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State of the Art

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Economic causes of the Eurozone crisis: the analytical contribution of Comparative Capitalism

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Abstract

The article discusses advances and limitations of Comparative Capitalism scholarship on the causes of the Eurozone crisis. It explains the crisis by highlighting four basic mechanisms: first, the absence of a system of coordinated wage bargaining has been made responsible for the loss of cost competitiveness. Second, the specialization in price-sensitive medium-quality goods and the corresponding loss of market shares to emerging markets has been attributed to the weak innovation systems of Southern economies. Third, the loss of competitiveness has been masked temporarily by a strong increase of public indebtedness and, fourth, private household indebtedness. These four explanations do not put the blame for the Eurozone crisis on a single government or a single type of actors, but rather highlight the systemic causes for the crisis, brought about by the construction of a common currency for institutionally very heterogeneous economies.

Key words: Varieties of capitalism, Europe, wages, collective bargaining, financialization, Germany

JEL classification: P16 political economy, E02 institutions and the macroeconomy, P51 comparative analysis of economic systems

1. Introduction

Although the Eurozone crisis does not make it to the headlines of the media anymore (except for Greece), it is still in full force. Despite occasional announcements that things have taken a turn to the better, the Southern member economies are still in the midst of a very deep recession. In February 2015, the Eurozone's seasonally adjusted unemployment rate was 11.3% (Greece 26.0%, Italy 12.7%, Portugal 14.1%, Spain 23.2%), going up from 7.5% in 2007 (Greece 8.3%, Italy 6.1%, Portugal 8.9%, Spain 8.2%). According to the same source (Eurostat, 2015), the youth unemployment rate was 57.3% for Greece, 41.8% for Italy,

34.8% for Portugal and 54.9% for Spain at the end of 2013. This contrasts with the unemployment rate of 4.9% and the youth unemployment rate of 7.9% for Germany. How can we explain the different fortunes of Germany on the one side and the Southern economies such as Greece, Italy, Portugal and Spain on the other side?[1]

Given the continuation of the Eurozone crisis, discussions about its causes are still in their preliminary stages. The focus of the public debate on the perceived causes of the crisis has changed several times, from the manipulation of Greek statistics over unsustainable sovereign debt and government bond spreads, from weak banks to issues of industrial competitiveness and labour costs. However, some years after the outbreak of the crisis, we can witness increasing signs of a maturing of the debate. More specifically, the debate is moving from newspapers and blogs to academic conferences and journals. Correspondingly, it may be appropriate to take stock of the debate so far.

Owing to the widely divergent fates of the Eurozone economies during the crisis, recent developments have led to a renewed interest of Comparative Political Economy scholarship in European economies. More specifically, scholars working in the institutionalist Comparative Capitalism (CC) tradition have developed a number of highly useful insights that are able to complement and deepen the usual crisis accounts discussed in macroeconomics. After a short exposition of the general discussion on the state of the Eurozone crisis (Section 2) and on theories on the economic causes of the Eurozone crisis developed in macroeconomics (Section 3), the article summarizes some general notions of the CC research program and its separate versions (Section 4), before turning towards the individual causal arguments developed in CC scholarship with regard to the Eurozone crisis (Sections 5–8). The final section concludes, with a special focus on the policy implications that can be derived from this analysis, as well as on the shortcomings of the CC research program and the corresponding research frontiers.

2. Point of departure: what is at stake in the Eurozone crisis?

As mentioned before, the discussion on the Eurozone crisis has constantly shifted during the last 2 years. Still, the current state of the debate on the core economic problems of the Eurozone consists of two broad observations, each based on two elements (see also Bibow, 2013; Johnston and Regan, 2015):

1. High *public* and *private* indebtedness in the Southern economies of the Eurozone.
2. Lack of *price* and *product* competitiveness of Southern economies, as witnessed by weak exports.[2]

High public indebtedness is at the core of the well-known EU adjustment programs for the South, for example in Greece and Portugal. Spain, however, did not have high public debt before the onset of the euro crisis. In the case of Spain, private indebtedness is a much

1 In this article I will limit myself to the common juxtaposition of Germany and the Southern economies (Greece, Italy, Portugal and Spain) due to space constraints. This is not to deny that the two camps are larger, with, for example, Austria and Finland often siding with Germany, and that some cases such as Ireland or France do not fit this overly simplified lumping together.

2 The focus of the article is on the emergence of the Eurozone crisis, not on crisis management post-2010. Otherwise, we might need to add a third observation, namely deflation and lack of demand.

more severe problem. The twin crisis in the Southern Eurozone, however, does not only relate to a high degree of indebtedness, but also to the loss of competiveness. This competitiveness problem stems, on the one side, from diverging labour costs and inflation rates within the Eurozone, and, on the other side, from the rise of companies from emerging markets that have strongly increased global competition for the products of the Southern economies, while increasing demand for German products.

Other issues that feature prominently in the Eurozone crisis debate can either be related to these observations or have lost their salience. High public debt—together with persistent balance of payment imbalances—triggered increasing sovereign bond spreads before the July 2012 intervention of the European Central Bank/ECB President Mario Draghi ('whatever it takes'). The absence of a lender of last resort in the Eurozone's national economies, a major issue during the early phase of the crisis, has largely been compensated for by this intervention. Similarly, the weakness of many banks—which is central to the evolving European Banking Union—is based on high public and private indebtedness and the fact that liabilities are mainly owed to European banks (Crafts, 2014, p. 722). The looming risk of deflation is a consequence of the Southern economies' attempts to regain cost competitiveness via 'internal devaluation'—and the unwillingness of German companies to risk their export success by accepting a higher rate of inflation. Enduring balance of payment imbalances, finally, are a widely used indicator of different levels of international competitiveness in North and South, but their decrease does not necessarily mean that the problem of the South has been solved. The problem may also be triggered by a depression of demand in the South (Guillemette and Turner, 2013, pp. 6–9) or by a loss of competitiveness of the Northern economies.

3. The limitations of mainstream macroeconomic theories on the causes of the Eurozone crisis

Mainstream macroeconomics has developed some widely used theoretical explanations for the Eurozone crisis. Two related issues have been identified: one triggered by exogenous shocks (such as the subprime financial crisis) and the other triggered by endogenous developments, in particular non-synchronized business cycles. Although the first problem was more prominent in early public debates, the second problem has become more central during recent debates and is the more severe one.

Arguments about the first problem mainly point towards the absence of major preconditions for an 'optimal currency area' (OCA) (Mundell, 1961; McKinnon, 1963; Kenen, 1969) in the Eurozone, even before the latter had been established. Common currency areas reduce the degree of flexibility in case of a need for adjustment caused by an asymmetric shock: whereas Iceland was able to achieve a 25% fall in wages relative to the Eurozone with a single devaluation, Spain—with a similar problem of overvaluation—was unable to do so (Krugman, 2012). In the case of an OCA, however, a highly unequal economic performance between sub-regions caused by an exogenous shock could be compensated by strong geographical labour mobility, highly flexible labour markets or a common system of risk-sharing (usually through massive fiscal transfers), conditions that in part apply to the USA but not to the Eurozone (Feldstein, 2011, pp. 7–8). A more optimistic version of the OCA theory, however, argued that the formation of a currency union would over time by itself create the conditions necessary for its success (Frankel and Rose, 1997).

A more recent and more relevant discussion about the structural problems of the Eurozone in macroeconomics highlights a slightly different problem, namely an identical central bank interest rate for a heterogeneous economic area with decentralized decision-making and diverging economic cycles (Landmann, 2009; De Grauwe, 2013, pp. 6–8). Point of departure of this argument is an observation that has been made by a number of macroeconomists and has been coined 'rotating slumps' by Blanchard (2006), but even goes back to the prediction of the 'Walters critique' during debates in the UK about joining the European Monetary System in the 1980s (Walters, 1990). If the economic cycles of member states are not synchronized—as it happens to be the case in the Eurozone against expectations of optimistic OCA theorists that the common currency would even out these divergent cycles—the average interest rate is too high for those economies in a difficult situation and too low for booming economies (Feldstein, 2011, pp. 4–5). During much of the 2000s, too high real interest rates contributed to the depth of the recession in Germany (post-unification difficulties), whereas too low real interest rates for Southern Europe led to an overshooting of the boom, most notably an inflation of wages and other prices. A crucial indicator for this phenomenon is the strong divergence of nominal unit labour costs (NULC) between Germany and the countries of the South.

Given a currency union, these divergences cannot be compensated fairly easily and painlessly through a nominal devaluation or an adjustment of interest rates. Instead, macroeconomists assume that the adjustment will take place via the causal chain of: a loss of competitiveness, a recession, rising unemployment and lower wage demands (Blanchard, 2006). In the meantime, other economies have become more competitive and undergo a boom, overshoot and so on ('rotating slumps'). But in marked contrast to the model, these inflation differences persist over very long periods of time in the Eurozone, where some states always have a higher inflation than the average and other states always have a lower (ECB, 2005, pp. 61–63, 2012, pp. 71–72; Collignon, 2009, p. 9; Höpner and Lutter, 2014, p. 2).

Thus, all of these highly instructive discussions in macroeconomics leave a number of observations unexplained. First, the rotating slumps argument neither explains why the Southern economies have so far proved to be unable to follow the predicted recovery process, nor why Germany currently is not undergoing a massive boom (followed by wage inflation). Secondly, neither the OCA- nor the rotating slumps-argument explains the high level of public and private debts in the Southern economies. Thirdly, these macroeconomic theories are unable to explain why European economies fared so differently with regard to the new competition from emerging markets. To sum up, the general perspective inherent in mainstream macroeconomics has difficulties to analyse both the emergence and the persistence of the very country-specific divergences that are at the heart of the Eurozone crisis.

As we shall see in the following, CC scholarship can provide some important answers to these questions, in part because of its more microeconomic focus on the competitive situation of companies, but mainly because of its focus on country-specific institutions and their stickiness. While mainstream macroeconomic accounts may have been helpful in identifying the imbalances and their dangerous consequences, an important contribution by CC scholarship is 'offering an account of *why* and *how* those imbalances developed' (Kuokštis, forthcoming, p. 12, emphasis in original).

4. Three generations of CC research

CC scholarship broadly shares three common convictions that set it apart from both mainstream macroeconomics and most schools of Marxism (Jackson and Deeg, 2006, pp. 6, 30): first, different institutional contexts make for different economic capacities and problems, secondly national institutions matter and thirdly institutions are sticky. In addition, most scholars in CC highlight the importance of certain specific institutional spheres such as corporate governance, financial systems, industrial relations and skill regimes for an understanding of modern capitalism (Jackson and Deeg, 2006, pp. 12–20). Within this broadly conceived research program, however, we need to distinguish three generations of CC scholarship. Each has a different theoretical background, country focus, conceptual contribution (and limitation)—and each provides a specific contribution for explaining the Eurozone crisis.

Although there were important earlier and parallel developments (Jackson and Deeg, 2006, pp. 7–11, 21–30), the 'varieties of capitalism' (VoC) approach as formulated by Hall and Soskice (2001) clearly is the focal point of the first CC generation. With a theoretical background in microeconomics and rational choice institutionalism, as well as a country focus on Germany (and Japan) versus the USA (and the UK), it has been established a binary juxtaposition of coordinated and liberal market economy types (CME/LME) that each constitutes an economic equilibrium based on a specific coordination mechanism. Over the last 15 years, comprehensive research has demonstrated many conceptual and empirical shortcomings of VoC, such as its binary orientation, exclusive focus on the supply side and neglect of common tendencies within contemporary capitalism. As we shall see, the direct contribution of the original VoC approach for explaining the Eurozone crisis remains fairly limited, but its conceptual apparatus is still very influential for later CC explanations, in particular due to its canonical formulation of many core concepts. Even authors who develop their CC perspective in opposition to VoC still often build upon many of its achievements, such as the juxtaposition of different wage bargaining systems (coordinated versus non-coordinated), of different skill regimes (general versus company-specific) or of different types of innovation (incremental versus radical).

The various shortcomings of the VoC research program have led to a flurry of extensions, in particular with a background in historical and sociological institutionalism (e.g. Yamamura and Streeck, 2001; Schmidt, 2002; Amable, 2003, 2008; Jackson and Deeg, 2006; Hassel, 2006, 2014; Hancké *et al.*, 2007; Becker, 2009; Hall and Thelen, 2009; McCann, 2010; Crouch, 2012; Schneider, 2013; Thelen, 2014). This 'post-VoC' (Bruff *et al.*, 2015, p. 34) research program has broadened the established country focus with a special interest in Eastern, Northern and Southern Europe, Asia, Latin America and South Africa. It has highlighted the importance of history and politics (in contrast to economic equilibria) for the emergence of capitalist institutions, of distributive struggles and inequality (in contrast to a focus on growth only) and of the role of the state for capitalist coordination—but also for rent-seeking and state capture, particularly in the more vaguely conceptualized 'mixed market economies' (MMEs) of Southern Europe and France (Molina and Rhodes, 2007; Hall and Gingerich, 2009, pp. 478–479; Beramendi *et al.*, 2015*a*). Over the years, a particular focus has been placed on comprehensive (often EU-driven) processes of liberalization and financialization, and on the various forms of institutional change that these processes have triggered, most notably a weakening of unions. As is demonstrated in Sections 5–8, this second-generation CC research has not only developed important insights into Southern European capitalism,

but also into the transformative forces of liberalization and financialization that are helpful for explaining the Eurozone crisis.

Still, the post-VoC agenda usually remains wedded to supply side-institutions and to the comparison of country models. It incorporates neither the demand side, nor the interaction of national capitalisms with each other, particularly in the context of an international institution such as the Economic and Monetary Union (EMU). These shortcomings are important points of departure for a third wave of CC scholarship. This third generation is more heterogeneous than the first two generations. It is often also more critical with regard to the existing political structures and cares even more strongly about conflicts, power differentials and income inequalities, although not being squarely in the Marxist camp (Ebenau, 2015, pp. 55–57). On the one side, these 'critical comparative capitalism' (CCC) scholars combine concepts of (post-)VoC with those of (Critical) International Political Economy and European Studies, focusing on the interactions and problematic interdependencies between national varieties of capitalism (VoC). Thereby, they highlight unavoidable tensions within the EMU (e.g. Scharpf, 2011; Gabor and Ban, 2012; Hall, 2012, 2014; Höpner and Schäfer, 2012; Hancké, 2013*a*, *b*; Johnston *et al*., 2013; Panagiotarea, 2013; Becker, 2014*a*; Höpner and Lutter, 2014; Kuokštis, forthcoming; Streeck, 2014; Beramendi *et al*., 2015*b*), but also tensions within the global political economy, due to a shift of production towards emerging markets (e.g. Nölke and Vliegenthart, 2009; Nölke, 2011; Bohle and Greskovits, 2012; Kalinowski, 2013; De Ville and Vermeiren, 2014; Vermeiren, 2014; Nölke *et al*., 2015). On the other side, some CCC scholars find their prime source of inspiration not in (post-)VoC, but in the (institutionalist) Regulation perspective, Dependency theory and post-Kaleckian macroeconomics. Still they come to similar conclusions about the fragile interdependence between nationally distinct capitalisms within the EMU (Stockhammer, 2011, 2013; Armingeon and Baccaro, 2012; Becker and Jäger, 2013; Regan, 2013, 2015; Becker, 2014*b*; Gambarotto and Solari, 2015; Jessop, 2014; Stockhammer *et al*., 2014; Baccaro and Benassi, 2015; Baccaro and Pontusson, 2015; Johnston and Regan, 2015; Suau Arinci *et al*., 2015). Here, however, the focus is not only on supply-side institutions (and companies), but also on demand-side institutions such as collective bargaining and unemployment insurance (and household indebtedness), and these scholars often do not speak of CMEs, but of export-led or profit-led growth regimes (or models), in contrast to the demand-/consumption-/debt-/wage-led growth regimes that typically can be found in LMEs and MMEs.[3] Still, (post-)VoC country types and growth regimes are not identical, as, for example, demonstrated in a juxtaposition of recent developments within the one-sidedly export-led German economy and the more balanced export and consumption-led Swedish economy, both usually classified as CMEs (Baccaro and Pontusson, 2015).[4] Both wings of CCC research, however, agree that the introduction of the Euro has led to a highly problematic deepening of the German specialization on export-led growth, and of the Southern European specialization on consumption-led growth.

3 There are some parallels here—in substance, not theory—to post-VoC research that has started to combine New Keynesian macroeconomic models with VoC categories (e.g. Carlin and Soskice, 2009; Amable and Azizi, 2011; Iversen and Soskice, 2012, 2013; Carlin, 2013). See also the incorporation of issues of consumption and household debt into post-VoC research by Crouch (2012).

4 More generally, (post-)VoC country types imply a higher degree of permanence than growth regimes that also can be shifted in principle.

Although the link between scholars working on growth regimes and the original VoC approach may be quite strenuous (certainly in terms of their basic theoretical assumptions)—and may indeed indicate a future replacement of (post-)VoC as leading paradigm within CC by the study of macroeconomic growth regimes—the three generations of CC scholarship still have a lot in common that separates them from competing approaches that try to explain the Eurozone crisis. Against the generalizing tendencies of both macroeconomics and Marxism, they share a common focus on country heterogeneity. Notably the recent development of CCC scholarship has led to a quite eclectic, but nevertheless useful synthesis, particularly with regard to the combination of comparative and international/European as well as of supply- and demand-side perspectives. To highlight the specific contributions, limits and synergies of the various CC perspectives towards an explanation of the Eurozone crisis more specifically, the subsequent sections each focus on one typical CC element: Section 5 on industrial relations (all three generations), Section 6 on skill formation and innovation systems (VoC and CCC), Section 7 on states as central coordination mechanisms (post-VoC) and Section 8 on household financialization (mainly CCC).

5. Industrial relations: EMU, wage bargaining systems and price competition

The first, and by today most elaborate CC account of the crisis focuses on the divergent development of labour costs that is based on the different wage coordination systems in the various types of capitalism within the Eurozone. This point has been brought up by authors such as Collignon (2009), Scharpf (2011), Carlin (2013), Iversen and Soskice (2013), Ramskogler (2013), Hall (2014), Höpner and Lutter (2014) and Vermeiren (2014), but the most comprehensive treatment so far is by Hancké (2013*a*, *b*) and associates (Johnston *et al*., 2013). The point of departure is the limitation of the 'rotating slumps' argument outlined above. Why have some economies consistently kept down their nominal labour costs and others consistently failed to do so? This is where an argument derived from CC needs to come in. Under the assumption that price inflation is driven by nominal wage inflation, it highlights the different institutions for labour and wage-bargaining in the Eurozone economies as well as their stickiness as causes for these imbalances.

The interaction between central banks, inflation and labour unions was at the origin of CC theory development, even before the VoC approach proper was developed. Studies about the different fate of advanced economies during the high inflation period of the 1970s and early 1980s indicated that economies with strong wage bargaining coordination fared better with regard to inflation. In this case, the central bank only had to threaten to increase interest rates in order to temper wage inflation—instead of forcing the whole economy into a grinding halt (Hall and Franzese, 1998). The VoC literature then further developed this line of argument by highlighting institutional complementarities in the CME ideal types, where factors such as protection against dismissals and co-determination allowed employees to take a long-term perspective and to forego short-term benefits (such as immediate wage increases) for long-term ones (such as employment protection and future wage increases). In the context of CC discussions about the Eurozone, these institutions arguably enabled the German workforce to permanently implement comprehensive wage restraint—and therefore to gain price competitiveness—whereas the workforce in Southern economies was not able to repeat this fate. It has also been argued that a currency union increases incentives for wage restraint, since the latter

provides a perspective for job security and—in the long term—possibly wage increases due to increased export shares. In contrast, under flexible exchange rates the potential long-run advantages of wage restraint may be undone by periodical devaluations (Höpner and Lutter, 2014, p. 7). Given a currency union and mostly intra-regional trade, steady wage moderation by only one group of economies automatically leads to the accumulation of trade imbalances (Armingeon and Baccaro, 2012, pp. 272–273; Johnston *et al.*, 2013, p. 10). Whereas the two types of economies were able to co-exist prior to the existence of the EMU, the destruction of two safety valves—first nominal exchange rate adjustments and secondly national central banks with individual inflation rates—has led to the permanent crisis that we are witnessing (Johnston and Regan, 2015).[5]

Hancké's (2013*a*, *b*) comprehensive study first distinguishes between an exposed and a sheltered sector in the economies of the Eurozone. Whereas labour costs in the exposed sector are kept down due to international competition, this mechanism is absent in the sheltered parts of the economy, in particular the public sector. Somewhat ironically, launching the EMU has eliminated the brakes on public sector wages that had been put in place by those institutions that prepared the EMU, the European Monetary System and Maastricht (Johnston, 2012; see also Section 7). Hancké secondly distinguishes between coordinated and uncoordinated wage-bargaining systems. Whereas in the former a lead sector—usually one of the exposed sectors—sets a standard for wage increases that is followed by the other sectors (e.g. IG Metall in Germany), this mechanism is absent in uncoordinated wage-bargaining systems. Corresponding to this argument, NULC would increase less in the exposed sectors of all Eurozone economies and in the sheltered sectors of economies with coordinated wage-bargaining systems, in contrast to sheltered sectors in economies without coordinated wage bargaining.

Hancké *et al.*'s line of reasoning has been extended by Höpner and Lutter (2014, pp. 4–5) who highlight that even in the exposed sector the distinction between coordinated and noncoordinated wage bargaining systems is an important factor. In economies without a wage coordination tool, even in exposed sectors workforces will not be able to consistently restrain labour costs in a situation of a crisis of competitiveness. Moreover, companies in the exposed sector of coordinated market economies can rely on lower costs of inputs and services from non-exposed sectors, therefore making wage restraint in the exposed sectors easier. Empirically, this is an important factor for the cost competitiveness of German exporters (Lehndorff, 2012, p. 83; Dustmann *et al.*, 2014). Correspondingly, economies with noncoordinated wage bargaining systems in a currency union can always be out-competed (in terms of labour costs) by coordinated ones, in both the exposed and the sheltered sectors. This insight is in line with the empirical development of NULC in the Eurozone. Thus, economies such as the Italian that relied on occasional devaluations as 'periodic injections of stronger competitiveness' (O'Neill, 2014, p. 1) lost out to the German economy that in part still features a system of coordinated wage bargaining, in spite of the ongoing erosion of the power position of German unions (Hassel, 2006, pp. 205–208). However, it remains an issue for empirical research whether the German wage restraint can be better explained by

5 Even after the introduction of fixed nominal exchange rates under the European Monetary System's Exchange Rate Mechanism inflation rate adjustment was still possible, as national central banks could react to high inflation with monetary contraction (Johnston and Regan, 2015, pp. 8–10).

the system of coordinated wage bargaining or by the weakening of the unions, a factor particularly highlighted by growth regime perspectives (Lehndorff, 2012, pp. 83–84; Stockhammer *et al.*, 2014, p. 7).

Of course labour unions in economies with coordinated wage bargaining systems could decide to try to fight for higher wages to remedy the critical situation in the Eurozone, e.g. through a transnational coordination of wage bargaining (Collignon, 2009, pp. 32–37; Johnston and Regan, 2015, p. 16). But given the weakness of wage bargaining institutions on the European level (Glassner and Pochet, 2011) and the de-synchronization of class struggles in Europe (Stockhammer *et al.*, 2014, p. 8), this transnational coordination option has so far proved to be illusionary. Moreover, German workforces and their employers do not only compete with those of the Eurozone, but also with Chinese, Japanese and American ones (as well as production facilities in Eastern Europe) and are for this reason extremely unlikely to voluntarily risk their cost competitiveness, in particular given a world economy with feeble growth. This choice is based on the institutionally deeply rooted export focus of the German economy and is politically backed by a powerful coalition between export companies and the core workforce in German manufacturing (Gabor and Ban, 2012; Carlin, 2013; Höpner and Lutter, 2014, p. 20). Wage restraint, not boosts in productivity, has been central to the favourable development of German NULC over the last 15 years (Bibow, 2013, p. 369). Thus, it is extremely unlikely that German wages will inflate to a degree that enables a re-balancing of Eurozone cost competitiveness, even if the 'German low-cost strategy' may be quite dangerous for the German economy itself in the long run, given its extreme dependence on exported goods (Baccaro and Pontusson, 2015).

Although the CC argument about the importance of wage bargaining systems leads to similarly sceptical conclusions regarding the smooth functioning of the Eurozone as the macroeconomic argument about OCAs, there is a fundamental difference in terms of policy prescriptions: whereas OCA assumes that currency unions can work best with highly flexible labor markets, CC scholarship demonstrates that highly coordinated labour markets fare much better with regard to the challenges of monetary integration in the EMU (Hancké, 2013*a*, p. 110; Johnston *et al.*, 2013, p. 38). It is also important to highlight that—in contrast to the macroeconomic argument of rotating slumps—this CC scholarship argument does not point towards an equilibrium where economies are in turn undergoing booms and busts, but towards a situation where certain economies are continuously unable to match the wage restraint of the others. Empirically, only the Troika programs have been able to depress NULC during the last few years, at massive social and political costs (including a further collapse of unions), and have of course not (yet) affected France and Italy that have also lost a substantial amount of labour cost competitiveness (Höpner and Lutter, 2014, pp. 20–21).

Given the stickiness of wage bargaining systems that have been established over many decades, with coordinated wage bargaining systems being particularly difficult to emulate—Höpner and Lutter (2014, p. 19) call the German case a 'relic of a historical stroke of luck'—the perspectives for the Eurozone are bleak. The combination of the rotating slumps argument from macroeconomics and the heterogeneous wage bargaining system argument from CC leads to the expectation of protracted economic, political and social crises in the Southern economies, if nominal exchange rates are kept inflexible.

6. Innovation systems, skill formation and product competition: dealing with the rise of large emerging markets in the international division of labour

Discussions so far have assumed that the competition between companies is based on homogeneous products and is mainly concerned with price competition. However, more realistically is to assume that companies are producing different goods and competition is not only based on prices alone (Lehndorff, 2012, p. 80; De Ville and Vermeiren, 2014; Vermeiren, 2014). More specifically, VoC scholarship assumes that specific national production systems cater particularly well for specific types of products, based on an appropriate system of skill formation. According to VoC, CMEs have comparative institutional advantages in incremental innovations in high-quality manufacturing, based on a sophisticated system of skill formation, in particular through vocational training (Hall and Soskice, 2001; Iversen and Soskice, 2013). Southern European economies, in contrast, have more advantages in producing medium-quality goods, based on a more uneven system of skill formation. The first implication of this distinction is that typical (Southern) goods should be (even) more price sensitive than typical CME-type goods (De Ville and Vermeiren, 2014, p. 8; Vermeiren, 2014, pp. 102–104).[6]

We also need to broaden our view from inter-regional trade balances to extra-regional trade balances. Compared with the issue of nominal labour costs discussed in Section 5, the issue of extra-European trade relations has received much less attention. This may have to do with the EU's broadly balanced external current account as well as with the importance of intra-European economic ties. Still, the Eurozone as a whole is very open towards the rest of the world which has with far-reaching implications for any explanation of the Eurozone crisis, the main issue being the economic rise of China and other large emerging economies (Chen *et al.*, 2012, pp. 8, 21). Here, several mechanisms are at play, as pointed out by De Ville and Vermeiren (2014). First, emerging market producers are very strong competitors for the typical labour-intensive goods produced by the Southern European economies (both intra- and extra-regional) but so far much less so for advanced German products, such as capital goods (Chen *et al.*, 2012; Baccaro and Pontusson, 2015, p. 28). Secondly, much of the extra-regional demand created by emerging markets is for typical German products (such as luxury cars or advanced machinery), much less so for the typical goods produced in Southern Europe (such as food and fashion). Thirdly, the rise of China and other emerging economies brought along an appreciation bias for the Euro, due to massive euro acquisitions by the People's Bank of China. Again, this affects typical Southern European goods more than German ones, because of their higher price sensitivity. Fourthly, the extra-regional German export success—ceteris paribus—also leads to a higher exchange rate for the Euro, compared with a Southern European currency alone.

These considerations help us to explain why the Southern Eurozone economies have not only accumulated intra-regional trade deficits, but also (until very recently) huge extra-regional trade deficits, much in contrast to Germany (Chen *et al.*, 2012, p. 10; De Ville and Vermeiren, 2014, pp. 5–6; Gambarotto and Solari, 2015, p. 803). Thus, a broadening of the

6 In comparison with the UK and Sweden, however, German exports are more price-sensitive, due to their focus on manufacturing, instead of high value-added services (Baccaro and Benassi, 2015; Baccaro and Pontusson, 2015).

CC perspective from the study of Western economies and intra-regional trade imbalances to the study of global capitalism and extra-regional trade imbalances provides us with yet another important explanation for the deterioration of the competitive position of the Southern European economies. Again, the implications for the future of the Southern European economies are meagre, at least if emerging markets continue to rise. The current strategy of increasing the export competitiveness of the Southern economies via cost-cutting ('internal devaluation') will generally not be sufficient to match the low wage levels in large emerging markets such as India or China. Even the recent substantial increases of both unit labor costs in China and of the Renminbi exchange rate did not allow the Southern economies to improve their extra-regional trade performance (De Ville and Vermeiren, 2014, pp. 26–28). Finally, the Southern economies do not only compete with emerging markets and Germany, but also with Eastern European economies (Bohle and Greskovits, 2012). Here, important competitors did not enter the Eurozone and have been able to devalue their currencies if necessary (e.g. Poland in early 2009).

7. The state as central coordination mechanism: public indebtedness as compensation

Another strand of CC scholarship also departs from the juxtaposition of different systems of wage coordination and the problem of uniform monetary policy (as highlighted in Section 5), but focuses on the general coordination mechanism in Southern economies (Hassel, 2014). It highlights that the latter relies on the dominant role of the state, instead of coordination between the business community and labour as in CMEs (Schmidt, 2002). As we shall see, this post-VoC perspective provides a partial explanation for the expansion of public debt in the Southern Eurozone economies. It is only a partial explanation since, for example, the explosion of sovereign debt in Spain was mainly due to bank rescue packages after the subprime crisis (Armingeon and Baccaro, 2012, pp. 255–259; Johnston *et al.*, 2013, p. 6). These rescue packages, in turn, were necessary because of excessive private debt, in particular from a real estate bubble (see Section 8 for additional elaborations). However, the existence of a currency union with Germany makes matters worse in case of high public or private debt, since the German export model needs monetary stability and does not allow for inflating away debt, as, in contrast, required by the Southern model (Armingeon and Baccaro, 2012, pp. 261–263).

Compared with the CCC argument advanced in Sections 5 and 6, Hassel (2014) takes a less economic and more political view of the origins of the Eurozone crisis. This is in line with the characterization of Southern Europe in post-VoC research. Here, access to the state and its resources (coordination, protection or compensation) is an important asset for capital and labor (Molina and Rhodes, 2007).[7] However, there is also an economic logic at play: Southern economies always relied on devaluations to regain their competitiveness. The Eurozone has made this impossible, but it has offered Southern European states an alternative

7 In a more fine-grained analysis we clearly need to distinguish between the different types of state-focused economies that are lumped together in the vague MME category, in particular between France (state coordination for innovation incentives) and the Southern economies (state protection and compensation). I owe this point to an anonymous reviewer.

for appeasing their constituencies, namely access to cheap sovereign credit via increased state indebtedness.[8]

Access to the state—or even state 'capture' (Beramendi *et al.*, 2015*a*, pp. 49–55)—was always a highly important resource in Southern European economies, based on clientelistic relations and political lobbying. Whereas this resource has before been utilized for the protection of companies and labour forces via periodic devaluations, the focus increasingly went on to utilize fiscal resources after the introduction of the EMU, supported by lower interest rates for sovereign debt. Correspondingly, a comparison of Germany and Southern Europe with regard to nominal wage growth shows a diverging pattern, with strongly increasing wages in Southern European public sectors (Hassel, 2014, p. 20). Moreover, the easy inflow of cheap capital made unpopular reforms to increase competitiveness superfluous, in particular given the 'reform fatigue' after the major efforts to comply with the criteria for EMU inclusion (Johnston, 2012). This observation also contains important conclusions with regard to an understanding of the German government (and the Troika) position towards the South:

> [e]conomic adjustment programs, for instance in Greece, contain measures on labor market deregulation, not because there is an expectation that these measures will improve competitiveness, but because policy-makers in the Troika believe that the protection and compensation mechanisms must be broken for the effectiveness of financial transfers. (Hassel, 2014, p. 24)

Based on this analysis, one can easily draw very pessimistic conclusions with regard to the future fate of the EMU. According to this analysis, solving the Eurozone crisis requires nothing less than a fundamental societal and political upheaval in Southern Europe, thereby overthrowing a system of rule that has been established over several decades, inter alia, to mobilize support for the democratic governments in Greece (but also Portugal and Spain) that have taken over from authoritarian rule (Hall, 2014, p. 1230). Although there may be some normative merit in this proposal, given the oligarchic character of Southern European societies, the likelihood of its implementation appears dim, not to speak of the social damage that would be done on the way.

In addition to the political obstacles for a solution along the lines outlined above, the CC perspective also points towards hardly surmountable economic–institutional obstacles. From this perspective, successful reform programs have to realize a new set of institutional complementarities (Amable, 2008). However, it is extremely demanding (if not impossible) to construct the innovation institutions of a fully functioning CME departing from the basis of an MME type—Hancké (2013*a*, pp. 117–118), e.g. discusses the failed attempts in Italy and France—particularly given the increasing weakness of unions in the European periphery (Culpepper and Regan, 2014; Hassel, 2015). The alternative option would be a shift towards an LME, obviously the blueprint of the Troika reforms. However, in order to realize the specific comparative advantages of an LME-type economy, some very important institutional complementarities are notoriously difficult to construct, e.g. a skill regime supporting radical innovation.

8 Of course this is a matter of degree. In a more general perspective, all Western states have increased their indebtedness since the 1970s, thereby 'buying time' (Streeck 2014) with regard to the exhaustion of the post-war growth model.

8. Growth regimes: private sector debt and household financialization

The first three CC-based arguments have contributed to explaining the competitiveness problem of the South, as well as the problem of large public debt. What about the private debt problem? In contrast to Portugal, Italy and Greece, public debt was not an issue at all in Spain before the onset of the financial crisis. Generally, except for the case of Greece, private debt is at least as important as public debt for the current misery of the Southern Eurozone countries (Chen *et al.*, 2012, pp. 20–21; De Grauwe, 2013, pp. 11–16; Regan, 2015, pp. 13–14). Whereas the GDP share of government liabilities in the whole Eurozone of about 70% slightly decreased after the introduction of the euro (until the financial crisis), the share of household liabilities increased steadily, from about 50% in 1999 to 70% in 2008, thereby exceeding the GDP share of government liabilities (De Grauwe, 2013, p. 13). Except for Italy, all Southern economies underwent a housing bubble (Schweiger, 2014, p. 162). Based on a strong increase of borrowing by private households, increased consumption and construction activities further increased the inflation problem in the South (Chen *et al.*, 2012, p. 8; Johnston *et al.*, 2013, p. 10; Johnston and Regan, 2015, p. 4; Baccaro and Benassi, 2015, p. 21), thereby contributing to the cost differentials discussed in Section 5.

Why was this huge increase of private debt in the Southern Eurozone possible? Of course the elimination of exchange rate risk certainly has contributed to making credit more easily and cheaply available. Still, it does not explain the size of the increase of debt. Moreover, the massive increase of private debt did not only affect the Southern Eurozone economies over the last one to two decades, but also numerous countries outside the Eurozone or even the European Union, including the Baltics, Hungary and South-Eastern Europe (Becker, 2014b, p. 27). Thus, strongly increasing private household indebtedness can only partially be attributed to the introduction of the Euro and the elimination of exchange rate risks.

To understand the strong expansion of private debt in many European economies, we need to draw onto efforts for complementing the comparative perspective of CC with an intertemporal as well as transnational one. The basic idea is that the institutions of capitalism not only vary between countries, but also over time, a notion that has already been highlighted by post-VoC research, but is particularly central to Regulation perspectives and post-Kaleckian economics (Becker and Jäger, 2013; Stockhammer, 2013; Becker, 2014*b*; Gambarotto and Solari, 2015; Stockhammer *et al.*, 2014). More specifically, we can distinguish different phases of capitalism, with financialization (roughly since the break-down of the Bretton Woods system) being the most recent one, affecting many fields of economy and society (van der Zwan, 2014). Financialization works on different levels, notably with regard to companies and households. For an understanding of the Eurozone crisis the latter are more relevant. Enhanced private access to credit can decrease the demand for public transfers, a motivation that was central to the emergences of financialization in the USA during the 1970s (Krippner, 2011). Thus, increasing private indebtedness can be seen as an alternative to increasing public indebtedness as fuel for a demand-led growth regime. Moreover, financialization—in terms of strongly increased cross-border financial flows—relaxes the balance-of-payment constraint of credit-based consumption for some time (Baccaro and Pontusson, 2015, p. 21).

Crucially, financialization interacts differently with different types of capitalism (Lapavitsas and Powell, 2013), leading to different growth regimes, with an export/profit-led

growth regime in Germany (and China and Japan) and a credit/demand-led growth regime in Southern Europe, the USA and the UK (Stockhammer, 2011). Whereas LME-type economies in particular generally embraced this development wholeheartedly (and at least temporarily successfully), Germany was far less thoroughly affected by household financialization (van Treeck, 2008; Mertens, 2015). Instead of increasing household indebtedness, we can find substantial savings in Germany, inter alia, based on the worries of workers with highly specialized skills about long-term employment (Carlin and Soskice, 2009; Gabor and Ban, 2012). The Southern economies share LMEs' openness towards financialization—including the propensity for bubbles—but are less able to benefit from this development than the latter; as the USA and the UK have focused their economies on the provision of innovative financial services for more than three decades (Kalinowski, 2013; Kuokštis, forthcoming).

Based on these considerations, the development of the Southern Eurozone economies can be qualified as 'dependent financialization' (Becker, 2014b, p. 25–32; see also Gambarotto and Solari, 2015). Similar to Central Eastern European economies, they are dependent on foreign capital (Bandelj, 2007; Nölke and Vliegenthart, 2009; Bohle and Greskovits, 2012), but with a stronger tendency towards de-industrialization than the latter. The focus of economic activity moved from industry towards finance, real estate and construction and often from production for export to the management of imports (Chen *et al.*, 2012, p. 8; Becker and Jäger, 2013, p. 171; Schweiger, 2014, pp. 163–165). Temporarily, the deteriorating export competitiveness in production after the introduction of the Euro had been masked—more precisely: over-compensated—with regard to its negative effect on economic growth by an increasing private indebtedness and rising asset prices, fuelling booms in construction and consumption (Stockhammer *et al.*, 2014, pp. 8, 11–13).

Where did the huge amount of credit to private households come from? Without necessarily implying a causality going from the German trade surplus to the expansion of credit and the corresponding growth in the South—it could well be the other way around—a part of Southern credit has been financed by Germany (Gabor and Ban, 2012; Lehndorff, 2012, pp. 87–88; Bibow, 2013, pp. 374–376; Regan, 2015, p. 13). Investors from outside of the Eurozone—e.g. from emerging markets—preferred to acquire financial instruments issued in Germany (or France and the UK), thereby making these large Eurozone economies an indirect channel for their financing of Southern debt, mainly via carry trades by European banks (Vermeiren, 2014, p. 112). While German banks were able to strongly decrease their positions after the onset of the Eurozone crisis, the German central bank very much increased its liabilities, via the TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system. Thereby, the eventual write-down shifts from bank shareholders to taxpayers, although some banks still remain highly leveraged (Bibow, 2013, pp. 377–378; Vermeiren, 2014, pp. 175–176; Bruff, 2015, p. 124).

Seen from this perspective, recent developments in CC research help us not only to blame the introduction of the Euro for the difficult situation in the Southern economies, but also to locate part of the causes in broader—and even more fundamental—developments of contemporary capitalism such as financialization that can only be reversed by a fundamental economic change (and not only within the EMU). Financialization and the introduction of the Euro have led to strongly diverging and increasingly fragile growth regimes in the Eurozone, where Germany has deepened its specialization in export-led growth and Southern Europe in debt-led growth—a perfect symbiosis for a couple of years, but a rather unholy alliance in the long-term. By taking this into account, the implications for overcoming the crisis in the

European South are not getting better, since the thorough de-industrialization that went hand-in-hand with financialization in Southern Europe will inhibit any quick recovery, unless compensated by a new credit-based boom. In fact, Southern European capitalisms have been even more ‘peripheralized’ than before (Gambarotto and Solari, 2015). Germany, in turn, suffers from a highly problematic specialization in manufacturing exports that may not be stable in the years to come, particularly due to rising inequality, limited exports to Southern Europe as well as increasing competition from emerging markets moving up in the manufacturing value chain (Baccaro and Benassi, 2015; Baccaro and Pontusson, 2015; Bruff, 2015).

9. Summary and implications

CC scholarship is not the only valid account of the causes of the Eurozone. It has a number of substantial limitations that cannot be addressed without transgressing the boundaries of the research program. These limitations most prominently include more narrowly political factors, such as international political power structures (e.g. the German dominance within Eurozone rescue politics) and domestic political restraints and norms (e.g. necessary for explaining the ongoing adherence of Southern governments to policies that prolong the crisis).[9] Still, CC scholarship has identified four important causal mechanisms of the Eurozone crisis: the absence of a system of coordinated wage bargaining has been made responsible for the loss of cost competitiveness, whereas the specialization in medium-quality goods and the corresponding loss of market shares to emerging markets has been attributed to the weak innovation and skill systems of Southern economies. The loss of competitiveness has been masked temporarily by a strong increase of both private and public indebtedness.

These four accounts based on the common assumption of divergent national institutional conditions complement explanations that have been brought forward by mainstream macroeconomists. At the same time they contribute to further develop the CC research program, in particular with regard to its recent combination with the Regulation perspective, Dependency theory and post-Kaleckian economics on the one side, and to (critical) International Political Economy and European Studies on the other side. Analytically, future CC scholarship seems particularly promising if it further expands on the interaction between different growth regimes and on their interactions with international institutions and power structures. Empirically, subjects that require additional CC research include, inter alia, the questions whether German wage moderation is primarily based on a weakening of unions or on coordinated wage-bargaining as well as whether German exports primarily depend on cost competition (discussed in Section 5) or on product competition (Section 6). Similarly, the question whether credit creation in the South has caused German intra-Eurozone export surpluses or vice versa (Section 8) warrants further research, as does the issue in how far the divergence of growth regimes has been caused by the introduction of the Euro or rather by the long-term

9 One example of Eurozone political decisions that cannot be accounted for from the perspective of CC is the bank-sovereign debt doom loop and the subsequent erection of the European Banking Union, However, compared to the more fundamental causes of the Eurozone crisis discussed in CC, the Banking Union is arguably a rather superficial solution, given the limited firepower of the resolution mechanism, the absence of a joint deposit insurance and the general inability to address the instability of modern finance (Avaro and Sterdyniak, 2014).

development of financialization. Finally, the overly simplified notion of MMEs (Section 7) seems untenable and needs further differentiation, particularly if countries like France and Ireland are included in this category.

Generally, arguments developed in this article do not put the blame for the Eurozone crisis on a single government or a single type of actors, but rather highlight the systemic causes for the crisis, bought about by the construction of a common currency for institutionally rather heterogeneous economies under the conditions of increasing financialization. Studies based in macroeconomics already argued that the introduction of a common currency is a major risk. Contributions based in CC scholarship indicate that the situation for the Southern economies is even worse. From the CC perspective, the conditions that have originally led to the crisis are still in place. Given the deep institutional embeddedness of these conditions, the crisis is far more fundamental in character than discussed in the public at large. Moreover, it cannot be solved through the strategies that are usually discussed in public debates, such as fiscal stimulus, wage deflation, labour deregulation, improved banking regulation or a weakening of the external exchange relationship of the Euro. Based on the analysis of this survey, some of these measures are even counterproductive. This refers, in particular, to the attempts to further enforce labour market flexibility, weaken labour unions and depress demand in the Southern economies.

CC scholarship does not offer a simple solution for the crisis. The much-discussed option of further political integration on the EU level, hand-in-hand with massive fiscal transfers to the South, does not offer a convincing alternative, even if we ignore the massive democracy problem that would be implicated. It does not provide a solution for the competitiveness problem (Feldstein, 2011, p. 11; Johnston and Regan, 2015, p. 16) and its best outcome would be to turn Southern Europe into some kind of permanently subsidized Mezzogiorno. However, the volume of intra-European fiscal transfers would probably neither be sufficient nor comparable with the level of support that has taken place on the basis of solidarity within an established nation state (Streeck and Elsässer, 2016). In a broader perspective, we may even conclude that a currency union is generally more favourable to economies close to the CME ideal type, given their superior ability for wage moderation and their lower propensity to engage in financialization, overheating and real exchange rate overvaluation. While LME-type economies can deal with these challenges based on their greater flexibility, their potential for productivity increases and their lower reliance on the state, Southern economies suffer most from the absence of devaluations and macroeconomic discretion (Kukštis, forthcoming, p. 8). Based on the CC scholarship assembled in this article, the best option seems to be some kind of institutional reform of the Euro-system that would give back Southern economies the option to devalue their currencies and to regain an independent monetary policy.

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