- The EZ is an uneasy marriage between the export-oriented, and skill-intensive, Export Oriented Economies (EOE) of Northern Europe (North) and the Demand Driven Economies (DDE) of Southern Europe, with strong public sector unions. (South).
- The rejection of Keynesian solutions in the EOE is based on a rational understanding of how macroeconomic policies work in the institutional context of those countries.
- Nevertheless, the interaction between macroeconomic policies and national institutions works very differently for different parts of the union, rendering policies that are appropriate for the South dysfunctional for the North, and vice versa.

- This does not necessarily mean that the eventual outcome is a breakup of the EZ, but if the union is to stay intact and prosper it will most likely require major domestic reforms in the South coupled with large North-South transfers.
- However, nothing guarantees such a bargained outcome that is subject to intractable holdout and war of attrition dynamics.
- Perpetual austerity for the South is a feasible outcome in this game.
- How then did the EMU members end up in this suboptimal situation?
- They did so because each government pursued goals that served their own immediate interests well, yet paid little heed to the long-term difficulties of achieving high economic performance in a monetary union of such disparate parts (*“everyone got what they wanted, but no one aimed to create a viable macroeconomic union”*, Moravcsik, 2012).

Structural-institutional tensions in the EMU

- The European economic and monetary union (EMU) and its key institutions -- especially, of course, the European Central Bank (ECB), and the (now amended) Stability and Growth Pact -- were built around a Northern model of capitalism.
- EMU institutions were not only created on northern European terms, they have functioned, and continue to function, on Northern European terms.
- This is understandable given that the North was willing to forego EMU if these terms were not made part of the Treaty.

Main Features of EOE

- Independently of monetary policy and exchange rate systems, these economies are driven strategically by export orientation.
- A large proportion of high value-added employment comes directly and indirectly from the export sector.
- The success of the export and related high value-added sectors depends on research and development in knowledge-based companies, on close two-way links with the technical university and research systems, and on the system of vocational training at all levels. It depends also on the capacity of the export sector to meet long-term profitability goals, especially as the cost of product and process innovation increases.
- There is a powerful positive feedback system in which the successful and growing knowledge base and skill formation are core drivers of exports, and where success in export growth is critical via the resources it provides for firms to make the necessary investments in high levels of research and skill formation.

- Two factors underpin this positive feedback system.
- The first factor is a sufficient degree of real wage restraint in the export sector.
- Export-sector wage restraint is difficult given the power of highly skilled workforces, as well as (necessarily) profitable companies.
- EOE governments have generally been committed to the feedback system and thus to export-sector wage restraint, and they have accomplished this in part by commitment to a tight monetary policy in which excessive wage increases are “punished” by increased interest rates and currency appreciation---or at least by firm commitment to ruling out the possibility of depreciation by fixing exchange rates.
- A common currency has consequently been seen as an attractive way to make such a commitment. In part, governments have also sought to underpin wage restraint by institutionally and financially supporting an extensive training system that keeps the supply of skilled workers high.

- The second factor is the strict control of fiscal policy.
- Wage restraint in the export sector depends on real wage restraint in the public sector, including utilities/public services.
- One political given in the northern CMEs is that employment in the public sector is highly protected.
- Real wage restraint in the public sector is inherently fragile because there is little danger of job loss, and wage increases imply an appreciated currency or at any rate no devaluation--- a win-win situation for public sector employees.
- To offset this, there is a strong commitment by governments to tight rule-based fiscal policy as well as minimizing public sector deficits.

- Thus, EOE with large companies, unions, and highly skilled workforces in the high value-added sectors of the economy as well as powerful unions in the public sector, depend on the rule-based discipline of tight monetary and fiscal policy.
- EOE's preference for currency unions stems from hostility to devaluation.
- EOE (governments, business associations, unions) neither want the ability to devalue themselves nor for competitors to be able to do so. If EOE exporters know their government is prepared to devalue it reduces their incentive to increase competitiveness through R&D and/or skill upgrading, as well as weakening the ability of unions to gain the cooperation of union members in imposing wage restraint to enhance competitiveness.
- And if foreign competitors can devalue they can wipe out instantaneously any gain in competitiveness secured by EOE exporters through R&D, skill upgrading or wage restraint.

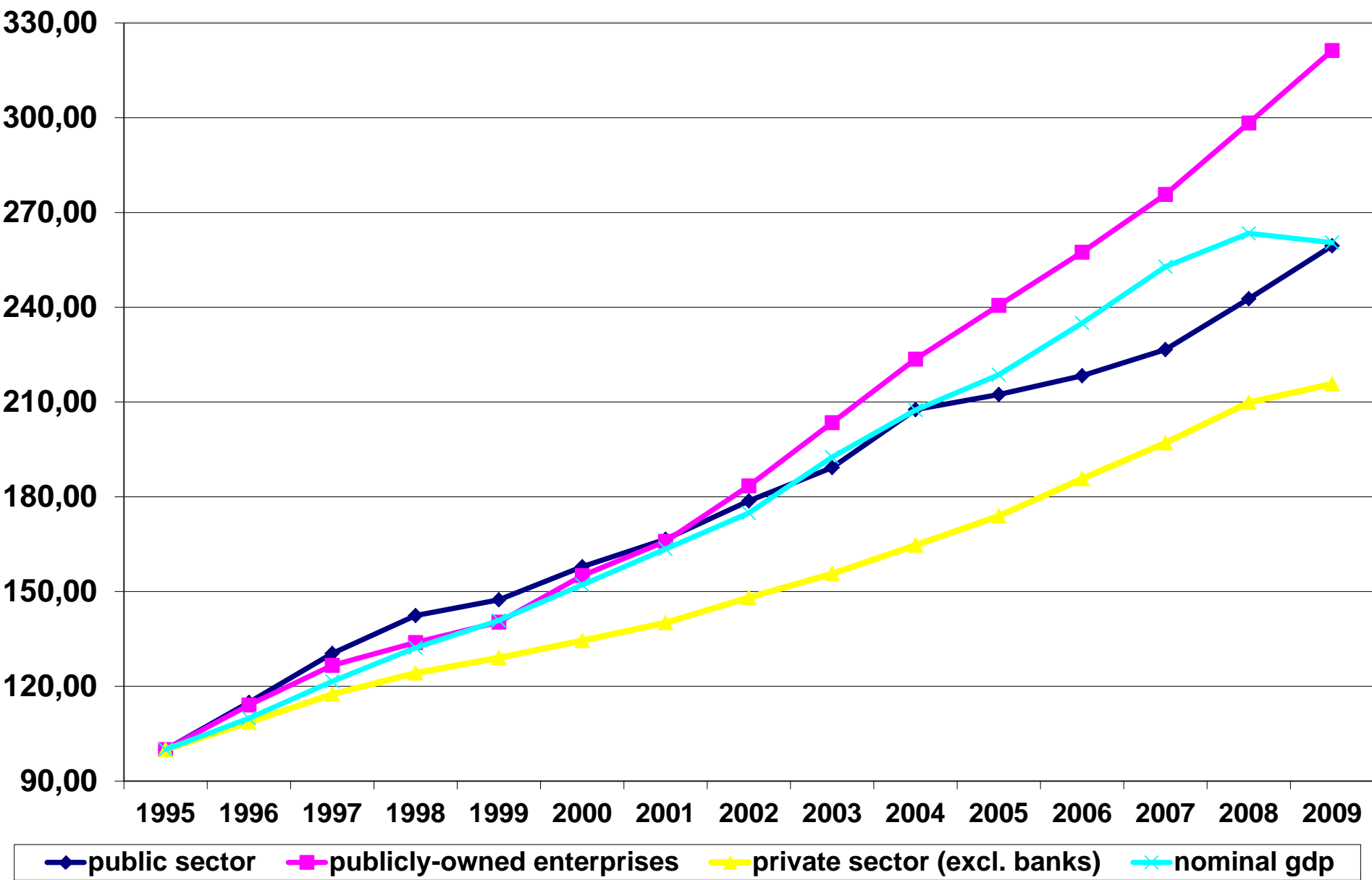
- This explains not only the initial concern of EOE to move to a D-Mark bloc after the inflationary chaos of the 1970s, but also explains the strong Northern preference to include France, Italy, and the peripheral EU members in the EZ.
- Reason is that the Southern countries are missing many of the institutions that support wage restraint, and are consequently prone to use devaluations as an alternative policy tool to counter real exchange rate appreciations when not tied into a currency union.

The “Southern” Member States

- The other EZ member states cannot be analyzed so uniformly. They include the peripheral economies (GIPS) and also France and Italy.
- Their motivations for entering the currency union differ very substantially from those of the EOE.
- Each wanted, first, to pin itself to a low inflation currency area; and second, to access low real interest rates (a pursuit that had previously been hampered by devaluation fears).
- Low real interest rates were seen by the Southern economies as drivers of demand and keys to attracting investment.
- In common with the EOE, these countries (excluding Ireland) had high collective-bargaining coverage, but there was little capacity for wage restraint because of union fragmentation and division between socialist and communist unions.

- High coverage did, however, facilitate fragile “social pacts” that secured the support of unions for fiscal restraint and restrictive monetary policies to meet the Maastricht entry conditions .
- Once these states were securely inside the Eurozone, the lack of wage restraint re-emerged (Johnston et al. 2014), with the partial exception of the export sector – which could no longer rely on the inability to devalue to restore competitiveness after exchange rates were irrevocably fixed.

Greece: Evolution of Wages (1995=100)



A Congruence of Interests?

- Thus, both the EOE of the North and the DDE of the South had interests in a common currency area.
- For the EOE, a common currency ruled out competitive devaluations from the DDE, while increasing their demand for northern products.
- And for the DDE, a common currency offered low and stable inflation as well as, low real interest rates and inward investment.
- But a major issue for the EOE was whether there was sufficient fiscal discipline in the DDE. Without fiscal discipline, the concern was that countries would run high deficits and allow too high a debt-to-GDP ratio to build up, with the possibility of default and the need for North-South transfers.
- The SGP was thought to provide a solution to this problem.

- Financial globalization appeared also to provide help in this respect – as well as the move in the late 1980s and early 1990s to financial market flexibility in the European Union (as set out by the Delors Committee in 1989).
- The significance of financial market flexibility for the potential development of the EZ was that it meant:
 - (i) that sovereign borrowing by the DDE would operate within the framework of implicit fiscal sustainability rules, which would help reinforce the SGP rules on deficits and debt . Thus, open financial markets offered a powerful guarantee to the North that the South would need to respect fiscal discipline in terms of deficits and public sector debt to avoid being penalized by financial markets, and
 - (ii) that the ability by the DDE for external borrowing was greatly facilitated, both directly and because their commercial banks could now borrow externally (including from Northern banks).

- From 1998 to 2008 -the honeymoon period of EMU – things appeared to work well, and both the Commission and ECB produced self-congratulatory reports.
- The “resounding success” of EMU appeared to defy the so-called Optimum Currency Area (OCA) criteria.
- According to OCA criteria, for a monetary union to succeed it must hold that :
 - (i) member states are not subject to divergent economic trends that may be hard to adjust to without national monetary policy autonomy and flexible exchange rates.
 - (ii) labour and goods markets are flexible and workers are mobile between countries.
 - (iii) the monetary union has a sizeable tax and transfer system at the central level.
- None of these conditions applied to the eventual members of the EZ in the 1990s.

- The political-institutional conditions described above for the EOE and the DDE of EZ can be thought of as relatively long-term persistent elements in a currency union.
- What is remarkable is that the Maastricht Treaty, which set out the conditions that a member state needed to fulfill in order to qualify for Eurozone membership in 1999, makes virtually no reference to required future institutional development.
- It only referred to the well known “Maastricht Criteria” on inflation, debt, budget deficits, and interest rates required to participate in EMU – (which were later fudged).

- From 1998 to 2008, wage moderation in Germany led to German exports expanding from 27% of GDP to 44% of GDP (but this was also due to slow growth of GDP).
- The South got what it wanted as well, as interest rates in the DDE fell dramatically and were close to German levels by 2005.
- The single currency also removed currency risk on financial transactions between Eurozone banks, increasing the willingness of northern banks to lend to southern banks.
- This resulted in a massive inflow of foreign credit into the peripheral economies in particular. In Ireland, Greece, and Spain, domestic demand grew rapidly, financed directly and indirectly by foreign borrowing. Non-tradable sectors, such as real estate, construction, retail, and the public sector, expanded rapidly.

- A key driver of the inflation differential between the North and the South was the behavior of wages in the sheltered sector, especially the public sector (Johnston et al. 2014, Johnston & Regan 2014).
- In the EOE, coordinated bargaining tied sheltered sector wage growth to the restrained wage growth in the export sector.
- Once these economies were in the Eurozone, the mechanisms tying wages in the sheltered and export sectors therefore broke down, and public sector unions (and other sheltered sector workers) were able to secure inflationary wage settlements.

- The higher inflation in the South, encouraged by less-restrained wage bargaining in tight labor markets in the sheltered, formal sectors and especially in the public sector, produced very low real interest rates and hence high rates of investment.
- This was reinforced by investment from the North. The sizeable external surpluses amassed in the North gave the Northern banks scope to increase lending to the South, both to individuals and companies and to southern banks.
- The flow of capital from North to South increased the growth rate in the South and put upward pressure on Southern inflation, which further reduced the real interest rate in the South, and so on. The faster growth rate in the south boosted Northern exports.
- The competitiveness advantage of the North was reinforced further by the real depreciation associated with higher relative inflation in the South.

- In the EZ, as in other advanced economies, external imbalances were of little concern to policy makers during this period as the dominant macroeconomic regime of inflation targeting focused almost exclusively on price stability.
- In other words, the DDE in the late 1990s and 2000s that could access financial markets with credible inflation-targeting independent central banks were likely to end up as global borrowers, just like the United Kingdom and United States. The EZ put the peripheral economies in a functionally equivalent position and enabled their (with the benefit of hindsight) excessive borrowing.

- In the pre-euro period, many economists and policy makers expected that the competitive pressure of the euro and the single market would force institutional change on member states, specifically a convergence on competitive or liberal institutions. This did not happen.
- When the GFC hit, some of the DDE found themselves with large budget, and current account, deficits and excessive levels of net foreign debt.
- Without the exchange rate instrument, the required adjustment would be very painful if it relied on a large, and front-loaded, austerity programme.
- Although most economists would agree that for some countries (e.g. Greece) the imposed austerity may be self-defeating (in the sense of restoring public debt sustainability), austerity has been the outcome of intergovernmental bargaining in the EZ.

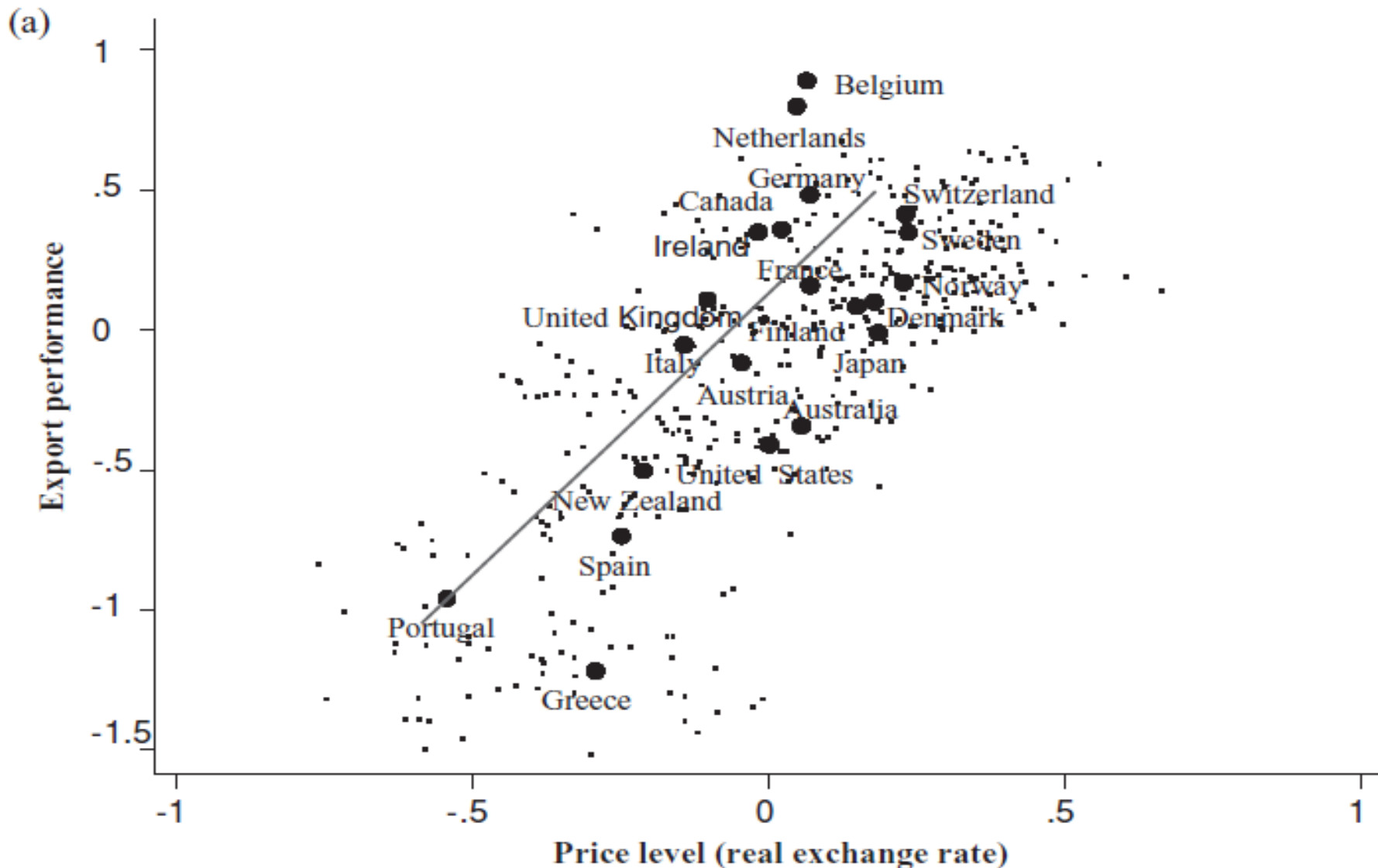
- The EOE are fewer in numbers, but they would prefer to leave the Eurozone rather than accept a union without strong monetary and fiscal discipline.
- It has also become clear that (so far) the DDE are deeply opposed to leaving the EZ even under the heavy weight of externally imposed austerity; in part, this is due to the real income losses as a result of the consequent devaluation.
- Thus, the EOE, particularly Germany, have been able to maintain rule-based and disciplined macroeconomic management despite the opposition of the other members, notably France and Italy.
- Germany would not (or pretended to?) choose to be part of the EZ if it became accepted wisdom that governments **and** the ECB could intervene in the economy with the aim of creating employment and growth.
- It is the combination of that implicit EOE's threat to leave the EZ and the choice of the DDE to stay in the EZ (despite their dislike of austerity) that enables Germany to continue to impose austerity.

The Political Economy of Wage Bargaining Institutions, Training, and Exporting

Questions to be answered

- Does solidaristic wage setting lead to efficient outcomes?
- Why do “expensive” countries export a higher share of their output than “cheap” ones?
- Can Internal Devaluation work in “dysfunctional” economies?

Price Levels and Export Performance for OECD countries (1970-2000)



Real Exchange Rates and Competitiveness

- Small open economy producing a traded good (T) and non-traded services (S) .
- The T good produced in the home country is an imperfect substitute of the many other varieties produced in the ROW.
- T : produced by skilled workers – which become skilled after incurring a training cost, c – with unit hourly productivity.
- S is produced by unskilled workers, with productivity $l_s < 1$.
- Assume Bertrand competition, so that prices equal average costs.

Examine two-types of economies:

- Coordinated , C , in which wages are set in both sectors through centralized bargaining, and in which there is tendency for wage equalization in both sectors.
- Uncoordinated , U , in which independent unions in each sector set wages.

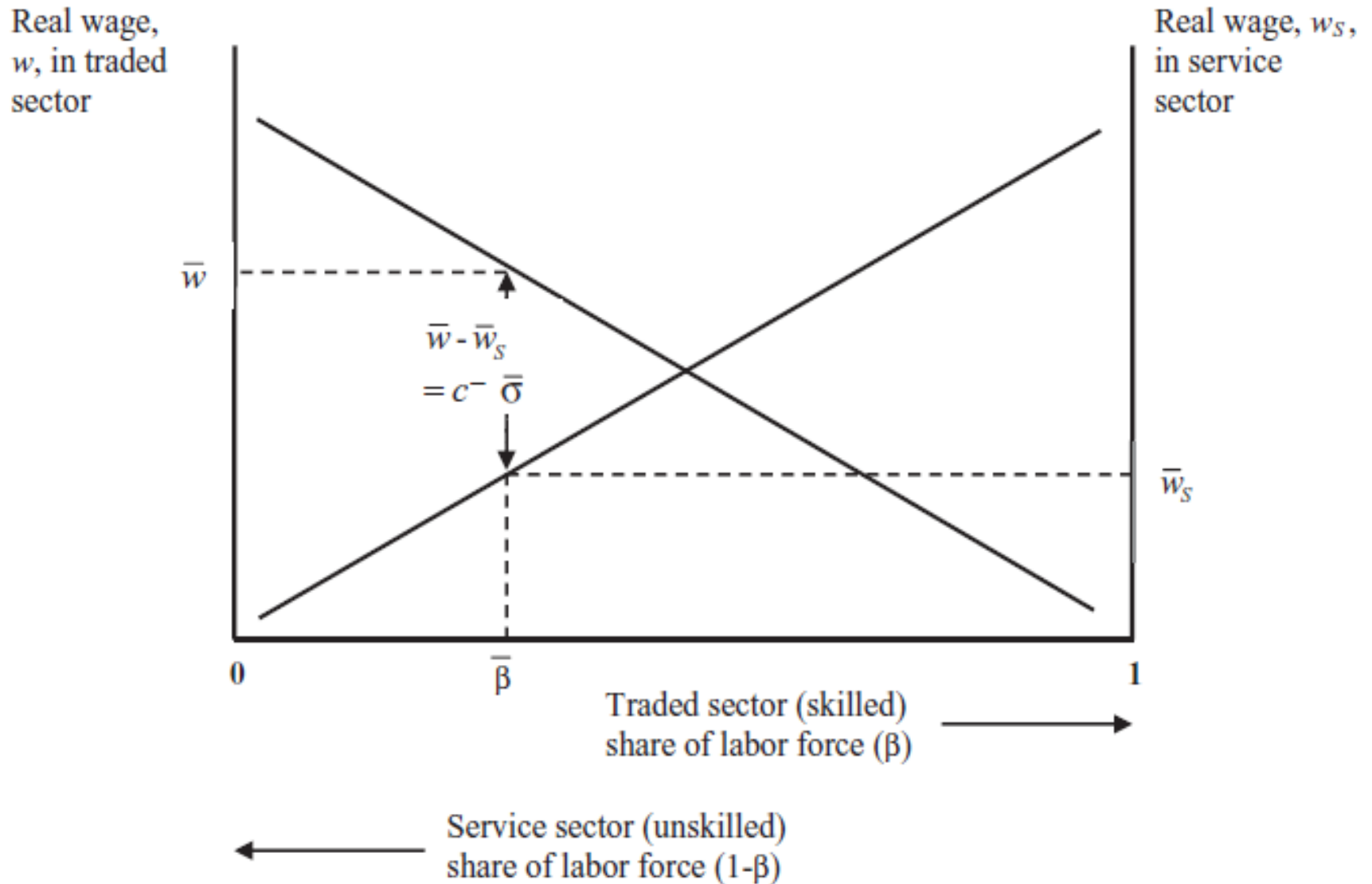
Another key difference assumed between the two types of economies is that in C , training is subsidized by the government , whereas in U , workers have to pay for their own training.

A. The Full-Employment Cases

- *The T-sector real wage schedule:* The T-sector union sets a real wage, w , that declines as the labour supply and employment of (skilled) labour in this sector increases. This is because the demand for T depends on the relative price, and thus an expansion of employment and production can only be enforced thru a lower real (worker's) wage.
- *The S-sector real wage schedule:* A similar relationship holds for this sector as well, since demand and employment in services can be raised only if the real wage, w_S , falls.
- Given a training cost c , and a public subsidy to training equal to σ , a clearing labour market in (long-run) equilibrium implies that
$$w - w_S = c - \sigma .$$
- If unions set wages to achieve full employment the outcome is portrayed in Figure 1.

Figure 1

Real Wages and the Distribution of Labor across Two Sectors

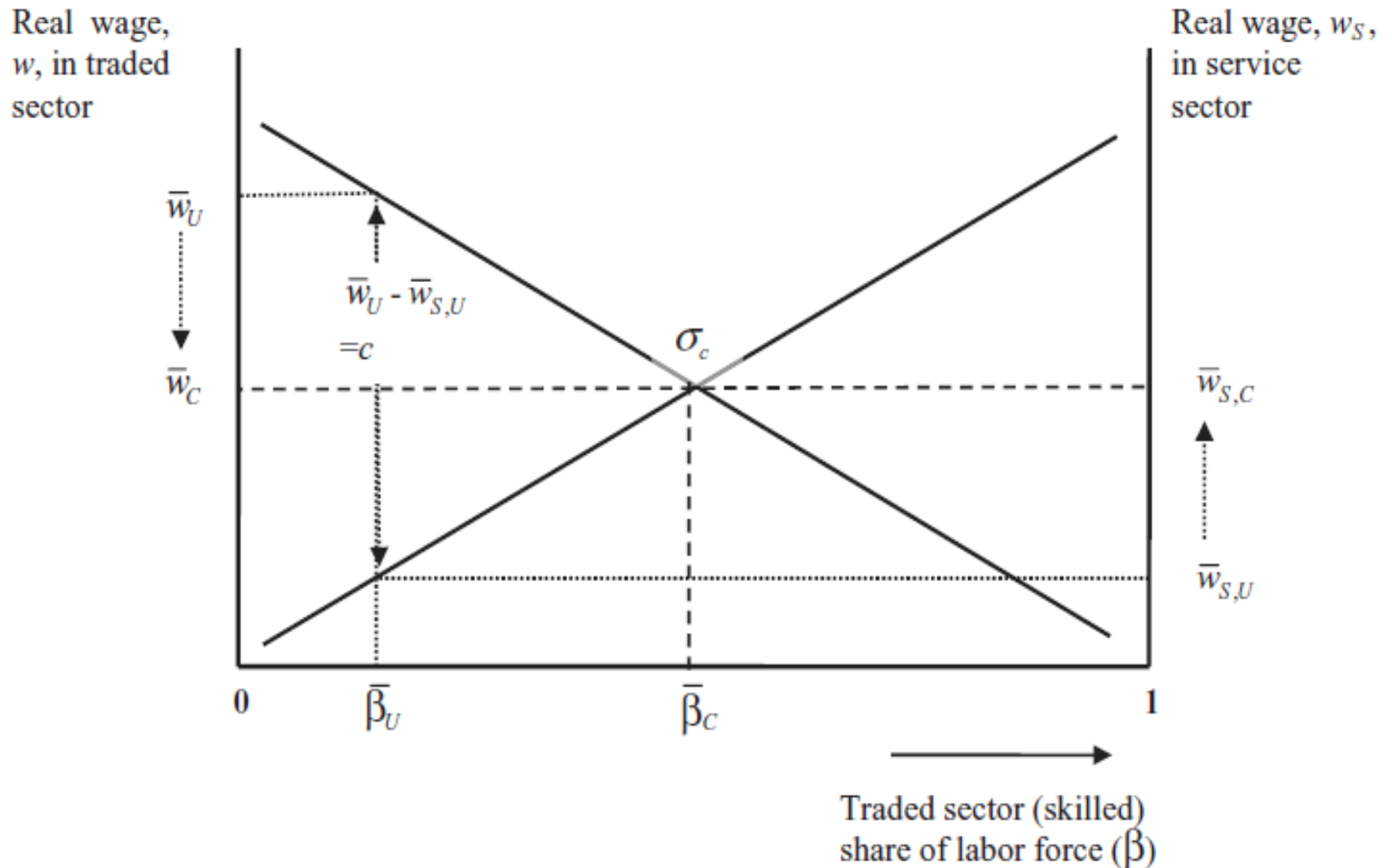


- However, there is nothing that guarantees that unions will set wages so as to achieve full employment...essentially what Figure 1 shows is what would be the result if union behaviour mimicked a perfectly competitive market.
- Note that for workers that have gone thru a public training programme to be able to find jobs, they depend on skilled unions reducing wages to absorb the newly trained workers.
- If each uncoordinated union cares only about its own members , it has no incentive to do so, i.e. there is an insider-outsider division preventing newly trained workers from finding jobs.
- In such a situation, public training subsidies are a *necessary*, but not *sufficient*, condition for training to take place.
- A sufficient condition is that skilled unions cooperate with unskilled unions to compress wages enough so as to clear the labour market for both types of workers.
- Thus, an effective public training scheme requires a coalition of skilled and unskilled workers in the industrial relations system.

- In C-types of economies, the centralized confederation of trade unions has as an objective to secure “equal” wages for its members (this appears to be a robust finding of the literature).
- Explanations include: desire for redistribution by the median union member, insurance against job reallocations, ideological commitments, overall implicit agreements between centralized unions and centre-left political parties, pressure by exporters for wage compression (early 20th century Denmark and Sweden).
- In the present framework , it is assumed that an encompassing trade union strikes a bargain with a (centre-left) coalition government in which the union delivers wage compression (i.e. low wages in the export sector) in exchange for subsidized training.
- Important assumption: cost of subsidies borne also by a “professional” class.
- Figure 2 depicts the case of fully subsidized training ($c=\sigma$).

Figure 2

Effect of Coordinated Wage Bargaining on Relative Wages and Employment



Comparing C-type with U-type economies

- The C-economy will have a higher proportion of its labour force in the export sector; the share of the T-sector in GDP will be higher .
- Competitiveness , measured as relative unit labour costs in the T-sector, will be higher in C-economies; the share of exports in GDP will also be higher.
- The real exchange rate – defined as the ratio of domestic consumer price index to the foreign price index - will be higher in C-economies.

Real Exchange Rate and (Non-Traded) Services Wages

Let P_c be a weighted average of the service sector price level, P_s , and the world price of tradables, P_T^* (in which the price of the domestic variety has a very small weight).

Assuming Bertrand competition for services, the price of services will be equal to the av. cost of producing it, i.e. $P_s = W_s / l_s$. Thus

$$P_c = a P_s + (1-a) P_T^* = a W_s / l_s + (1-a) P_T^* \rightarrow$$

$$1 = a \left(\frac{W_s}{P_c} \right) / l_s + (1-a) \frac{P_T^*}{P_c} \frac{P_c}{P_c} \rightarrow$$

$$1 = a w_s / l_s + (1-a) \frac{P_T^*}{P_c} \cdot \frac{1}{q} \quad (1), \text{ where } q \equiv \frac{P_c}{P_c^*}$$

is the real exchange rate. From (1) \rightarrow

$$dq / dw_s > 0. \quad \text{This is because } w_s$$

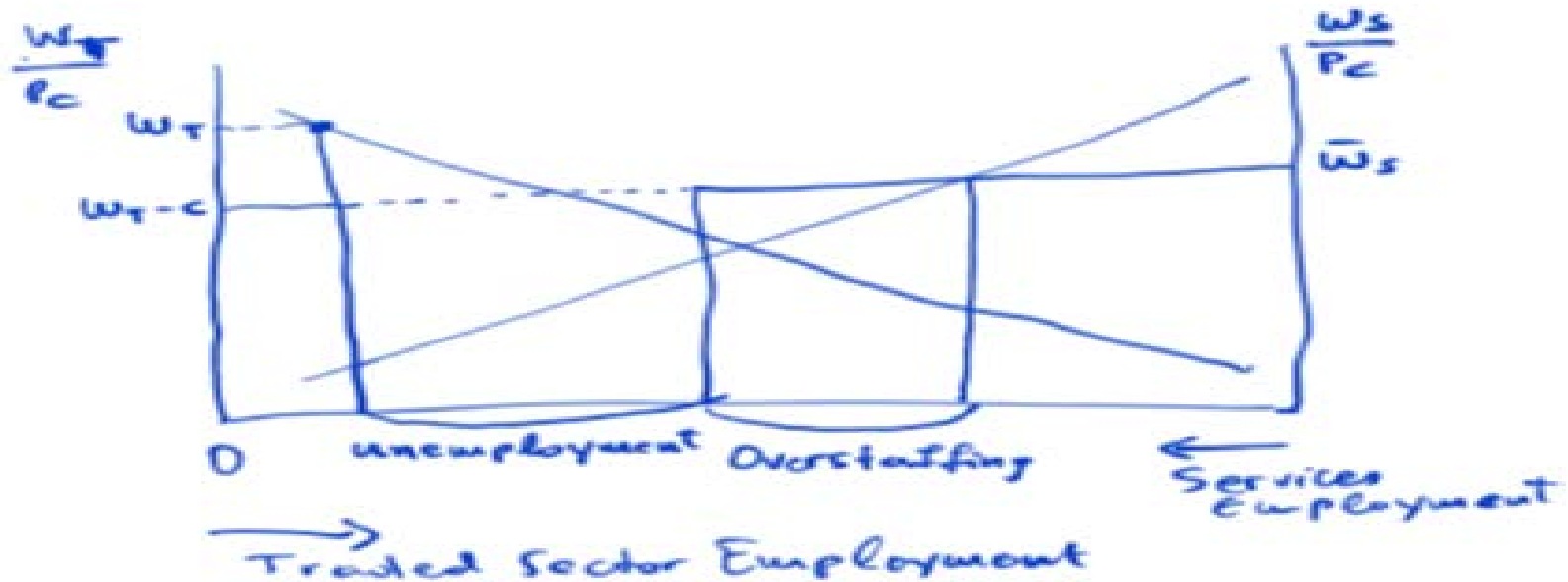
affect the consumer price index, but traded sector wages do not (since, traded sector prices are (largely) set in the ROW).

B: Unemployment

- Skilled or unskilled unions may not care about setting wage rates guaranteeing full employment.
- A particularly poignant case (call it the “Greek” case) may arise if unions in the sheltered, non-traded sector, which may also happen to be state-owned :
 - (i) set wages too high for labour market clearing ,
 - (ii) ensure thru clientilistic networks overstaffing of public sector enterprises (whose deficits add to the overall government deficits), and
 - (iii) the government provides very small subsidies to training (assumed zero in Figure 3).

Figure 3

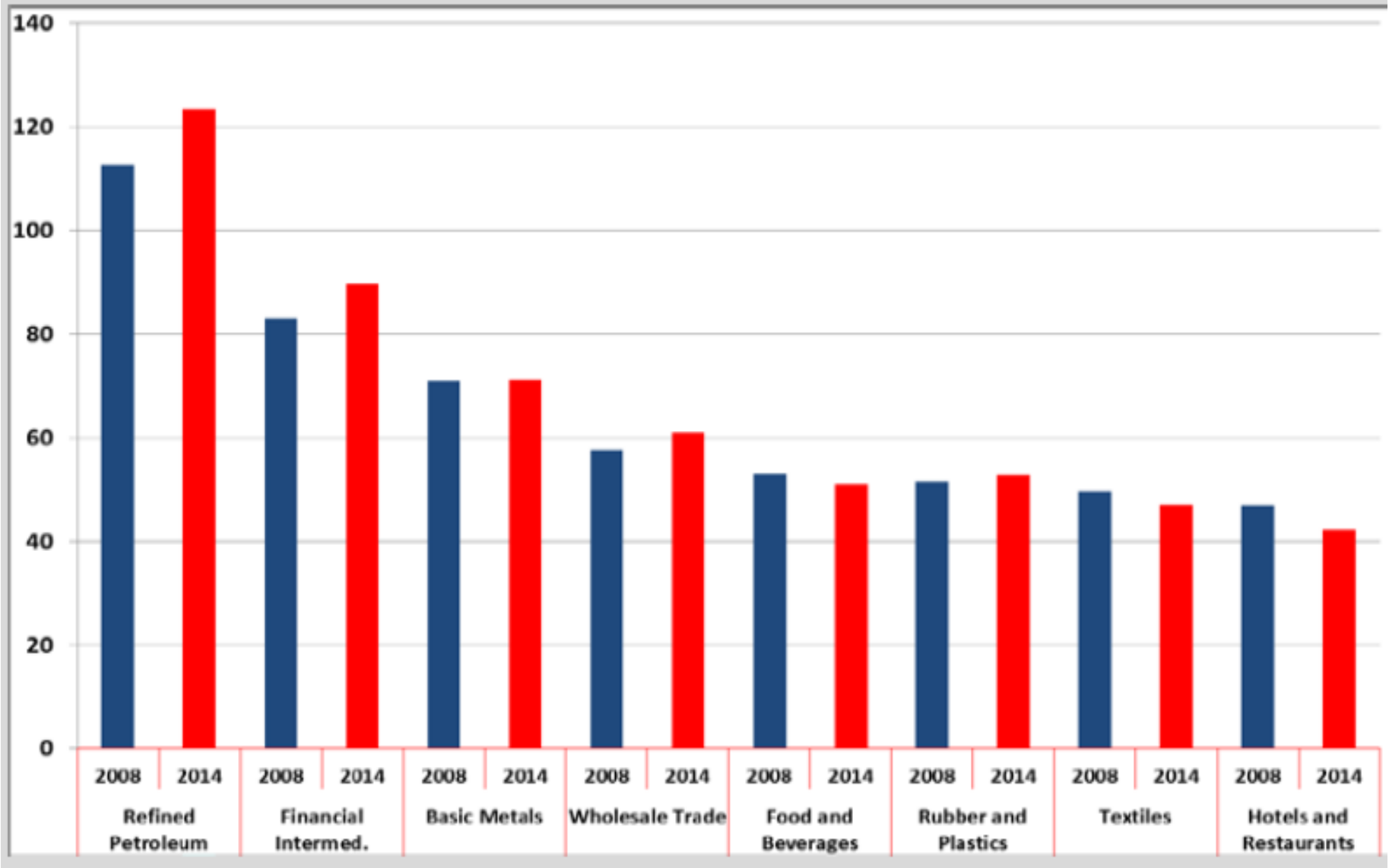
The “Greek” case involves too high wages in the export sector, small production of exportable goods, and current account and budget deficits. Foreign borrowing can alleviate the unemployment consequences for a few years, but the adjustment will be particularly harsh when a sudden stop arises.



- In principle, a reduction of nominal wages in both sectors would re-orient demand towards home-produced goods, and would prevent a vast rise in unemployment due to the reduction in overstaffing and the sudden stop in capital inflows.
- However, reducing wages across the board has been harder to achieve than envisaged thru the reduction in minimum wages.

Internal Devaluation has not Affected Everybody in Greece

Figure 4.4: Average daily wages in selected industries, 2008 and 2014 (euros)*



Greece: Compensation per Employee , 2010=100

