

**EXPLORING SECTORAL CONFLICTS OF INTERESTS IN THE
EUROZONE: A STRUCTURAL POLITICAL ECONOMY APPROACH**

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1. Introduction

The recent Eurozone crisis has made clear that the build-up of external imbalances and foreign debt positions are amongst the major unresolved problems in the European Monetary Union construction. The real exchange rate¹ is a crucial variable in both issues, and developments in current accounts and in the real exchange rate between Europe's 'Northern' and 'Southern' economies were indeed a major focus of attention in the build-up to the recent crisis and following the outbreak of the crisis.

The possibility to influence the real exchange rate through policies can generate conflicts of interests. However, whilst such conflicts are usually framed in terms of Eurozone-level or national-level interests, in this chapter we highlight the important sectoral component of conflicts of interest, which can lead to rethink, qualify, or question received dichotomies such as 'North versus. South'.

As a first approximation, each of the two issues is associated with a fundamental sectoral cleavage: there is a conflict of interest between *tradable and non-tradable sectors* for what concerns developments in the real exchange rate, and between *financial and real sectors* with respect to the accumulation of foreign debt positions and their possible write-offs. We shall discuss these issues in the context of the European 'North-South problem' which is associated with systematic external accounts weaknesses of the 'Southern' economies (the lower- and medium-income European economies²). The latter are generally seen as 'potential catching-up economies', i.e. economies which move on a (potentially) higher income and productivity growth path than the more advanced ('Northern') economies. We shall, in the course of this paper, explore the reasons for these external accounts weaknesses and how these materialised before the beginning of the recent crisis and since its outbreak. The build-up of external accounts disequilibria cumulates in foreign debt positions and these can become a major concern in the context of a regime change in international financial markets. The processes of winding-down of such debt positions (both of the private and the public sectors) are a major concern to the banking sectors with repercussions for the real

¹ The real exchange rate is an indicator of price competitiveness, which takes into account both nominal exchange rates and relative price levels (or relative unit cost developments).

² The analysis in this paper is not going to be limited to Eurozone countries. For countries within the Eurozone the developments of the real exchange rate will be the relevant variable. For countries outside the EMU adjustments in the nominal exchange rate (in addition to the real exchange rate) and the choice of exchange rate regime remains an issue in the context of European 'North-South' relationships. As the recent dramatic developments with respect to Greece have shown, even Eurozone member countries are not immune to speculations regarding radical changes in exchange rate settings (viz. 'Grexit'). Thus, although we shall in this paper often use the term 'Eurozone', we shall in fact refer to the wider range of 'Southern (European) economies' that face situations not dissimilar to those which are already members of the EMU. Where differences between these groups of economies exist, these will be pointed out.

economy. It is these issues which we shall discuss from the point-of-view of ‘sectoral interests’ in the course of the crisis, but also in the period prior to the crisis.

The analysis of how ‘sectoral interests’ articulate themselves in relation to particular economic variables (such as the real exchange rate or external debt positions) can lead to interesting insights into the political-economy dynamics (at national and European levels) when adopting different sectoral decompositions of an economy (in this case: tradable versus. non-tradable sectors and financial versus. real sectors).

But the emphasis on conflicts of interests should not obscure the fact that the aforementioned sectors are to some degree interdependent, within each country and at the Eurozone level. For example, within each economy the non-tradable sector’s aversion to real exchange rate devaluation (which might reduce real incomes and thus domestic demand through accompanying austerity measures) could be tempered by the need that the tradable sector be competitive enough to guarantee the long-run sustainability of the external accounts of the country, which is central for the long-term viability of an open economy. At the Eurozone level, the interest of tradable sectors of advanced countries (the ‘North’) to avoid real exchange rate appreciation (relative to the ‘South’) which would lead to a loss in their competitive positions may be tempered by the risk of considerable fall in demand in the ‘Southern economies’ if that real exchange rate adjustment would not take place.

This form of interest in the viability of the system, which can be called ‘systemic interest’ (Cardinale, this volume; Cardinale, 2015; Cardinale and Coffman, 2014), may lead sectors to support policies that are beneficial to them only indirectly, i.e. because they favour the viability of the system as a whole. Whilst perception of systemic interest is by no means always present, we show that the crisis has in many respects acted as a catalyst, making systemic interest apparent (at the national or Eurozone levels) – irrespective of whether it was then acted upon.

In this paper we explore the interplay of particular and systemic interests surrounding adjustments in the real exchange rate, in its implications for external imbalances and debt write-off. We adopt both of the aforementioned sectoral classifications – tradable versus. non-tradable and financial versus. real – to characterise the political-economic dynamic in the EU both before and during the crisis. We show how this level of analysis complements, and sometimes contradicts, the results of analyses based on standard divides, such as ‘North-South’.

We proceed as follows. In section 2, we first discuss the rationale for using interdependencies between economic sectors as heuristics for political interdependencies, and how this analytical representation affords visualization of the interplay of particular and systemic interests. We then specify the operationalization of our key analytical tools – sectors and interdependencies – as developed in various strands of theoretical and empirical economic analysis. In section 3 we provide the background for the build-up of external imbalances and foreign debt positions in the

Eurozone, by reconstructing the trajectories of advanced and catching-up countries before and during the crisis. In section 4 we focus on external imbalances and the conflict between tradable and non-tradable sectors. We reconstruct conflicts of interest before the crisis and show that the crisis has arguably made systemic interest apparent. In particular, we argue that systemic interests might derive from interdependencies among sectors as well as macroeconomic conditions to which all sectors in an economy are subject. In section 5 we move to the other policy issue, i.e. the problem of foreign debt positions, and the associated conflict between financial and real sectors. In this case too we reconstruct conflicts of interests and the forms of systemic interests made apparent by the crisis. Moreover, we show that the interplay of sectoral interests may also interact with another political dimension, which has to do with government's consideration of the tax burden on the national economy. In section 6 we further refine the analysis by considering the heterogeneity of firms with sectors. We suggest that the crisis can modify interests within a given sector, thus affecting the stance of that sector as a whole with respect to the policy issues at stake. In section 7 we discuss how the overlap of interests at multiple levels (within sectors, and across sectors and countries) and across multiple policy issues can lead to a relatively unclear articulation of interests, which may be responsible for prolonged periods of "muddling through" in policy-making. Section 8 brings the chapter to a close.

2. On political and economic interdependencies

2.1. The economic and the political

This chapter is based on a conceptualization of conflicts of interests within the Eurozone³ in terms of the interplay of economic interdependencies between sectors. 'Sectors' will in this analysis be defined in ways that seem particularly relevant given the features of the Eurozone. Conflicts of interest between those sectors (but also confluence of such interests in periods of crisis) are then analysed with regard to particular policies.

This analytical approach has precedence in the history of economic thought where in early representations of the internal structure of an economy, there was great awareness that productive sectors carried economic interests that could seek political representation (Cardinale and Coffman, 2014). Writings in the tradition of Political Arithmetic (see e.g. Davenant, 1698; Petty, 1663; King, 1696) as well as Physiocracy in France (especially Quesnay, 1759) discussed aggregations of economic activities in such a way that they corresponded to socio-political interests.

Quesnay's (1759) *Tableau Economique*, which arguably represents the first formalized model of interdependencies between sectors (see Phillips, 1955; Hishiyama, 1960; Candela, 1975; Vaggi, 1987; Pasinetti, 2002), represents a very interesting starting

³ For a clarification of the use of the term 'Eurozone' in this paper, see footnote 2 above.

point for our analysis, because it presents a conceptual prototype for considering the interests between interdependent sectors.

Our analysis can take advantage of the much more sophisticated techniques of structural analysis that have been inspired by Quesnay and classical political economy. For example, in the first half of the twentieth century, multi-sectoral models have been developed by von Neumann (1945), Leontief (1941) and Sraffa (1960), and have in turn provided the foundations for multi-sectoral models of economic dynamics (Pasinetti 1981, 1993; Quadrio Curzio 1967, 1975; Baranzini and Scazzieri 1990; Landesmann and Scazzieri 1996; Hagemann, Landesmann and Scazzieri 2003).

Leontief connected his work directly to Quesnay, and saw his *Structure of the American Economy* (1941) as an attempt to construct a modern *tableau*. But Leontief developed input-output techniques to focus on the study of material and technological interdependencies, thus not pursuing their socio-political dimension. In a sense, this chapter aims to initiate a line of empirical work that could “complete” Leontief’s rediscovery of Quesnay, by revisiting Quesnay’s insights about the coupling of economic and political analysis.

It is important to note, however, that we do not assume the relevant aggregations of interests at the outset. We will rather see what coalitions may emerge on the basis of the policy issues we want to discuss. So the basic idea is to take economic interdependencies as a ‘model’ (or even a heuristic) of the structure of economic interests in society, thereby operationalizing what Truman (1962) calls ‘potential’ interest groups.

In attributing political interests to economic sectors we depart from classical political economy, which took ‘classes’, defined on the basis of types of income (rent, profit, wage), as the relevant forms of aggregation. A proxy for the interest of a sector could be its value added, irrespective of how it is distributed among types of income within that sector (see Cardinale, this volume). In other words, different ‘classes’ (workers, managers, shareholders) associated with the same sector might have an interest in their sector expanding at the expense of others. This does not exclude conflicts between types of income receivers within each sector, or indeed across the economy, but suggests that in some historical contexts, defining interests along sectoral lines could be a more explanatory powerful way of aggregating interests in society.

This analytical approach is not meant to be normative but mostly explanatory, although at times it might highlight possibilities for cross-sector alliances that are not otherwise evident, or the presence of systemic interests that are not recognised. More specifically, our analysis points to the existence, in a given configuration of sectoral interdependencies, of the potential for conflicts of interest as well as coordination among them. This structural point of view is compatible with at least two forms of coordination of sectoral interests. One is that in which sectoral actors coordinate themselves, either through a non-coordinated bargaining process or through agencies.

The other possibility is that central institutions, notably governments, act to coordinate industrial interests in view of some ‘general’ objective. Each of these possibilities holds both at the national and cross-country level. At the national level, both forms of coordination are well documented. At the cross-country level, a form of coordinating function is carried out by cross-country sectoral lobbies, which have been influential in articulating the interests of cross-country sectors and in having them represented at the supranational level of decision-making, as is shown by the literature on EU-level lobbying (see Coen 2007, 2009 for a review). The other form of coordination is carried out by supra-national institutions such as the European Commission, or organizations such as the WTO at the global level. It must be noted that, among the various influences on public policy, our approach highlights those that are due to sectoral interests, but their relative weight may vary considerably from case to case. For example, in what follows we will argue that the electoral dimension might play a much stronger role than sectoral interests in policy decisions concerning debt write-off.

Our analysis points to the structure of economic interests, which obviously does not exhaust the range of political interests and cleavages. There are many more (cultural, linguistic, ideological, ...), which may overlap with, or cut through, cleavages based on economic interests. Yet economic interests are often highly relevant, if only because they tend to have much political clout, as has been shown empirically in the literature on EU interest groups. Of course the reverse could be true: political motives may be prior, and lead to economic alliances that make sense economically only *ex post*, or that are simply ‘satisficing’ from an economic point of view, and are rather based on political motives. More generally, this begs the question of whether the economic and the political can really be separated *a priori*. Whilst we provide heuristics to think about the interplay between economic and political interests, a general discussion of the distinction is beyond the scope of this chapter (but see the concluding chapter of the volume).

Another caveat, which is especially relevant at the empirical stage, is that observed interdependencies – and the inferences we make about their validity as heuristics for political groups – may reflect the status quo but do not necessarily imply an impossibility to change; hence, their constraining effects may be less stringent than observed interdependencies suggest. In fact, interest formation at the sector level and sectoral interdependencies evolve in a dynamic context as we shall attempt to show in our analysis of the crisis of the Eurozone.

2.2. Particular and systemic interests

A crucial property for our purposes is that structural representations of the economic system allow us to visualize possible conflicts of interests, but also the conditions whereby the system as a whole is viable.

For example, if we take input-output interdependencies, the system can reproduce itself and grow with different sectoral proportions, i.e. with different relative weights of sectors. Such different sectoral compositions will have an impact on the growth potential of the economic system as a whole and also on whether sectoral output potentials are fully exploited, but the system could be viable with different sectoral configurations in the sense of yielding an overall positive growth rate. If we interpret this analytical result from the point of view of economic and political interests, we can infer that there is room for conflict between sectors, as some sectors may expand relative to others without compromising the viability of the system.

At the same time, such conflicts are systemically sustainable so long as the system remains within sectoral proportions that are compatible with its capacity to reproduce itself. Beyond those limits, the crisis of some sectors can affect other sectors through interdependencies, so the latter may be damaged too.

This suggests that, in pursuing its own interests, each sector may need to balance the particular interests in its own preservation and expansion, and the ‘systemic’ interest in keeping the system to which it belongs viable. An important implication is that in this scheme, the ‘public interest’ (or ‘public good’) is not something abstract, but is grounded in systems of interdependencies, and in sectors’ awareness thereof (Cardinale and Coffman, 2014)

However, each structural representation is based on different conditions for systemic coherence. In the case of systems represented through input-output interdependencies, we need to consider conditions of viability such as reproducibility with a non-negative growth rate. But if we extend the representation, as we do in this chapter, to include interdependent sectors within and across interdependent countries, we need to define at least two types of viability. One is sectoral, and has to do with reproducibility along the lines described above; and it might entail different constraints if we consider interdependencies within and across countries (e.g. the consideration of the possibility to import necessary inputs and to export excess produce). The other type of viability has a macroeconomic character, and – in the context of the topics discussed in this chapter - has to do with the sustainability of external accounts and debt sustainability issues of national economies in or linked to the Eurozone. These macroeconomic conditions are necessary for the long-term viability of an open economy, and again may impose additional constraints when we consider macroeconomic interdependencies with other countries.

Moreover, if we adopt a dynamic representation of the system, which allows for structural change, we need to account for the possibility that disrupting existing patterns of interdependencies may be necessary for structural change itself. But in such cases,

which include attempts to rebalancing national economies through policies, there may be fundamental uncertainty concerning the trajectory of the traverse, which could make it difficult for sectors to ascertain *ex ante* whether certain policies (e.g. industrial policy) are in their interest (Cardinale 2015).⁴ The consideration of structural change also leads to a ‘dynamic’ view of systemic interest, which is not to be equated with a standard condition of reproducibility. In this case, systemic interest needs to be perceived in the necessity of structural change, which can provide the basis for a higher growth trajectory or the emergence from a situation of ‘non-viability’. A realignment of sectoral interests might take place in such a context.

In other words, in a dynamic representation there could be low- and high-growth paths that are viable and sustainable. As a result, different configurations of systemic interest could be pursued which lead to different growth trajectories.

Furthermore, the viability conditions of different trajectories depend to an important extent also on the investment in and maintenance of certain ‘stocks’, both material (e.g. infrastructure) and immaterial (legal frameworks, coordination devices, etc.). The Eurozone crisis and its possible resolution may be seen as contributing to switches between high and low growth paths because of its effects on such immaterial stocks. It may introduce new coordination devices, for example through deeper integration, which help the articulation of systemic interests connected to a high growth trajectory. Or it could deplete existing material stocks, for example by slowing down investment in infrastructural projects.

Whilst the case of systemic interest under structural change is clearly relevant for the Eurozone, in this work we concentrate on the sectoral and macroeconomic types of viability conditions mentioned above, which are particularly relevant for a system such as the Eurozone, with its tight multi-level interdependencies between countries, as well as between sectors within and across countries.

In the presence of sectors that are highly interdependent across countries, a crucial issue is to consider the cleavages that are generated in response to the main policy issues at stake. In particular, in this chapter we consider real exchange rate adjustments and debt write-off as the key policy issues, and look at what the sectoral cleavages are likely to be (tradable versus. non-tradable and financial versus. real, respectively).

The political science literature on cleavages (Lipset and Rokkan, 1967; Hirschman, 1968; Rae and Taylor, 1970; Rogowski, 1987; Svallfors, 2007) has shown that it is important to establish whether cleavages reinforce or overlap with each other. In the former case, the interests of sectors A and B are aligned against the interests of sectors C and D across the main policy issues. In the latter case, sectors A and B have similar

⁴ We do not want to assume, however, that in the presence of structural change the political weight of sectors always varies proportionally with their economic weight. Among the reasons why this may not be the case, we could mention that incumbent sectors may depend more heavily on political support, as well as have established political connections. Moreover, emerging sectors might often make smaller claims on the national rather than the international arena (e.g. the WTO).

interests (and different from C and D) with respect to one policy issue, but A and C's interests are aligned (against B and D) with respect to another policy issue. It is usually found that overlapping cleavages may be an element of cohesion, because they avoid polarization of conflicts (Coser, 1956). In the following analysis, we shall argue that the overlap of cleavages may render the payoffs of each policy unclear. Given the perception of greater uncertainty of interest formation at the cross-country level, established configurations of systemic interest, such as the national ones, may be more salient than supranational ones, although they may lead to lower-growth trajectories.

2.3. Analytical representations

Analytical representations of economic interdependencies always imply an initial decision about aggregation to define the unit of analysis.⁵ There are moreover two ways to proceed with aggregation: (i) assume that the units subsumed under the aggregate are homogenous or (ii) allow for some degree of heterogeneity also within the aggregate.

While we shall opt for various types of 'sector' definitions in our analysis (a relevant form of 'intermediate level of aggregation') we shall nonetheless also point to heterogeneity within our 'sector' aggregates (e.g. enterprises of different size classes or different degrees of export exposure). In fact, there might be tensions within a sector (because of its internal heterogeneity) on how to define the 'sector's interest' and hold a certain coalition together, especially when circumstances change, as in the passage from the pre-crisis to the crisis situation.

Another point is that individual entities might belong to different aggregates, e.g. sectors are defined differently e.g. by 'product' (which in statistical reality is always a basket of products) or by 'process'. The latter referring to similarity of technologies used across enterprises (e.g. energy-intensive processes and less energy-intensive processes).

These different forms of sector aggregations are not just an analytical matter but will articulate themselves in the political arena depending on the subject matter (e.g. trade negotiations taking place by product lines versus. the impact of energy price hikes that are more relevant in relation to processes). Moreover, a choice for one or the other definition of sector implies a focus on the situation (and dynamics) in different markets: a product definition will focus on the output market while the process definition on the market for inputs. The 'process' definition based on 'technological similarity' might also direct one towards an interest in 'process innovation', while the product definition leads to a focus on 'product innovation' and all that this entails in terms of interests in favourable conditions (but also competitive outcomes) for such innovations.

In our analysis we shall use a definition of sectors by product. Moreover, among the many possible techniques of analysis of interdependencies, we shall use input-output

⁵ We shall focus on definitions of sectors and interdependencies starting from a production theoretical angle, leaving other definitions for future work.

interdependencies but also the differentiated dependence of sectors on different components of demand (such as domestic versus. external demand) to characterise sector interdependencies. However, it is well known that input-output analysis focuses on sales and purchases of products and services within an accounting year ('flows') rather than the utilisation of 'stocks'. And whilst from the political-economic point of view, the individual or joint use of 'stocks' (such as pieces of infrastructure or pools of skilled labour) might be as important a constitutive element in the formation of 'interests' as flow input-output relationships,⁶ we leave such analysis to future work.

3. Two issues and two cleavages

We shall now embark on the substantive application of the more general analytical approach discussed above on a central issue of European integration: that of 'North-South' cleavages and, more specifically the issue of persistent 'external imbalances'. These lead to the build-up of external debt which characterise relationships between a significant set of low-/medium-income countries in the European economy (we use the term 'the South' for these economies) and some of the more advanced economies ('the North').

We shall focus on the real exchange rate as the crucial concept as, in the build-up to the recent financial (and Eurozone) crisis, real exchange rate movements and – linked to this – current account imbalances were a major focus of attention in the Eurozone. The build-up of external imbalances and of foreign debt positions is now generally considered to be one of the major unresolved problems in the EMU construction (see Darvas, 2012; European Commission, 2012; Giavazzi and Spaventa, 2010; Jaumotte and Sodsriwiboom, 2010). Although the relationships between 'Southern' and 'Northern' economies within the EMU will be the core of the following analysis, the 'North-South' problem in Europe is not restricted to the set of member countries of the EMU. Also other low-/medium-income countries in Europe (such as those in Southeast Europe; see Landesmann, 2015 a) suffer from what we shall call 'structural current account imbalances' and many of them are also linked to the Eurozone with some form of a fixed exchange rate regime.

⁶ Just as certain representations (e.g. Pasinetti's (1973) use of vertically integrated sectors) investigate the links of sector activities (directly and indirectly) to final products, there are also other analytical representations which emphasise the (direct and indirect) links to the use of specific primary inputs; these could refer to the uses of primary natural resources such as lands of different quality, of other natural resources, but also of skills of particular segments of the labour force. The dependence on a common input can of course be of great relevance for the formation of common interests. This goes in both directions: from the point-of-view of dependence of production activity on the availability and supply (at a certain price) of a particular primary input and also from the perspective of the input itself e.g. particular skill segments of the labour force being interested where the demand – directly and indirectly – for their skills will come from.

The notion of 'primary input' can also be extended to the direct and indirect dependence on the availability of a *particular type of infrastructure* or *legal/institutional settings* on which different (forwardly linked) sectors depend to different degrees. Again this is of political relevance for 'interest formation' vis-à-vis the provision of such infrastructure and legal/institutional settings.

As we shall apply a ‘structural political economy’ approach (Cardinale, this volume; Cardinale, 2015) it is necessary to go beyond country differentiation (‘Northern’ and ‘Southern’ economies) and also specify interest formations on the basis of ‘sectors’ that identify economic activities in relation the overall productive system and their interrelationships (see the discussion in section 2 above).

In this respect we shall employ two different types of ‘sectoral classifications’ in the following: first, that between ‘tradable’ versus. ‘non-tradable’ sectors and, second, ‘real’ versus. ‘financial’ sectors or interests. The use of both these sectoral schemes to characterise the pre-crisis and crisis political-economic dynamic in the EU also serves the purpose to show that multiple sectoral classifications can be employed to analyse a specific historical situation.

We shall argue that the analysis of the pattern of real exchange rate developments is a good testing ground for a political-economic analysis of interest articulation across sectors within and across countries and their implications for ‘systemic’ issues at the EU level.

The fact that there are periods of widely diverging real exchange rates and ensuing current account and debt developments across EU member states shows that the interests between tradable and non-tradable sectors get (at least over certain time periods) quite differently resolved in different EU economies (See Figs. 1 and 2). Why is this the case?

Figs. 1 and 2 Graphs on real exchange rate movements and debt (% of GDP) developments

One reason could simply be the *size* of the country: a priori one would think that big economies can rely more on the domestic market and hence overall policy should be biased in favour of non-tradable sector. However Germany is a counter-example (see below).

Another reason could simply be the *level of development*: lower income/lower productivity countries are prone to current account deficits (see Landesmann, 2015a and b). There are a number of reasons why that is so. Catching-up economies can offer higher rates of return as they move along a higher productivity growth trajectory compared to more advanced economies. This leads to attracting net capital imports and thus to current account deficits. Other reasons could come from the trade accounts and underlying expenditure patterns in a catching-up economy: both up-grading and high income growth require or imply importing superior capital goods and consumer goods produced so far only in advanced economies. More problematic aspects can arise from the fact that capital inflows themselves fuel an expectation of currency appreciation, which attracts further speculative inflows. Similarly, the fast urbanisation and agglomeration that accompany catching-up put strain on urban land rents, which in turn attracts speculative capital and ‘distorts’ price structures in favour of non-tradable sectors.

Thus it is likely that a ‘Union’ (defined here simply as a set of countries with highly integrated product and capital markets) which encompasses advanced economies and catching-up economies will be prone to show ‘structural’⁷ current account imbalances (see also Landesmann and Hanzl, 2016). Before looking at the implications of such imbalances for ‘systemic’ viability at the level of the EU as a whole we return shortly to the articulation of sectoral interest groups in advanced (‘Northern’) and catching-up (‘Southern’) economies.

Can we establish that there is a systematic bias in the ‘South’ towards a stronger position of non-tradable sector interests and a bias in the opposite direction in the ‘North’? If this is the case, it is an important ingredient in the political economy of the EU and has implications for its governance structure. We shall in fact argue that there is a dynamic *bifurcation in Southern economies* towards two quite different trajectories: on one trajectory there is indeed an evolving bias towards the non-tradable sector, while on the other trajectory there is a more balanced development in which the tradable sector’s capacities are strengthened along with growth in the non-tradable sector. In the first case, there could be serious instability along this trajectory, while in the second case a more balanced development will not violate the longer-term external accounts constraint.

Figures 3 and 4 provide empirical evidence that such a bifurcation indeed exists.

Figures 3 and 4 on current account developments and sectoral growth patterns in two groups of catching-up economies: CEEs and EU-South and Southeast.

What are the arguments for such possible biases? As mentioned above, a catching-up process is characterised by two issues: (i) productivity catching-up which - following Balassa and Samuelson- proceeds more strongly in the tradable sector; and (ii) a tendency to have a deficit on the trade account which results simply from the fact that the GDP growth rates in catching-up economies are higher than in the main trading partners and thus – in a situation with constant real exchange rates - even with equal import and export (income) elasticities compared with advanced economies, trade balances would be negative (see the literature on ‘balance-of-payments constrained growth’; e.g. Thirlwall, 1979; McCombie and Thirlwall, 2004)/ Moreover, there are good arguments in favour of import elasticities being higher in catching-up economies as there is a need to import capital goods and consumer goods of high quality and covering a greater ‘variety range’ from technologically more advanced economies.

From this situation one can argue that there are *two possible trajectories* open to deal with the situation of high initial trade deficits in which *catching-up economies* typically find themselves: one is to make a major attempt to close the trade deficit over time, the

⁷ We use the notion ‘structural’ here to point to the systematic explanation of these imbalances from the nature of the relationship between advanced and catching-up economies and not derived from random ‘external shocks’.

other is to allow the trade deficit to linger on and accept the debt burden which builds up as a consequence.

For both scenarios there can be cumulative causation processes at work which enforce one or the other trajectory. First, the *'lingering on' scenario*, which was already described above: the cumulative processes are the result of net capital imports putting pressure on the real exchange rate which makes investment into the non-tradable sector more attractive and imposes a strain on the tradable sector. Follow up consequences of investment into the non-tradable sector are relative price (including asset price) developments which encourage speculative flows into the non-tradable sector. Second, cumulative processes supporting a *trajectory of a Balassa-Samuelson variety* result from the scope for strong productivity catching-up in the tradable sector making this sector attractive for investment (and also attracting a qualitatively good labour force which can be offered higher relative wage growth compared to the non-tradable sector. Foreign investment adds to the knowledge/technology transfer and hence to the dynamic of productivity catching-up. This leads to technology and product quality upgrading and this to a 'climbing up the ladder' in comparative advantage and a shift of trade specialisation, moving towards higher income elastic products and higher value added components of the production chain (see Landesmann and Stehrer , 2001 and 2006 who demonstrated in a number of models this type of trajectory).

Empirical evidence that such a bifurcation into two trajectories exists is shown in Fig. 5, where we show real exchange rate developments of the range of lower-/medium income EU economies over the period 2000-2008 on one axis and changes in global market shares of these economies over the same period. We can clearly see that a group of lagging EU economies showed moderate real exchange rate appreciation over that period (this set of countries includes all the Southern EU economies plus Croatia and Slovenia) with no or very small increases in global (export) market shares, while another group of economies reveal the 'virtuous circle' of strong increases in real exchange rates combined with strong increases in their global (export) market shares (this group comprises all the Central European New Member States and the Baltics).

Figure 5

Thus we have established both a theoretical basis and empirical evidence in favour of these two trajectories for catching-up economies. We now want to establish *possible biases* (in the tradable versus. non-tradable sector trade-off) *amongst advanced economies*. A parsimonious argument is that once a bias has been established in one trading partner in an interdependent trading situation, there has to be a symmetric bias in the other trading partner. But let us go beyond this and understand a 'mercantilist bias' in the case of some of the 'Northern' economies – not all of them have such a bias as we can observe from the very different situations of e.g. Germany and the USA. Let us start with the behavioural analysis of the 'Savings-Investment' balance: From long-term empirical trends the US situation is the more typical one i.e. as countries get richer their savings rates fall. If they remain attractive for investment therefore they will have

a negative savings-investment balance and hence a deficit on the current account. On the other hand, we also have the example of Germany which shows a bias towards the tradable sector. How do we explain that? We can postulate *two possible trajectories amongst advanced economies*.

The *US trajectory* is based on its attractiveness for international capital flows even if it shows a chronic current account deficit. Why is this the case? One argument is the global reserve currency argument: Because of the sheer size and depth of US financial markets and the importance of the Fed as ‘the’ global monetary authority which can back up with its issuance power the US private and public debt positions, the US is seen as a ‘safe haven’ even when - over extended periods of time – the current accounts remain negative. Expectations regarding USD currency developments are therefore highly uncertain even when there are sustained current account deficits (which in other countries’ situations would move markets to expect depreciation). The cumulative causation argument also works here: trust in the power of the Fed leads to capital inflows thus stabilising or even appreciating the USD in spite of current account deficits which makes investors feel safe in investing in non-tradable and tradable sectors (in the former more if there are real appreciation pressures, in the latter more if the various components driving the real exchange rate – wages, productivity, nominal exchange rate – suggest a moderate depreciation) which in turn sustains a longer-term current account deficit position of the US economy and a sustained national investment-savings gap⁸.

The ‘*German*’ trajectory, which also applies to Japan and – in due course – also to other Southeast Asian economies. Empirical evidence suggests that the export sector in an economy is the sector with the highest productivity growth. Hence, a strategy that tends to support exports (and thus expand the weight of this sector in the overall economy) would also drive productivity growth in the economy as a whole. This motivation lies behind a ‘mercantilist strategy’ in catching-up economies, but also applies to advanced economies. There might be an ingrained List-tradition in Germany which continues to motivate this strategy – possibly a left-over of the catching-up phase in the second half of the 19th century – which might also have transferred to Japan (and from there to other East Asian economies).

Hence also amongst advanced economies different possible trajectories with regard ‘structural current account’ positions can persist and with this a difference in the policy emphasis with respect to the tradable and non-tradable sector.

We now return to the issues which might be generated by the problem of ‘structural external imbalances’ in the European context. Given the previous argument there are

⁸ Although we have concentrated here on the US as an example for an advanced economy with a ‘structural current account deficit’, many of the arguments can also be applied to other advanced economies such as e.g. the UK. Although the global reserve currency argument does not apply (or not to that extent), the arguments regarding depth of capital markets, the relative trust in the competence of monetary authorities and also the backing of debt positions with an underlying valuable asset and capital structure (including human capital) which has been built up over centuries can be applied also in this case.

potentially four groups of economies: (i) advanced economies with sustained current account surpluses (ii) advanced economies with sustained current account deficits (iii) low-/medium-income economies with sustained current account deficits (iv) low-/medium-income economies with moves towards balanced or sustainable current accounts⁹.

What does the presence and interaction of these four groups mean, firstly, for the functioning of the EU and the European economy more widely and, secondly, for political economy issues by which we mean the articulation of interest groups at the national and EU levels and its impact on policy-making and policy reforms?

Before we come to that let us summarise the factors which lead a ‘Southern’ country to move towards trajectory (iii) above (i.e. unsustainable external imbalances). Among the external factors, financial integration leads to cheap access to external finance and allows protracted periods of external disequilibrium in catching-up economies. Moreover, EMU membership or fixed exchange rate regimes seemingly make exchange rate risk disappear. The result is high indebtedness often denominated in foreign exchange. Furthermore, external creditors from the EU can rely on a likely bail-out if external debt becomes unsustainable. This generates a moral hazard issue in the EMU/EU because of contagion fears in the financially highly integrated region.

Among the internal factors, catching-up economies have initially undervalued land prices and high expectations of land price appreciation (also because of rural-urban migration). This makes real estate investment attractive. On top of that – especially relevant in transition economies in Eastern Europe – there is catching-up not only in productivity but also in expenditure structures which favour the distributive sector (wholesale/retail etc.) and other services sectors. Many of these are part of the non-tradable sector that mostly require urban or sub-urban locations and thus add to the pressure on land prices.

Similarly, we can summarise the internal and external factors which lead an advanced economy towards the choice of trajectory (i) (favouring the tradable sector) above. Among the external factors, there is high demand for investment goods and high-quality, high income-elastic products by the South which favours a positive trade balance of advanced economies trading with catching-up economies. Further, the above mentioned attractiveness of higher capital returns in catching-up economies favours net capital flows into these economies. This results in positive capital accounts in advanced economies and negative ones in the catching-up economies (‘capital flowing down-hill’) which is complementary to the current account developments where negative trade

⁹ We leave out the case of low-/medium-income countries with sustained current account surpluses – although they exist at the global level – because they do not feature in the European context. Strong currency manipulation, capital controls and protectionist measures are required to sustain such a position for a catching-up economy (which does not have the advantage of deep capital markets, international trust in its monetary authorities etc.). However, this is not an option for countries that are either members of the EU or in various types of association agreements or aspire to such, as any such arrangements do not allow such type of policy interventions.

balances in the catching-up economies need to be financed by net capital inflows from the advanced economies.

The internal factors, instead, could refer to a relatively stagnant domestic market in advanced economies, for example because of ageing, rising inequality, and a satiation of good investment opportunities in mature economies. Once we have established the factors that move an advanced economy towards trajectory (i) and a catching-up economy towards trajectory (iii), we can concentrate on the bilateral relationship between *‘Northern’ surplus country and ‘Southern’ deficit country* and later on introduce other relationships including countries which follow trajectories (ii) and (iv). Giving priority to this bilateral relationship reflects of course the interest in this paper in analysing a ‘North-South’ relationship at the European level characterised by *structural external imbalances*.

The political-economic question we shall attempt to address now is why (i) unsustainable current account imbalances between the ‘North’ and the ‘South’ developed in Europe prior to the crisis; and (ii) what were the differentiated patterns of adjustment which took place post-crisis. In this respect we shall discuss the political-economic processes which lie behind these developments using the framework of sectoral interests introduced earlier.

In section 5 we shall then expand the analysis employing an alternative sectoral decomposition into ‘real’ and ‘financial’ sectors or interests and discuss their respective positions with respect to debt build-up prior to the crisis and possible debt relief or debt restructuring post-crisis.

4. Conflicts over imbalances: tradable versus non-tradable

In most countries there is potentially a conflict of interest between ‘tradable’ and ‘non-tradable’ sectors: tradable sectors are predominantly interested in staying competitive in relation to foreign competitors (hence, in relative cost conditions), as well as maximising their access to foreign markets. Non-tradable sectors, on the other hand, are dependent on sales on the domestic market and thus interested in factors that strengthen domestic demand.

There are of course interdependencies between non-tradable and tradable sectors: Input-output relationships show that non-tradable sectors provide (directly and indirectly) a sizable share of the required inputs of the tradable sectors and hence quality and cost of these supplies matter for the competitiveness of the tradable sector. Similarly tradable sectors make through their export earnings contributions to domestic demand on which the non-tradable sector depends. Further, there are interrelated learning processes and technological spillovers that are of mutual interest to both these sectors. Moreover, the tradable sector is responsible for an important macroeconomic constraint i.e. the trade balance, which is of great importance for the longer-run viability

of an economy in an open international context. We shall return to this important ‘systemic interest’ below.

However, despite these various interdependencies there still remains a certain amount of ‘conflict of interest’ between the two types of sectors as an economy might be viable (at least over a certain time horizon) with different weights and evolutions of these sectors¹⁰. Let us briefly discuss the implications of such a conflict of interest between tradable and non-tradable sectors, first in a national context and then at the EU level.

In a national context, tradable sectors would – as mentioned earlier – emphasise the importance of ‘competitiveness’; this would allow such sectors to expand and raise incomes (and employment) in that sector. There are of course various ways to increase ‘competitiveness’: one route is through low unit costs (at current exchange rates); the other would be through the supply of high quality products. In the following we shall talk about relative unit costs always in a way which adjusts unit costs for quality levels. In this way we shall define a ‘real exchange rate’ which is the central concept we shall use in the following.

Let us now explore potential conflicts of interest between tradable and non-tradable sectors in relation to the real exchange rate. Tradable sectors will expand sales and incomes through a favourable real exchange rate (i.e. depreciation) as long as the Marshall-Lerner conditions are satisfied¹¹. However, a depreciated real exchange rate also means that imports will be relatively expensive and hence non-tradable sectors (and final consumers) which depend on such imports will be negatively affected. Further, if increased cost competitiveness is achieved by driving down wage rates (or rationalising on employment which also lowers unit costs in the tradable sector), this could negatively affect domestic demand on which the non-tradable sector depends. Furthermore, achieving real exchange rate depreciation through nominal devaluation will entail a pressure on domestic inflation through the exchange rate pass-through. This in turn depresses domestic real incomes.

What about the conflict of interest the other way round, from the behaviour of the non-tradable sector on the tradable sector? The non-tradable sector by definition is less affected by rising costs¹². Its sales are only indirectly dependent on foreign markets and its interest lies in the purchasing power on the domestic market. It is thus interested in positive domestic income developments and high spending out of these incomes. The

¹⁰ If there were only a unique balance of the two types of sectors to attain ‘viability’ of an economy there would be little ground to analyse ‘conflicts of interest’, as any articulation of such interests would tend to make the economy as a whole non-viable.

¹¹ The Marshall- Lerner conditions specify the conditions under which the relative demand (quantity) effects from an exchange rate depreciation outweigh the terms-of-trade (i.e. relative price) effects on the overall (nominal) balance of trade.

¹² We say here ‘less’ because the non-tradable sector is not immune to rising unit costs, since there are still substitution effects between domestically supplied tradables and non-tradables affecting the shares of the two types of sectors in domestic demand.

attitudes towards wage policy, public spending policy, exchange rate policy (effect on import prices and thus domestic real incomes) and even monetary policy¹³ are therefore likely to differ between non-tradable and tradable sectors.

Of course, there is also plenty of common ‘systemic’ interest between the tradable and non-tradable sectors at the national level: both must be interested in the viability of the domestic economy in the long-run and hence in observing the constraints on external imbalances which in turn depend on external financing conditions. But even there, the burden of adjustment might fall to different degrees on the two types of sectors if the external imbalances constraint is violated. An external debt shock might imply a long-term requirement for the domestic economy to be in a depressed state (in order to suppress domestic demand, thus affecting particularly the non-tradable sector) and might, furthermore, induce a strong adjustment in the real exchange rate in the direction which is beneficial for the competitiveness of the tradable sector.

Let us now explore the articulation of sectoral interests (tradable versus non-tradable sectors) in their historical contexts in Europe, and especially during the 2000-2014 period, in which the ‘North-South’ relationship in Europe went through a number of phases. Furthermore, this relationship took place in different economic and institutional contexts depending on whether countries were within the Eurozone, within the EU but not in the EMU, or whether one includes countries outside the EU but integrated in the wider European economic space¹⁴. Let us shortly sketch the developments over two phases: pre-crisis (2000-2008) and crisis (2009-2014).

The *pre-crisis phase* saw the development of – at times explosive – current account deficits in ‘Southern’ European economies (see Fig. 3 above). The reasons are – by now – well known: there was an interest rate convergence within the Eurozone and also a compression of interest rates in associated ‘Southern’ economies which were not EMU members but had opted for one or the other type of a pegged or fixed exchange rate regime. Interest rate compression, combined with a belief (and a documented record) of higher growth rates of catching-up economies, led to a strong incentive for high capital inflows into these countries. Whether these capital injections were mainly invested into the tradable or the non-tradable sectors depended on other factors (see earlier discussion).

¹³ Shortly on monetary policy: both sectors in principle are interested in low inflation; the tradable sector because it keeps the sector competitive and the non-tradable sector because it keeps real incomes *ceteris paribus* high. However, the two sectors can disagree on how low inflation is to be achieved. In fact, if domestic inflation is contained through high interest rates this could affect the two sectors differently. Relatively high domestic interest rates would invite capital inflows which exert pressure on the exchange rate to appreciate; this is detrimental for the cost competitiveness of the tradable sector but beneficial in terms of lower import prices for the non-tradable sectors. Similarly, a general fall in domestic demand because of high interest rates would be particularly detrimental for the non-tradable sector but might have beneficial implications on reducing wage rates and costs for the tradable sector.

¹⁴ As mentioned in footnote 2 above, we consciously extend the analysis beyond the EU as the ‘North-South’ issues are also relevant for the ‘wider European integrated economic space’.

What about *real exchange rate adjustment* which is the crucial variable in the case of sustained ‘North-South’ external imbalances? Obviously, tradable groups in advanced and catching-up economies are competitors; hence any movement in the real exchange rate in favour of one group will reduce the competitive position of the other group. Hence from a ‘sectoral interest’ perspective there is a conflict of interest there. What about *tradable versus non-tradable sector interest groups* in relation to the real exchange rate? Here it is obvious that real appreciation favours the non-tradable groups in both advanced and catching-up economies (always seen from the angle of the respective economy).

Thus we can think of a matrix of ‘sectoral interests’ in relation to real exchange rate movements (we look at the situation always from the point of view of a particular country appreciating its real exchange rate).

Matrix 1. Conflict/Complementarity Matrix in the case of real exchange rate appreciation

		Catching-Up	
		Tradable	Nontradable
Advanced	Tradable	(-,+)	(-,-)
	Non-tradable	(+,+)	(+,-)

Note: a minus (-) sign means a particular sector in a country disapproves real exchange rate appreciation; a (+) sign means a particular sector approves of real exchange rate appreciation. The first entry in the bracket always refers to the country - depicted in the horizontal dimension - which undergoes the exchange rate appreciation, the second entry in the bracket shows the approval or disapproval by the respective interest group of the other country – depicted in the vertical dimension. Hence, a bracket containing the same signs indicates a convergence of interests, whereas different signs indicate a conflict. Thus we can interpret the entries in the matrix in the following way: a (-,-) sign in the top-left quadrant means that the tradable sector in each country disapproves real exchange rate appreciation, always seen from the respective country’s angle. The (+,+) sign in the bottom-left quadrant means that the non-tradable sectors in each country have an interest in real exchange rate appreciation which is approved also by the tradable sector in the other country.

What emerges from this matrix is interesting in that, in relation to the real exchange rate developments, there are conflicts of interests between the same sectors in the two types of economies, and joint interests across the complementary sectors in the two economies. Thus real exchange rate appreciation is approved by the non-tradable sectors in the country where this real appreciation occurs and approved by the tradable sector of the other country (bottom left-hand entry). On the other hand, real exchange rate appreciation is disapproved by the tradable sector where this real appreciation

occurs, but is approved by the tradable sector of the other country (top left-hand entry) and disapproved by the non-tradable sector of the other country (top right-hand entry).

The crisis made the unsustainability of the previously built-up current account positions of a range of ‘Southern’ economies apparent. As the crisis erupted in quite a few of the Southern economies the situation moved towards a so-called ‘sudden stop’. This means that financial markets reacted to the increase in uncertainty with an unwillingness to allow any further net capital flows to come into these countries and in quite a few of these there were net capital outflows (see again Fig. 3 where a turn-around from negative to positive current accounts implies a move towards net capital outflows).

The developments of ‘North-South’ relationships in Europe during the crisis have put a lot of strain on the policy framework that underlies European integration (see Darvas, 2012; European Commission, 2012; Giavazzi and Spaventa, 2010; Jaumotte and Sodsiwiboon, 2010; Landesmann, 2015b). The crisis revealed that North-South relationships within the EMU and also in relation to countries closely linked to the EMU were not organised in a policy context that assured sustainability. Furthermore it would lead, if not addressed, to serious adjustment processes or – in a worse outcome – to protracted ‘crises’ in countries’ developments and also for the European integration process itself. What was this policy context?

The pre-crisis period showed serious deficits in capital market arrangements within the EU and in relation to countries which are strongly economically linked with the EU. From today’s perspective it seems an almost incomprehensible negligence in the set-up of the Single Market not to have immediately moved towards a pan-European monitoring and supervision system of financial institutions. It was clear from the very beginning that the financial market would be the most integrated amongst the three markets (goods and services, capital, labour) as capital is historically the most mobile factor. Hence the neglect of pan-EU supervision mechanisms must be explained by political-economic considerations such as the resistance of national supervisory bodies (in cohort with the interests of national financial institutions to benefit from close links to these national supervisory bodies) to give up competences. The implications of this deficiency in the EU/EMU policy framework will be further discussed in section 5.

Two other factors played a role in allowing the ‘external imbalances’ in the European economy to move towards unsustainable paths: one was the mistaken belief – in the context of a very incomplete integration context of the EU – that ‘external imbalances’ within a Union do not matter. The other was the singular focus of policy constraints imposed on fiscal developments and the public debt (entrenched in the Growth and Stability Pact, the GSP) but a neglect of private sector debt developments.

In any case, the build-up of unsustainable external imbalances between ‘North’ and ‘South’ in Europe went along without any check at the pan-European (or EU) level.

This deficiency became very apparent during the crisis and the urgency with which – although with some delay – policy-makers moved towards the setting up of joint supervisory mechanisms at the EU (or Eurozone) level as one pillar of the ‘Banking Union’ are a reflection of this. Furthermore also the attention given to developing a ‘Macroeconomic Imbalance Procedure’ (MIP) in the wake of the crisis which however still has many unsatisfactory aspects (for a discussion of MIP see e.g. Gros and Giovannini, 2014; de Grauwe, 2012; Belke and Dreger, 2013)

In this sense, we consider the crisis as an instance which made ‘systemic interest’ apparent. Making ‘systemic interest’ apparent does not, however, mean that this automatically leads to political-economic constellations which initiate actions in the direction of the ‘systemic interest’.

Let us now discuss what causes sectoral interests to move towards recognising ‘systemic constraints’ which could either take the form of a macroeconomic constraint (such as unsustainable external imbalances or debt sustainability) or a recognition of the importance of inter-sectoral interdependencies.

A crisis situation such as the one which arose for a number of ‘Southern economies’ in 2008/09 with a shift of the current account regime towards a ‘sudden stop’ (see Fig. 3 above) meant that both the North and the South were faced by regime changes with regard to these two types of constraints (of inter-sectoral relationships and macroeconomic constraints) and, furthermore, these articulated themselves at the national level and the inter-country level (i.e. in North-South relationships).

An overview of the different types of constraints can be obtained from the following matrix depicting the situation with the outbreak of the crisis in 2008/09:

Matrix 2: The nature of national and cross-country constraints in the wake of the financial crisis

	Sectoral interdependencies		Macroeconomic constraints	
	National	International	National	International
North	Weak banks hitting other economic activities	Sales constraint hits tradable sector	Growth slowdown	Export weakness hits domestic economy
South	Financing Crisis	External finance dries up	Severe Recession	Current account closure; Sudden stop

Exploring the different entries in this matrix, we see that the financial crisis hit the pattern of sectoral interdependencies through the worsening of the services provided by the financial sector to the other sectors of the economy. This was more severe in the

‘South’ than in the ‘North’ as the debt sustainability issue of the (private sector) borrowers was much more apparent in the South (due to the ‘credit bubble’) than in the North. On the issue of sectoral interdependencies we can also see an international dimension (second column) as the tradable sector in the ‘Northern surplus economies’ face a constraint in their exporting possibilities in the South and Southern (sectoral) economic activities face the additional constraint on borrowing from abroad.

As regards macroeconomic constraints, the North suffers from a general growth slowdown induced partly from a less well functioning domestic credit system and from the international transmission of the growth slowdown in its export markets. The South experiences a much more severe impact on growth through the dysfunctional domestic banking system and the dramatic shift in the current account constraints due to the ‘sudden stop’ of further net capital inflows.

Do these regime changes also change the nature of sector strategies as depicted in the earlier Matrix 1, which showed the pattern of congruence or conflict of sectoral interests? We would argue that in times of crisis, it is possible that sectoral interests can indeed shift in the light of the more binding constraints experienced during the crisis which have been depicted in Matrix 2.

First of all, there is an interest by the economy at large to deal with the weak banking system; this is an issue we shall examine in section 5. Further, still in this context, there has to be an interest by the ‘South’ to recover access to external finance on which many activities, and in particular importers, depend. Thirdly, there might be a shift in the attitude of the non-tradable sector in the South to switch its strategy and support a real depreciation of the currency which reduces domestic demand (in the short run, real devaluation is achieved through wage restraint) but might allow the export and the import competing sector to recover. Through the induced macroeconomic effects (lifting somewhat the balance-of-payments constraint) and spill-over effects on the non-tradable sector supplying inputs to the tradable sector, this might induce a shift in strategy of the non-tradable sector.

Let us move to inter-country sector strategies. In the pre-crisis period the tradable sector in the Northern country was not interested in a real depreciation of its trading partners as this would erode its competitive position. Once the crisis results in a severe recession in the Southern economy – which prior to the crisis soaked up the net exports from the North – this hits the tradable sector in the North. As a real depreciation of the Southern economy leads to a relaxation of its external accounts constraint and thus allows a recovery this would favourably affect the exporting potential for the Northern exporters. This output effect of a real depreciation of the South might outweigh the negative effect derived from a deteriorating (relative price) competitive situation of the North. The Northern tradable sector interests might thus realign behind a real depreciation of the South.

We can also examine economies that do have the option of nominal devaluations as a path towards real devaluation. This refers to ‘Southern’ economies which are not in the Eurozone which could switch from a pegged regime towards a more flexible regime or, taking the more extreme case such as envisaged with Greece during the crisis, of the possibility of an EMU member leaving the Eurozone. There the domestic and international situation with respect to devaluation will be seen quite differently in countries which have built up a large stock of Euro-denominated debt and other countries where the levels of Euro-denominated debt is much smaller. In the former a nominal devaluation would lead to a near *pari passu* increase in that country’s foreign debt ratios while in the latter the impact of nominal devaluation will be less severe. Hence we would expect different behaviour in the realignment of sectoral interests behind a nominal devaluation between these two sets of economies depending on the respective levels of foreign-exchange denominated debt levels.

The above analysis has shown that either a change in external environment (e.g. international financial crisis) or national economic developments (e.g. external imbalances transcending certain threshold levels) can change ‘sectoral interests’¹⁵. Furthermore, developments in the external context or internally can lead to a change in whether a constraint (be it of the macroeconomic variety or one expressing inter-sectoral interdependencies) becomes binding and thus influences a country’s economic trajectory overall and the formulation of sectors’ interests¹⁶. Lastly, the weights of different constraints can change depending on external and internal developments thus influencing overall economic trajectories and having a differentiated impact on sectoral interests and the conflictual or congruence stances amongst these. This includes conflicts and congruence constellations at national and international levels.

The analysis above thus suggests an interplay of particular and systemic interests. Furthermore, in order to make conjectures about which ones prevail in a given country, it is important to consider *how relevant domestic interdependencies are as compared to external interdependencies*.

The general point that seems to emerge from the analysis is that systemic interest could indeed align previously conflicting sectoral interests, but perhaps for different reasons and/or through different policies. For example, if the systemic interest considerations of the tradable sector of the advanced economy do indeed have to do with ensuring sufficient demand from catching-up economies, then this result could be achieved

¹⁵ It would be interesting to empirically test for ‘switchover points’ when the sectoral interests change as a result of the above-mentioned ‘thresholds’ being crossed with respect to variables characterising the external environment (e.g. downturn in export demand resulting from a move of trading partners into recession) or the national macroeconomic situation.

¹⁶ In section 7, we come back to analyse instances when internationally oriented sectoral interests switch towards a ‘nationalist stance’. Historical examples show such a switch of industrial interests, e.g. Germany in the 1930s. An example in the other direction, i.e. towards a more international definition of industrial interests would be the production relocation moves by Japanese industrial groupings over the 1990s and 2000s.

through domestic demand policies in the latter economies, without necessarily requiring real exchange rate adjustments, at least in the short run. On the other hand, the non-tradable sector of the catching-up country's interest in the sustainability of the current account would necessarily require real exchange rate adjustments. If this is the case, it could happen that even in the presence of strong systemic interest, there could still be a conflict as to the policies to be adopted, which could further delay measures that are of interest to many sectors.

The recent Eurozone crisis has shown how conflicts of interest across sectors (within an economy) and those across economies (the 'North' and the 'South') which arise from unsustainable external imbalances might get resolved in one way or the other in the course of a crisis. Further, that such resolution of sectoral and country interests might encounter complicated political-economic resistances which can lead to outcomes with very unequal burden-sharing of costs of adjustment and to sub-optimal outcomes for the Eurozone as a whole.

Thus the resolution or non-resolution of inter-sectoral and inter-country cleavages can result in different outcomes, i.e. stagnationary versus growth trajectories, more or less unbalanced growth between Northern and Southern economies, and balanced versus unbalanced growth across sectors within domestic economies. The outcome depends furthermore on inter-country policy agreements (or non-cooperative bargaining outcomes) and on changing policy framework conditions. The latter case will be further explored in section 7.

5. Conflicts over debt: financial versus real

External imbalances are a flow problem, which is associated with the stock problem of the build-up of foreign debt positions. This adds another sectoral divide, between real and financial sectors, over policies to be adopted with respect to potential debt write-off.

In the longer-run there is an underlying conflict of interest between the real and the financial sector: the financial sector can reap gains from a 'bubble-bust' pattern while the real sector does not have an interest in it and has to bear the costs of the moral hazard/bail-out situation in a 'closed economy' setting. In an 'open economy' setting the issue is more complicated as the 'moral hazard' issue becomes internationalised. In this situation two types of asymmetries can emerge: the responsibility for bail-out might be shifted away from the governments in which international banks' subsidiaries operate and to the governments where the headquarters of the mother banks reside as it is in these countries that the banks are seen as 'systemically relevant'. The second asymmetry emerges from the relative distribution of real economy adjustments in conditions when 'sudden stops' of capital flows occur. In this case the governments and

international institutions which provide emergency finance to a country that is subject to such sudden-stops can de facto dictate the pattern of adjustment in the affected country as the latter cannot raise finance to continue operating vital services without such support. An example of such a situation emerged in the case of the Greek ‘crisis agreements’. The interests of French and German banks and worries about bail-outs clearly affected the French and German governments’ stance over the Greek ‘rescue’ package and the pattern of adjustment of the Greek economy in the wake of these rescue packages.

However, in the pre-crisis period there was no striking conflict between ‘real’ and ‘financial’ interests. The pre-crisis period saw a strong emphasis on financial markets integration. Banks and other financial institutions could gain a lot from arbitrage processes as pre-cursors of full market integration in the EU¹⁷: thus, there were gains from low levels of financial intermediation in catching-up economies, from undervalued land prices, from catering to segments of the population which did not have access to the credit market so far, etc. Hence financial institutions represented a strong lobby in favour of financial markets integration, discouraging too strong supervision and regulation (which would increase their costs) and in favour of widening credit activity towards segments of the population which did not have access to credits in the past. Furthermore, big banks had advantages in risk pooling, would be the main beneficiaries of the moral hazard issue mentioned above (i.e. likelihood of a bail-out in case things go wrong) and were thus prime movers in the financial integration and debt build-up in Europe’s South prior to the crisis.

Another group that benefited from financial markets integration were international speculators that are faster than others in moving in and out of investments across borders. Their activities added to the volume of capital movements in and out of emerging economies; in the case of flexible exchange rate regimes this applies to speculators in foreign exchange transactions as well thus contributing to exchange rate volatility.

What about the interest groups representing the ‘real economy’? These would not stand in the way of financial markets integration in the period before the crisis as international liquidity ‘fuels’ their own activities: providing finance for multinationals’ investments, providing credit to households and SMEs that require finance to purchase goods and services and undertake investments etc. Hence there is *no striking conflict of interest between ‘real’ and ‘financial’ interests in the pre-crisis ‘boom/bubble’ period*¹⁸.

The crisis can be seen as enforcing the transversality condition, i.e. making unsustainable debt positions of the private and public sectors (particularly in economies

¹⁷ In fact, a potential for gains from arbitrage reflects incomplete market integration. If all barriers of market integration would have disappeared (i.e. if the world – or the EU - were really ‘flat’) so would any gains from arbitrage.

¹⁸ Of course, this is not completely the case as e.g. the real sector would, for example, not be interested in undue exchange rate volatility which results from speculative behaviour on foreign exchange markets.

lacking their own Central Banks) apparent. The crisis hits both the financial sector and the real sector in catching-up economies and through debt write-offs and the decline in import demand also the financial and real sectors in the advanced economies. What about conflicts of interest during the crisis period?

We now attempt a similar analysis regarding *complementarity/conflict of interest between real and financial sectors* in the aftermath of the financial crisis, as we did in section 4 with regard to real exchange rate adjustments, but this time with respect to *debt write-off*¹⁹. As we shall see, the situation becomes more complicated than the one analysed in section 3, as the issue of debt write-off adds another dimension than simply analysing the relationship between the two (private) sectors, because it involves the tax payers (at national or international levels) which are likely to be burdened by such debt write-offs.

Let us first analyse the case of a bank debt write-off in the ‘Southern’ country, in a situation in which the burden of this debt write-off is carried by the tax-payers of the same country.

Matrix 3. Conflict/Complementarity Matrix in the case where debt write-off in the South is borne by the tax-payers of the domestic economy

		Catching-Up	
		Real	Financial
Advanced	Real	(~, -)	(~, +)
	Financial	(+, -)	(+, +)

Note: ~ means ‘indifference’

In this situation we can see that a ‘debt write-off’ (if enforced by the government) is welcomed by the financial sector of the respective country and also by the financial sector of the other country (bottom right-hand entry) as reduction of bad debt items in the balance sheets of banks also contributes to the health of the banking system in the integrated financial system in the EU as a whole. On the other hand, a bank debt write-off is not welcomed by the ‘real’ sector in the respective country as it would have to carry the costs of such a debt write-off in this case; the ‘real’ sector in the other country is not affected by this in the short-term – hence the ~ (i.e. indifference) sign – top left-hand quadrant.

¹⁹ A similar analysis regarding conflicts of interest using the real versus. financial sector decomposition could be undertaken with respect to ‘financial sector reforms’ and the EMU ‘banking union’. Both are issues hotly debated in the wake of the recent crisis and policy steps were taken in this direction. This topic would also lend itself to an application of a ‘structural political economy’ analysis but we shall not cover it in this contribution.

The constellation in this case is different from the previous matrix where we had a strict complementarity: tradable sector interests in one country were aligned with non-tradable sector interests in the other country. In this case the financial sectors in both countries are interested in debt write-offs in the South because of the strong interdependence of financial institutions across the EU and hence an interest that the banks' balance-sheet situation improves in all countries. On the other hand there is a conflict of interest between the 'real' and 'financial' sectors within a country as – in the situation where the costs of the debt write-off is borne by the tax payers of the respective countries – the real sectors of each country do not welcome a debt write-off, at least in the short-run²⁰.

However, as we have argued, the crisis makes apparent the need to obey the transversality condition (i.e. bringing the debt situation back on a sustainable path). A recognition of this 'systemic interest', means a shift in sectoral interest constellations that would make the matrix look like Matrix 4 below:

Matrix 4. Conflict/Complementarity Matrix in the case of debt write-off in the South is borne by the tax-payers of the domestic economy – the case to ensure viability of the domestic financial system

		Catching-Up	
		Real	Financial
Advanced	Real	(~ , ±)	(~ , +)
	Financial	(+ , ±)	(+ , +)

Note: ~ means 'indifference'

Which systemic interest considerations could make the real sector of the catching-up economy approve of debt write-off? At issue in a crisis situation is the survivability of the banking system with its implications for credit provision to businesses (especially SMEs) and to households for facilitating purchases of goods and services. In an environment in which the existence of the financial system as the provider of essential services for the economy as a whole (and thus the 'real sector') is threatened, the cost-benefit calculations of the real sector – on the one hand having to bear the costs of bank bail-out, on the other hand, being vitally dependent on 'liquidity' and credit provision in its operation – might lead to a switch from perceiving a net cost of a bail-out to a net benefit. Such a situation is depicted in Matrix 4. Hence, a crisis situation might lead to a convergence of interests between the two sectors. It is also interesting, that in this case the two types of constraints – namely the macroeconomic constraint to restore debt

²⁰ In the short-term, bank rescue operations within a country by the government add to the fiscal constraint and hence induces additional austerity pressures in the South. In the longer-run, the improved balance sheets of the banks should support the operation of the credit system and is thus beneficial to both sectors.

sustainability and the inter-sectoral interdependence constraint of the financial sector providing essential services to the real sector – are involved to lead to a recognition of ‘systemic interest’.

Let us now discuss the situation in which bank debt write-off involves other countries’ holders of debt titles. In this case, the debt write-off of private sector debt in one country might directly negatively affect the financial interests in the other country. And then also further negatively affect the ‘real’ sector in the other countries (as their tax payers might have to step in). Hence in this situation the conflictual situation does move to the international arena and we get the following matrix:

Matrix 5. Conflict/Complementarity Matrix in the case where debt write-off in the South is borne by the banks (and the tax payers) in the advanced (Northern) economy

		Catching-Up	
		Real	Financial
Advanced	Real	(+ or -, +)	(+ or -, +)
	Financial	(-, +)	(-, +)

When the costs of the debt write-off are borne by the debt holders of other countries there will be a congruence of interests in the South in that a debt write-off is good both for the real and the financial sectors within the country but not necessarily welcomed by the financial sector in the other country. Whether it is welcomed by the real sector in the other country depends on the (balance sheet) situation of the financial sector there: if it is relatively strong then the real sector in the other country will be able to reap a net benefit from the debt write-off because export prospects to the previously debt-constrained Southern economy will improve. On the other hand, if the banking system in the advanced economy is in a bad state, then the tax payers in that country might have to step in to rescue the banks over there. This is indicated by the (+ or -) signs in the entries of matrix 5 and it also serves as an explanation of the drawn-out process of the ‘troika’ in deciding on the debt write-off in the case of the Greek banks. In this case the long waiting period served the purpose to allow the banks in the French and German economies to somewhat recover from the initial impact of the financial crisis so that an additional shock from a debt write-off in Greece would not require any rescue operations by the French and German governments of their own banks.

However, the situation with regard to debt write-off in this case involves not only the consideration of private sector interests in the two economies, but also the interests of the taxpayers in these economies.

We thus deal with a more complicated interest constellation (and thus bargaining situation) than is depicted in the Matrices 4 and 5 above: on the one hand, there is the direct effect of a debt write-off in the South affecting the financial and real sectors in the North as depicted in Matrix 5 above. On the other hand, there is an involvement of the taxpayers' interest in the North, as the interdependence of financial sectors in the two economies (the 'contagion fear') recedes into the background when private holders of 'bad debt' get substituted by public holding of bad debt. This is exactly what happened in the second phase of the Greek crisis.

The government in the North is thus likely to make its own cost-benefit calculation on whether the tax burden on its own population which a debt write-off in the South would involve is outweighed by other considerations of interdependencies. On the one hand, as the fear of financial contagion across the banking sectors recedes into the background, the Northern government shifts its sectoral concerns from its financial sector to the impact which a debt-trapped situation in the South might have on the real sector of its economy (its export possibilities). On the other hand, there are also other, more far-reaching 'systemic concerns' that may drive the Northern government's behaviour in its relation to the South, which concern the long-term viability of the EMU framework as a whole.

We can thus see, in the case of the debt write-off, that the political economy setting involves not only sectoral interests, but also government actions. Such actions may themselves be driven by (at times changing) weights of sectoral interests, but also reflect the governments' own evaluation of particular or systemic (domestic or Eurozone) interests.

6. Within sector heterogeneity and the private sector versus taxpayers conflict of interest

In this section we discuss the implications of 'within sector heterogeneity' and also deal more deeply with the taxpayers versus private sectors interests issue. Whilst we cannot discuss these issues comprehensively here, we need to consider such issues in order to obtain a full picture of the formation of 'sectoral interests' on the one hand, and the behaviour of governments as representing sectoral interests but also acting on behalf of 'national systemic interests'. Furthermore, both governments and sectoral interests situate themselves in an international arena which can have both cooperative and non-cooperative bargaining features. The 'systemic interest' also goes beyond the national level and has a EU/EMU/European or global dimension.

Let us start by considering 'within sector heterogeneity'. How does within-sector heterogeneity, e.g. that the tradable sector is composed of companies which are more domestic market-oriented and thus compete with imports and other companies which are highly export-oriented, affect our analysis? We shall see that this can have far-reaching consequences for the formation of the 'sector's interest'. Furthermore, in the

course of changing circumstances, such as the move from a pre-crisis to a crisis situation or from a regime with low levels of international integration to one with a high level in international integration, ‘sector interests’ which reflect within-sector composition will change as well.

Because of the above described heterogeneity the extent to which different companies within the same ‘sector’ will be affected by national versus international inter-sectoral relationships and by specific macro-economic constraints will differ. As the weights and relevance of these constraints change – e.g. affected by a general slow-down of international trade or an international financial crisis – firms within that sector will be differently affected and this differentiated impact will feed into the formation of ‘sector interests’, at times leading to a dramatic shift in orientation.

Let us give some concrete examples in the context of our previous analysis. Tradable sectors are characterised by both import-competing and export activities. Allowing for a distribution of firms along an axis whether they are more domestic market or more export-oriented, we can say that the import-competing firms differ from mostly export-market oriented firms in that the former are interested in the level of domestic demand for their output while the latter are largely unaffected by it. On the other hand, both sets of companies have an interest in ‘price competitiveness’, hence would be interested in real exchange rate devaluation. However, the domestic-market oriented, import-competing firms also have to consider in which way real exchange rate devaluation is achieved. For example, a fall in wage incomes – either through a fall in wage rates or an employment shake-out – would improve productivity levels, but would also affect the levels of domestic demand which is of particular concern to domestic-market oriented companies.

Let us now analyse the impact of a regime change from pre-crisis to crisis, on the composition of the tradable sector and hence on the formation of ‘sector interest’: an unfolding economic crisis does lead to a depressed domestic economy and hence there could be more pressure towards real exchange rate depreciation. This could lead to ‘beggar-thy-neighbour’ policies in the form of competitive (real) devaluations, i.e. everybody trying to get a bigger slice of a shrinking cake. To turn this into a positive sum situation, awareness and ‘coordination devices’ have to be employed to follow ‘systemic interest’ at the EZ level and coordinate the relative expansion of domestic markets with surplus countries taking a lead. This push towards coordinated action would coincide with the interests of the ‘Northern’ export-oriented firms which are interested to overcome the growth-blockages in the ‘Southern’ economies, part of which would be to accept a relative (real) depreciation in the South.

Domestic-market oriented firms in the North, on the other hand, would be the drivers towards domestic market expansion in the North (and less interested in real exchange rate appreciation as this would reduce their competitiveness in the domestic market

towards imports). We can thus see that the different components of a tradable sector would articulate their interests differently during the crisis period²¹.

The ‘interest formation’ of a sector thus depends at any point of time on the composition in that sector (e.g. weights of predominantly import-competing firms versus. export-oriented firms). However, there is also another relevant issue here: the degree to which the particular interests of constituent groups within a sector get ‘political voice’. On the one hand, this will depend on the resources such groups have at their disposal and their willingness to use them for that purpose. On the other hand, it will also depend on the extent to which the issues which they are mostly concerned with might be picked up by other interest groups in other sectors. Thus there could be cross-sectoral alliances of similarly interested component groups in other sectors. Furthermore, there will be differences in the extent such interests would be supported by the ‘general public’.

For example, there might be two groups of banks within a ‘Northern’ financial industry: one group has become heavily exposed in having issued credit to a Southern economy, whilst the other has been mainly involved in credit operations towards Northern domestic borrowers. In ‘normal times’ these two groups of banks will articulate their respective interests on a range of issues: on the one hand, on policies which support credit activity on the domestic market, such as public subsidies to SMEs; on the other hand, on policies which support credit activity abroad, such as support for credit-finance of exporting firms including those which are strongly involved in such activities in ‘Southern’ economies. None of their activities, however, touches ‘systemic interest’ in the North in ‘normal times’. The situation can however switch dramatically in a serious ‘Southern debt crisis’. In such a situation, the financial groups heavily involved in having issued large volumes of credit in the South would get worried about a possible jump in non-performing loans and, if this reaches a certain level, the worsening position of these banks might reach ‘systemic risk’ levels. In this situation, the position of the financial industry as a whole (at national or Eurozone levels) might be at risk and it is at this point that the particular interest of this segment of the banking industry can acquire systemic importance.

This example shows that, under changing circumstances, what was a particular interest of one segment of an industry, starts to dominate the ‘sector interest’ as a whole and, in a further sequence, touches upon ‘systemic interest’ leading to that sector position getting a stronger, possibly decisive, ‘public voice’ at the national or international level. This process, by which the interests of a sector’s segment obtain a prominent position in the formation of sector interest and, in consequence, affecting policy interventions (at the national or EU levels), played an important role in the recent Eurozone crisis. This can furthermore show up in cross-country alliances of similarly affected segments

²¹ Similarly, we could analyse how the heterogeneity of the financial industry in a country (e.g. between those that are mainly operating in the domestic market and those which are heavily involved in international operations) articulate different interests with respect to debt write-off in a period of crisis.

of either the same (e.g. German and French banks) or other industries (such as exporting firms which have been supplying Southern customers which - in the crisis situation - become cut off from access to any further credit).

A final issue that we want to address in this section refers to multi-membership of individual actors in different sectoral classifications. We saw in sections 4 and 5 above that external imbalances and foreign debt positions are deeply connected, yet the cleavages they generate are distinct but overlapping, in that individual actors in general do not belong just to single sector classifications but to a number of such classifications, e.g. firms might be 'real' and in the 'tradable sector' or 'financial' and in the 'tradable' sector. Hence we have to deal with the *multi-classification membership of individual actors*.

Does this multi-sector/multi-classification membership of individual actors lead to better or worse outcomes in terms of crisis-resolution dynamics of the European Union?

One hypothesis could be that such multi-classification memberships leads to an alleviation of conflict situations (see e.g. Lipset and Rokkan, 1967; Hirschman, 1968; Rae and Taylor, 1970; Rogowski, 1987; Svallfors, 2007) because (i) individual actors do not invest all their 'interest capital' into the membership in a single sector, but participate in a number of sectors. Interest capital thus gets diversified. On the other hand, and this could be hypothesis (ii), this interest capital diversification also leads to a less clear-cut articulation of interests (which also gets reflected in their organisational representation) and thus might make bargaining structures less clear-cut. This could have draw-backs in arriving at a bargaining solution and the enforcement of such a bargaining solution.

The two hypotheses may well be verified at the same time, and lead to situations where there are no sharp, dichotomic conflicts, yet there is the risk of a stalemate and prolonged periods of "muddling through".

7. Overlapping sectoral conflicts and the political economy of the Eurozone

We now move further in the discussion of crisis-resolution and address more widely the question of 'forces of cohesion' and 'forces of disintegration' in the European Union.

A key issue in this respect is whether a crisis situation generates a tendency towards a '*nationalist bias*' through a re-positioning of sectoral interests and of interests within each sector. A crisis could, of course, also generate the opposite, i.e. an '*international integrationist bias*' of sectoral interests. We shall analyse reasons for both these two biases to occur in pre-crisis and crisis situations (or even in different phases as the crisis evolves).

In general terms, when individual actors attempt to position themselves in terms of interest constellations, we have to consider the uncertainty context regarding the 'pay-off matrix', the time discount factors used by the different agents and the knowledge about the other players' coherence of (domestic) interest constellations. Furthermore, in the European context, we are in a situation of many players with very complicated coalition politics. This uncertainty issue might lead to a bias towards a more nationalist stance, for example because the knowledge about the own country's sectoral interests and their interdependencies is higher than that regarding the other players. Moreover, the firmer institutional anchorage of national bargaining and coordination mechanisms might make convergence upon 'systemic interest' at the national level more likely than at the European or global level. In addition, in a multi-player bargaining situation at the European level, a country's weight will be greater if national coordination or bundling of interests takes place prior to the international bargaining.

The nationalist bias might be reinforced by the additional process that unfolds in the course of the crisis, namely the shift from issues of conflict and congruence of private sectors' interests to the involvement of government interest related to the burden on the taxpayers. This involves distinct pattern of political representation of interests, electoral politics, etc. It is thus no longer just an issue of checking 'viability of an interdependent economic system' but requires the recognition of the additional dimension of political and electoral dynamics. Furthermore, it is likely that for some issues, the electoral dimension could end up having much more weight than the complex balance of interests across different sectoral cleavages²².

The nationalist bias might be particularly relevant because of the current stage of EU integration, in which the electoral dimension is still predominantly a national one. In fact, the intermediate (i.e. incomplete) level of (political and institutional) integration has a number of implications (i) for policy formation at the national and the EU/EMU levels and (ii) for the growth and development trajectories which the EU and parts thereof are likely to move along. We shall turn to these issues now within the context of our 'sector interest' based analytical framework. We shall also attempt to show that changes or reforms in some of the aspects of the EU/EMU policy framework might in

²² This is, e.g. more likely to be the case in debt write-offs as these involve discrete interventions in stock adjustments as compared to the external imbalances issue where policy interventions (in the form of wage policies, industrial policies etc.) only have a gradual impact.

turn affect sectoral interest constellations and thus growth and development trajectories²³.

A first, crucial implication of the intermediate level of integration is that the Eurozone displays the typical persistent asymmetries (analysed below) that are a necessary part of monetary unions, but does not have the necessary mechanism to deal with them (e.g. debt pooling, fiscal centralization, banking union). Hence, it can be conjectured that the coupling of the structure of the European economy and the institutional structure of the EU/Eurozone, are affecting the viability conditions of the European economy, forcing it upon a lower than ‘potential growth’ trajectory. Let us see why.

Monetary unions tend to display *persistent asymmetries*, three of which are *external imbalances*, *disproportional (i.e. uneven) growth across countries and regions*, and *uneven inflation rates* across an otherwise integrated economic region. Why do such persistent asymmetries arise and why do they constitute a special problem for monetary unions, especially an incompletely developed one such as the European Monetary Union?

In a nutshell, whilst asymmetries are typical of any set of integrated economies, a monetary union puts in place an institutional setup in which the resolution of problems requires coordinating interests at different levels (e.g. sectoral, regional, national). These are often conflicting and even when they converge upon a systemic interest in conflict resolution, some actors might have a much more urgent need than others in such a resolution. Let us explore this conjecture in more detail.

In principle, the asymmetries mentioned above are ‘natural’ across any set of countries or regions: there is no a priori reason why countries or regions should have balanced production and expenditure patterns which would not give rise to external imbalances. Or why they should all grow at the same growth rates (given that the sources of growth – labour force and its utilisation, capital accumulation and technical progress – might develop quite unevenly across countries or regions). And finally, given that there are significant segments of goods and services sold in markets which are either not at all or only partly tradable or have significant transport, transactions and information costs attached to them, the arbitrage processes enforcing similar price levels and thus inflation rates can only work partially. Hence there is room for differential inflation rates, reflecting different cost-push, demand pull and expectations-driven processes even in otherwise highly integrated economies.

²³ As we have suggested at various points in this essay, ‘viability’ conditions can be established in quite diverse ‘equilibria’, i.e. some of them leading to long-term stagnation others allowing sustainable growth. These viability conditions are furthermore conditioned on the policy and (international) institutional frameworks in place.

Hence, we would expect such ‘asymmetries’ to occur across any set of integrated economies and regions. But what is special about monetary unions and why do we emphasise the problem of ‘persistence’ of such asymmetries? Here we come to the core of the problem the Eurozone faces: in any other set of integrated economies or regions, there are reaction mechanisms to the development of such asymmetries which do not threaten the institutional set-up as the ones on which a monetary union is built.

External imbalances get reflected in the build-up of external credit and debt positions, and if financial markets consider such positions at any time unsustainable or unprofitable, this will induce a change in credit behaviour, mechanisms of de-leveraging, withdrawal of banks from certain regions, etc. But no cross-country institutional framework is involved in such developments. Similarly, if there are uneven growth processes which lead to differential real income developments, possible employment consequences emanate from these, as well as impacts on the development of social security supports for the population. Again this will not lead to political-institutional consequences at a cross-country level, but rather to certain responses by private actors such as migration, relocations of firms, etc. Finally, differential inflation rates, if these threaten external imbalances by making some countries and regions uncompetitive and others more competitive, will in turn lead to mobility decisions of private actors, wage responses in response to induced labour market impacts, and adjustments in the willingness to lend across regions. Furthermore, if countries do not form a currency union, to exchange rate responses or a switch from one exchange rate regime to another (e.g. from pegged to floating).

Hence, we can expect such ‘asymmetries’ to occur across any set of integrated economies and regions. However, monetary unions face specific problems. In fact, they build a rather complex cross-country institutional and policy framework which goes well beyond the market integration processes described above. It is this cross-country institutional and policy framework that comes under strain once ‘persistent asymmetries’ develop across countries and regions within a monetary union.

Let us examine these strains through our model of sectoral interests. Sectoral interests are some of the main movers behind integration processes in general and monetary integration specifically. Single Market integration and then monetary integration was very much in the interest of internationally operating companies to allow easier access to a widening market, reduce transaction costs, eliminate exchange rate risks, and allow the much freer expansion of financial activities across the European economy (from which also non-Eurozone financial institutions, such as those located in the City of London, benefited). As companies operating in different sectors and countries are differently affected by such acts of integration (reducing, on the one hand, their market power in the home market and losing discriminatory access to domestic policy makers, but gaining freer access to other countries’ markets, on the other hand) the political economy behind such integration steps is complex. It will reflect both within-sector heterogeneity (which – as we argued earlier – are constitutive for the formation of

‘sector interests’) as well as the differentiation of such interests across sectors and countries.

The articulation of sector interests and their influence on country-specific political processes are a crucial source of the specific institutional structure and policy framework associated with the EMU. It is interesting for our purposes to analyse how these policy frameworks are holding up to the strains of ‘persistent asymmetries’ and the impact of the recent financial crisis, and how sectoral interests react and get reformulated as a result. In other words, we want to understand how the reactions of sectoral interests to crises, i.e. when it becomes evident that some of the ‘asymmetries’ are no longer viable to persist in the same way, can act as ‘forces of cohesion’ or as ‘forces of disintegration’ of the Eurozone.

Let us start with ‘external imbalances’. In section 5 we discussed the formation of ‘sector interests’ in the context of the emergence of external imbalances and also considered a possible switch of such interests when ‘external imbalances’ are deemed to be unsustainable. This could for example be the result of a change in the external environment in the form of asymmetric shocks strongly affecting a particular country’s export prospects or a financial markets crisis that might affect the perception of sustainability of external imbalances of particular members in a Monetary Union (MU). We also discussed that such realignment of ‘sector interests’ across interdependent economies might lead to sector interests taking either a more ‘nationalist’ or a more ‘integrationist’ view of ‘systemic interest’. The bias towards a ‘nationalist view’ can result from higher coordination costs of cross-country constellations supporting an integrationist approach towards systemic interest as compared to the well-tested ground of national political processes to come to a realignment of sector interests in view of national viability issues. *There is thus a real rivalry between the conceptions of ‘viability’ or ‘sustainability’ of development trajectories at the national and the cross-country levels.*

An additional asymmetry might derive from the fact that some countries might be more dependent in the resolution of their specific country-level ‘viability’ problem (e.g. unsustainable external imbalances) by also tackling cross-country coordination aimed at achieving a high-growth scenario for the MU as a whole. Other countries, on the other hand, might well be able to pursue a high-growth trajectory for their country without resolving coordination issues for the MU as a whole. This cleavage might coincide with whether the country is a structural ‘surplus’ or a ‘deficit’ country; it would also depend on other issues, such as the degree of openness of the country, the degree of its inter-connections with other MU countries as against connections with economies outside the MU, etc.

To be more concrete: a country of the EU’s ‘Southern periphery’ (e.g. Greece, Portugal, Bulgaria), which is also a ‘structural deficit’ country, might be heavily dependent on export markets in the EU, while a set of ‘Northern’ EU member countries (Germany,

United Kingdom) might have strong trade exposure outside the EU. In this case the Southern EU member countries have a stronger interest (once internal sectoral interests have converged to a joint position with regard to moving their own economy towards a viable trajectory) in a cross-country resolution of the external imbalances problem in the EU as a whole (e.g. through a differentiated reflationary process or coordinated wage agreements which lead to a ‘real devaluation’ of the Southern member countries relative to the Northern ones) than would the Northern EU member countries. The latter might lose out in their relationships with non-EU economies (e.g. relative loss of competitiveness) if they agreed to an EU-coordinated solution, and this loss might – from their perspective, and particularly from the perspective of the tradable sector in these economies – be greater than the gain they make from resolving the ‘EU systemic viability’ problem. Hence a coordinated agreement – Northern and Southern economies – towards the viability of a higher growth trajectory of the EU as a whole might not come about.

A similar type of analysis can be conducted with respect to the issue discussed in section 6 of this paper, i.e. the issue of debt relief for (unsustainably) indebted countries in the EU South. In fact, debtor countries (and the dysfunctional banking sectors in particular) would be much more dependent on a cross-country agreement on debt relief than are creditor countries. Nonetheless, also creditor countries can gain from a well-executed programme of debt relief. In fact, such programme would help not only the banks with a high share of non-performing loans on their balance sheets, but also a wider range of sectors that suffer from slow or negative growth in export markets that are important to them. But we can see that i) ‘within-sector heterogeneity’ plays a role, as banks in the creditor countries are differentially exposed to the problem countries; and ii) the range of sectors affected by the stagnation or contraction effect of the non-viable debt situation in the ‘Southern economies’ might not be that wide, so that the impact might not be an existential threat to many or all of them. This is very different in the debtor country, where the debt crisis has led to the ‘non-viability’ of a continued growth trajectory and a collapse of certain sectors with significant multiplier effects. We can thus see that also in a situation in which the resolution of a debt crisis in a set of ‘Southern economies’ might require cross-country agreements, such agreements might be hindered by the issues of *asymmetry of urgency of ‘Northern’ versus ‘Southern’ interests at sectoral and national levels*, as well as the more diffused nature of forming ‘sector interests’ in the Northern countries behind a cross-country resolution of this situation.

Finally, we come to another instance of ‘asymmetry’ linked to conducting a joint monetary policy when there are uneven pressures with regard to inflationary processes in the Eurozone. A number of observers (see e.g. Wyplosz, 2009) have remarked that the monetary policy rule of the ECB reflects the weight of the German and other ‘Northern’ economies over-proportionately (i.e. beyond their weights in the Eurozone’s GDP). To analyse the reasons for this, we come back to the issue of resolving external imbalances in the Eurozone through real depreciations (in the deficit countries) and

appreciations (in the surplus countries). It is well-known that due to nominal wage rigidities, it is much easier to achieve a real exchange rate adjustment in a chronic ‘deficit country’ in the context of an overall positive inflation rate, as in this case real depreciation can be achieved without cutting nominal wage rates. In such a situation a monetary policy rule, which reflects more strongly ‘Northern’ rather than ‘Southern’ inflation rates, results in the ECB not pursuing a policy that would facilitate real exchange rate adjustment of ‘Southern economies’. Hence their adjustment is likely to become much more drawn out and the achieved growth trajectory of these economies as well as the EU as whole might be much lower than the one which could be achieved if these asymmetries were not reflected in the conduct of monetary policy at the Eurozone level.

The foregoing analysis suggests that the cross-country institutional and policy frameworks of monetary unions (MUs²⁴) impose crisis resolution mechanisms that require coordinating different interests. This may be a crucial component of why ‘asymmetries’ (such as external imbalances) persist for longer amongst member countries than these would without MU. This also means that the ‘stocks’ resulting from such asymmetries (e.g. debt positions) can reach very high levels within a MU – as shown by the levels of private sector debt to GDP ratios in Southern Eurozone member countries before the crisis, and the very rapid rise of such ratios in some of the new member states and candidate countries (see earlier Fig. 2). Consequently, the strain caused by such stocks as evidence for ‘persistent asymmetries’ can also be higher in a MU than in a set of countries linked through pure market integration. And this might explain a paradoxical situation: whilst a monetary union could be associated with a higher growth path, a union with an incomplete state of integration might actually be forcing a lower growth path on the union as a whole, or at least on some of its members, as compared to a weaker system of coordination without monetary union.

8. Conclusions

In this chapter we have put forward a new lens to understand the major unresolved problems of the EMU. In particular, we have studied conflicts between tradable and non-tradable sectors for what concerns external imbalances, and between financial and real sectors with respect to foreign debt positions. We have shown that this lens suggests a reading of the political economy of the Eurozone that cuts across, complements, and often questions received dichotomies typical of country-level analysis, such as ‘North versus. South’.

²⁴ We speak here more generally of MUs instead of EMUs as these features pertain to monetary unions in general, where the disappearance of exchange rate risks and the externality effects of a central monetary institutions gives a certain degree of credibility to weaker member states which their own monetary authorities would not possess.

We started by reconstructing the particular interest that each sector has for each policy issue at stake, and how the crisis has made systemic interest apparent by highlighting interdependencies across sectors and macroeconomic constraints that affect all sectors within each country and within the Eurozone.

We then showed that, in the case of potential debt write-offs, the aforementioned analysis of sectoral interests needs to be complemented by a different dimension, which has to do with government's interest to consider the tax burden on its national economy. To further refine the analysis, we considered the heterogeneity of firms within sectors, showing how the crisis can change their interests, thus reconfiguring the positioning of the sector as a whole within the political economy arena.

The result of the overlap of conflicting interests within sectors and across sectors and countries is likely to be two-fold. On the one hand, coalitions of interests are unlikely to be the same across all policy issues, and this should prevent over-polarization of conflict. On the other hand, overlaps might make the payoffs of political action less clear, with the result that interest groups might invest less in having their stances represented. The combination of these effects can explain the policy stalemates that often characterize decision-making in the EU, and suggests that extended periods of "muddling through" may be inherent in the interface between the political economy of the European Union and its institutional setup.

The difficulty of coordinating interests at multiple levels may also be at the root of the interplay between forces of integration and disintegration in the EMU. In fact, the last part of the chapter reconstructed how sectoral and country-level interests are at play within the institutional set-up of a monetary union, and how this can lead to stances in favour of further integration or disintegration. We have suggested that a monetary union potentially makes possible a higher-growth trajectory than 'mere' trade integration, but its institutional setup requires a complex coordination of interests at multiple levels. The EMU is currently in what could be defined an 'intermediate level of integration', which lacks elements such as debt pooling, fiscal centralization and a fully-fledged banking union. Coordinating interests in such an institutional setup is particularly difficult, and this is arguably leading to a paradoxical result: a monetary union at an intermediate level of integration could be imposing (especially to some economies) a growth trajectory that is not only lower than that of a fully integrated union, but even lower than that of simple trade integration outside a monetary union. This analysis suggests the need to open the discussion – in academic analysis, policy circles and the public debate at large – on possible forms of integration that avoid this paradoxical result but are compatible with the complex configurations of sectoral and systemic interests discussed in this chapter.

REFERENCES

- Baranzini, M. and Scazzieri, R. (1990) 'Economic Structure: Analytical Perspectives', in Baranzini, M. and Scazzieri, R. (eds), *The Economic Theory of Structure and Change*, Cambridge, Cambridge University Press, pp. 227-333.
- Belke, A. and Dreger, C. (2013) 'Current account imbalances in the Euro area: Does catching up explain the development?', *Review of International Economics*, 21 (1, February), pp. 6-17.
- Candela, G. (1975) 'Il Modello Economico di François Quesnay', *Giornale degli Economisti ed Annali di Economia*, 34, NS., pp. 69-94.
- Cardinale, I. (2015) 'Towards a structural political economy of resources', in M. Baranzini et al. (eds), *Resources, Production and Structural Dynamics*, Cambridge: Cambridge University Press, pp. 198-210.
- Cardinale, I. and Coffman, D. (201) 'Economic interdependencies and political conflict: The political economy of taxation in eighteenth-century Britain', *Economia Politica. Journal of Analytical and Institutional Economics*, 31(3), pp. 277-300.
- Coen, D. (2007) 'Empirical and Theoretical Studies in EU Lobbying', *Journal of European Public Policy*, 14(3), pp. 333-45.
- Coen, D. (2009) *Lobbying the European Union: Institutions, Actors and Policy*, Oxford, Oxford University Press
- Coser, L. (1956) *The Functions of Social Conflict*, London, Routledge and Kegan Paul Ltd.
- Darvas, Z. (2012), 'Intra-euro rebalancing is inevitable, but insufficient', *Bruegel Policy Contribution Issue 2012/15*, August.
- Davenant, C. (1698) *Discourses on the publick revenues, and on the trade of England : in two parts, viz. I. Of the use of political arithmetick, in all considerations about the revenues and trade. II. On credit, and the means and methods by which it may be restored. III. On the management of the King's revenues. IV. Whither to farm the revenues, may not, in this juncture, be most for the publick service? V. On the public debts and engagements*, London, printed for J. Knapton

- De Grauwe, P. (2012) 'In search of symmetry in the Eurozone', CEPS Policy Brief, No. 268 (May).
- European Commission (2012), 'Current account surpluses in the EU', European Commission DG ECFIN, *European Economy* 9/2012.
- Giavazzi, F. and Spaventa, L. (2010) 'Why the current account may matter in a monetary union: lessons from the financial crisis in the Euro area', *CEPR Discussion Papers* No. 8008.
- Gros, D. and Giovannini, A. (2014) 'The "Relative" Importance of EMU Macroeconomic Imbalances in the Macroeconomic Imbalance Procedure'; Istituto Affari Internazionali (IAI).
- Hagemann, H., Landesmann, M.A. and Scazzieri, R. (eds.) (2003) *The Economics of Structural Change*. Cheltenham, UK; Northampton, MA, Edward Elgar.
- Hirschman, A. (1968) 'The Political Economy of Import-Substituting Industrialization in Latin America', *The Quarterly Journal of Economics*, vol. 82, (1, February), pp. 1-32.
- Hishiyama, I. (1960) 'The Tableau Economique of Quesnay', *Kyoto University Economic Review*, 30. 1, pp. 1–46.
- Jaumotte, F. and Sodsriwiboon, P. (2010) 'Current Account Imbalances in the Southern Euro Area', *IMF Working Paper* WP/10/139, June.
- King, G. (1936) *Two Tracts by Gregory King (a) Natural and Political Observations and Conclusions upon the State and Condition of England [1696]. (b) Of the Naval Trade of England Ao. 1688 and the National Profit then arising thereby [1697]*, edited with an introduction by George E. Barnett, Baltimore, Johns Hopkins Press.
- Landesmann, M. A. (2015a), 'Structural Dynamics of Europe's Periphery – Which are the Main Issues?', *Journal of Economic Policy Reform*, Special Issue, 2015.
- Landesmann, M. (2015b) 'The New North-South Divide in Europe: Can the European Convergence Model be Resuscitated?', in Fagerberg, J., Laestadius, S., Martin, B.R. (eds.), *The Triple Challenge for Europe: Economic*

- Development, Climate Change, and Governance*, Oxford, Oxford University Press, pp. 60-87.
- Landesmann, M. A. and Hanzl, D. (2016) 'Correcting external imbalances in the European Economy', Research Report no 410, Vienna, Vienna Institute for International Economic Studies.
- Landesmann, M. A, and Scazzieri, R. (eds.) (1996) *Production and Economic Dynamics*, Cambridge and New York, Cambridge University Press.
- Landesmann, M. A. and Stehrer, R. (2006), 'Modelling International Economic Integration: Patterns of Catching-Up and Foreign Direct Investment', *Economia Politica - Journal of Analytical and Institutional Economics*, Vol. XXIII, No. 3, 2006, pp. 335-62.
- Landesmann, M. A. and Stehrer, R. (2001) 'Convergence Patterns and Switchovers in Comparative Advantage', *Structural Change and Economic Dynamics*, 12 (4, December), pp. 399-423
- Leontief, W.W. (1941) *The Structure of the American Economy, 1919-1929*, Cambridge, Mass., Harvard University Press.
- Lipset, S. M. and Rokkan, S. (1967) *Party Systems and Voter Alignments: Cross-National Perspectives*, New York, The Free Press; London, Collier-Macmillan.
- McCombie, J.S.L. and Thirlwall, A.P. (2004) *Essays on Balance of Payments Constrained Growth: Theory and Evidence*, London, Routledge.
- Mongelli, F.P. and Wyplosz, C. (2009) 'The Euro at Ten: Unfulfilled Threats and Unexpected Challenges', in: Mackowiak, B., Mongelli, F.P., Noblet, G. and Smets, F. (eds.), *The Euro at Ten – Lessons and Challenges*, Frankfurt Am Mian, European Central Bank, pp. 24-57.
- Pasinetti, L.L. (1973) 'The Notion of Vertical Integration in Economic Theory', *Metroeconomica*, 25 (1), pp. 1-29; reprinted in Pasinetti, L.L. (ed.), *Essays on the Theory of Joint Production*, London, Macmillan; New York, Columbia University Press, 1980, pp. 16-43.
- Pasinetti, L.L. (1981) *Structural Change and Economic Growth: A Theoretical Essay on the Dynamics of the Wealth of Nations*. Cambridge and New York, Cambridge University Press.

- Pasinetti, L.L. (1993) *Structural Economic Dynamics: A Theory of the Economic Consequences of Human Learning*. Cambridge and New York, Cambridge University Press.
- Pasinetti, L.L. (2009) ‘Il Tableau Économique e le economie moderne’, in G. de Vivo (ed.), *Il Tableau Économique di François Quesnay*, Milano, Fondazione Raffaele Mattioli, pp. 109-24 (paper originally presented at Fondazione Mattioli, Milan, 9 October 2002).
- Petty, W. (1662) *A treatise of taxes and contributions : shewing the nature and measures of crown-lands, assessments, customs, poll-moneys ... ; with several intersperst discourses and digressions concerning warres, the church, universities, rents & purchases ... : the same being frequently applied to the present state and affairs of Ireland*, London, printed for N. Brooke .
- Phillips, A. (1955) ‘The Tableau Économique as a Simple Leontief Model’, *The Quarterly Journal of Economics*, 69 (1), pp. 137–44.
- Rae, D.W. and Taylor, M. (1970) *The Analysis of Political Cleavages*, New Haven, Yale University Press.
- Rogowski, R. (1987) ‘Political Cleavages and Changing Exposure to Trade’, *The American Political Science Review*, 81 (4, December), pp. 1121-37.
- Quadrio Curzio, A. (1967) *Rendita e distribuzione in un modello economico plurisetoriale*, Milan, Giuffrè.
- Quadrio Curzio, A. (1975) *Accumulazione del capitale e rendita*, Bologna, Il Mulino.
- Quesnay, F. (1758) *Tableau économique*, Versailles.
- Sraffa, Piero. 1960. *Production of Commodities by Means of Commodities; Prelude to a Critique of Economic Theory*. Cambridge , Cambridge University Press.
- Rae, D.W. and Taylor, M. (1970) *The Analysis of Political Cleavages*, New Haven, Yale University Press.
- Setterfield, M. (2011) ‘The remarkable durability of Thirlwall’s Law’, *PSL Quarterly Review*, 64 (December), pp. 393-427.

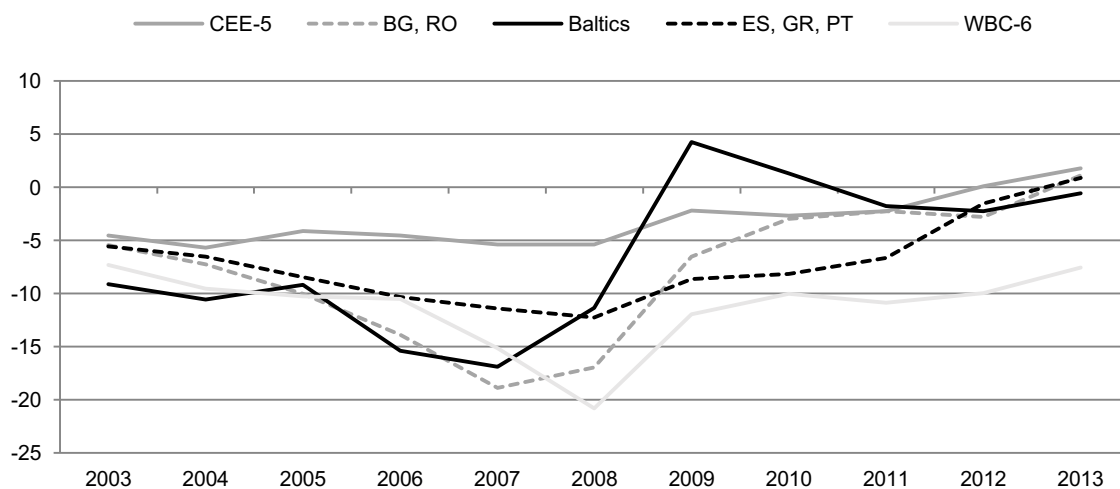
Thirlwall, A.P. (1979) 'The Balance of Payments Constraint as an Explanation of International Growth Rate Differences', *Banca Nazionale del Lavoro Quarterly Review*, 32 (March), p. 45-53.

Truman, D. B. 1962. *The Governmental Process: Political Interests and Public Opinion*. New York, N.Y., Knopf.

Vaggi, G. (2008) 'Quesnay, François (1694–1774)', in *The New Palgrave Dictionary of Economics*, eds. S. N. Durlauf and L. E. Blume, 2nd ed., pp. 816–826. Basingstoke: Nature Publishing Group.
http://www.dictionaryofeconomics.com/article?id=pde2008_Q000011.

von Neumann, J. (1945) 'A Model of General Economic Equilibrium', *The Review of Economic Studies*, 13 (1, January 1), pp. 1–9. doi:10.2307/2296111.

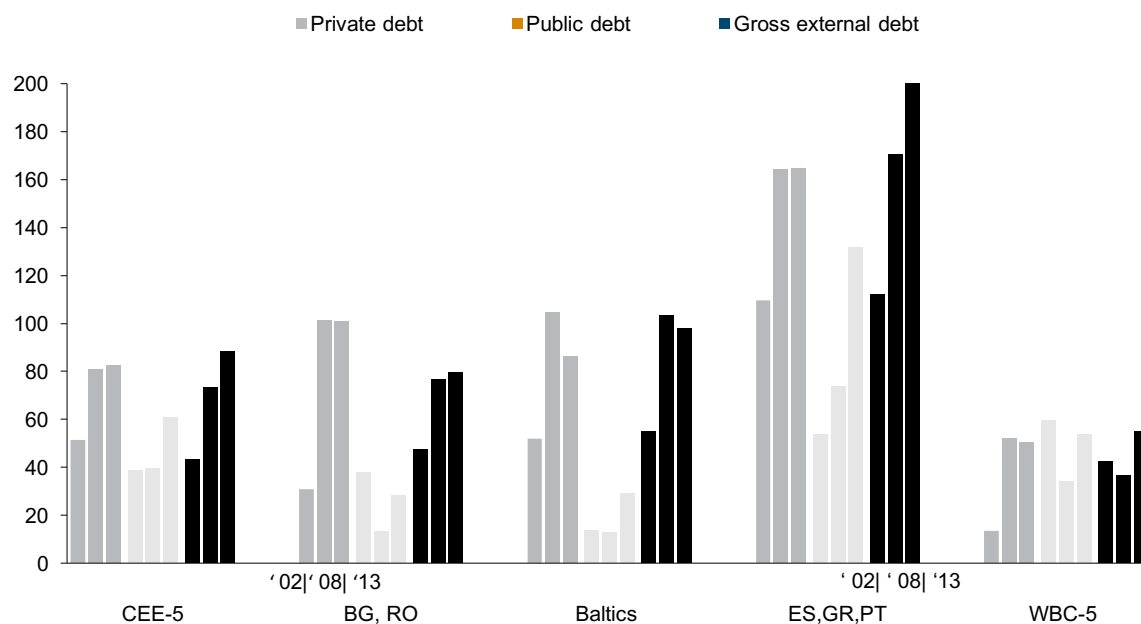
Figure 1 / Current account in % of GDP



Remark: CEE-5 refer to Czech Republic, Hungary, Poland, Slovakia and Slovenia; BG, RO to Bulgaria and Romania; ES, GR, PT to Spain, Greece and Portugal; the Western Balkan countries 'WBC-6' include Albania, Bosnia and Herzegovina, Macedonia, Montenegro, Serbia and Kosovo.

Source: wiiw Annual Database incorporating national and Eurostat statistics.

Figure 2 / Debt in % of GDP, 2002, 2008, 2013 – private, public, external



Remark: CEE-5 refer to Czech Republic, Hungary, Poland, Slovakia and Slovenia; BG, RO to Bulgaria and Romania; ES, GR, PT to Spain, Greece and Portugal; the Western Balkan countries 'WBC-6' include Albania, Bosnia and Herzegovina, Macedonia, Montenegro, Serbia and Kosovo.

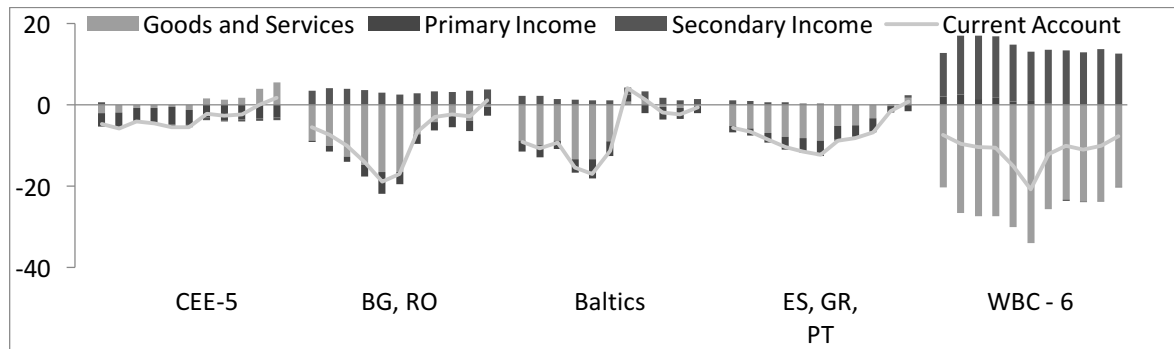
Data 2002: Private debt for Baltics refers to 2004 (without EE), for WBC-5 to 2003 (without BA).

Public debt for ES, GR, PT refers to ES, GR, PT only and to 2003.

Gross external debt for ES, GR, PT refers to 2003, BA and ME gross external public debt.

Source: wiiw Annual Database incorporating national and Eurostat statistics

Figure 3 / Composition of the current account of the balance of payments, 2003-2013, in % of GDP

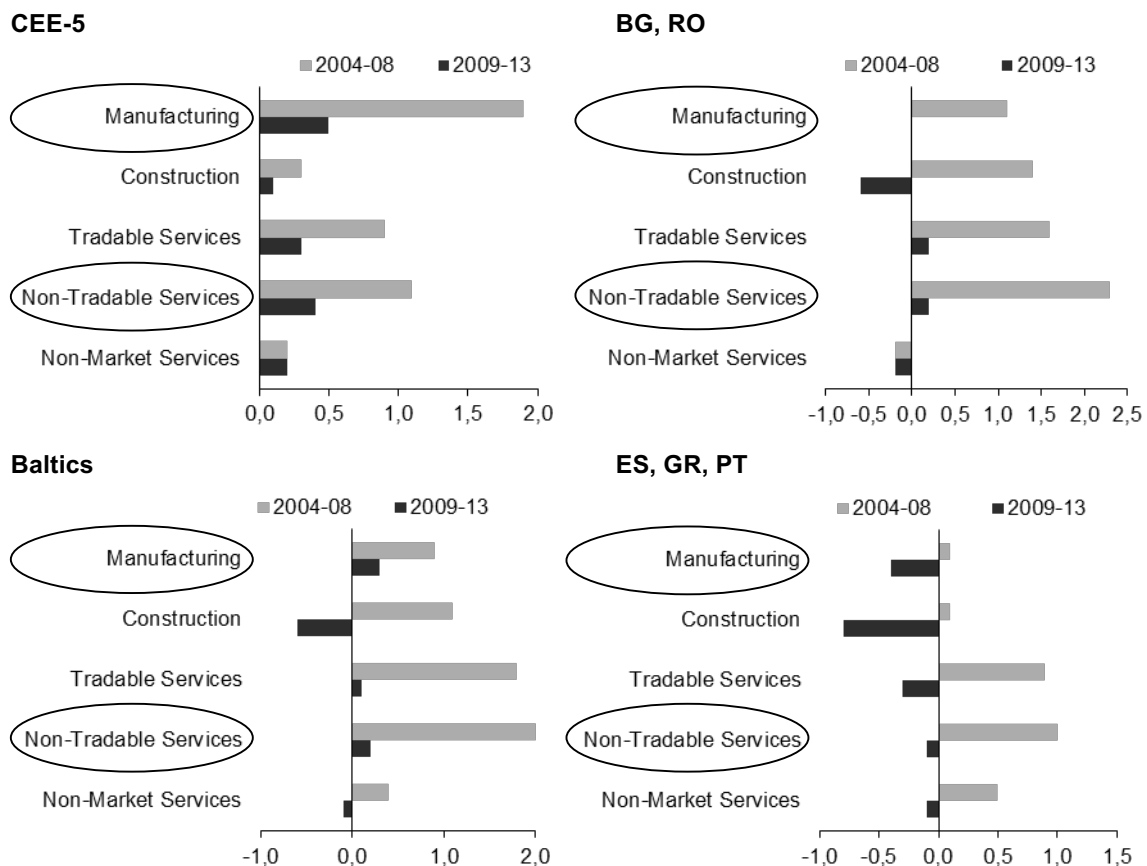


Remark: Components refer to BOP 6th edition as far as available, BOP 5th edition before. Primary income refers to Income Accounts, secondary income to current transfers.

CEE-5 refer to Czech Republic, Hungary, Poland, Slovakia and Slovenia; BG, RO to Bulgaria and Romania; ES, GR, PT to Spain, Greece and Portugal; the Western Balkan countries 'WBC-6' include Albania, Bosnia and Herzegovina, Macedonia, Montenegro, Serbia and Kosovo.

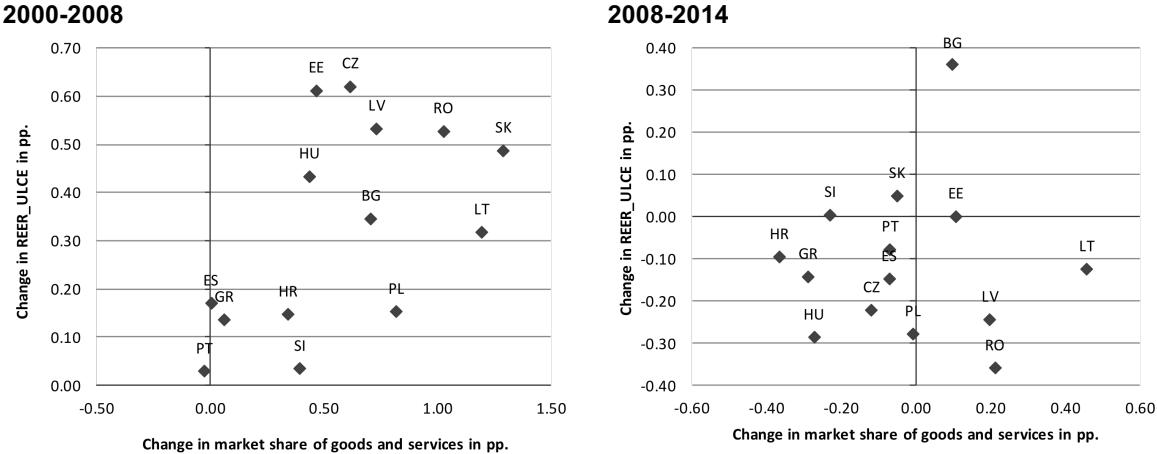
Source: wiiw Annual Database incorporating national and Eurostat statistics.

Figure 4 / Contributions to GDP growth by sectors, percentage points 2004-2008 and 2009-2013 (from constant prices)



Remark: Tradable Services are defined by NACE rev.2 categories H+J+K+M; Non-tradable Services by G+I+L+N+R+S+T; and Non-market Services by O+P+Q; for details see Landesmann and Hanzl (2016).
 Source: wiiw Annual Database incorporating national and Eurostat statistics, own calculations.

Figure 5 / Change in global export market shares and change in REER, 2000-2008, 2008-2014



Remark: REER refers to real exchange rates defined as relative labour unit costs in Eur. Country codes are following the ISO international standards.
 Source: AMECO Database, Eurostat.