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Softening industrial relations institutions, hardening growth model: The transformation of the German political economy

1. Introduction

In this paper we argue that German industrial relations are undergoing a process of fundamental liberalization, albeit incremental and protracted over time, which in turn is having a transformative impact on the German political economy, contributing to transforming it from wage-led to profit-led, and specifically to a particular type of profit-led: export-led.

Given the country's recent economic success through the crisis, the German model has been hailed by some academics as a blueprint for reform by other EU countries (Anderton *et al.* 2012; Dustmann, Fitzenberger *et al.* 2014). Politicians in crisis-ridden countries have echoed these views. For example, former Italy's Prime Minister Mario Monti declared proudly that his goal was «to make Italy as similar to Germany as possible»[1]. In contrast, we argue here that the German export-led model does not represent a sustainable long-term equilibrium, let alone an example for other countries, because its success is contingent on it remaining an exception. Furthermore, the social desirability of the model is questionable as indicated by the deterioration of various distributive indicators of social welfare.

The paper is composed of a quantitative and a qualitative, historical part. The quantitative part argues through simple statistics that the German economic growth model is turning into a profit-led one, and consequently that policies which directly

[1] Warum Italien mehr wie Deutschland sein sollte, in *Die Welt*, Jan. 11, 2012.

and indirectly boost the profit share of GDP (or, conversely, reduce the wage share), such as labor market liberalization, have in the case of Germany positive trickle-down effects on the rest of the economy. As an economy that has come to depend predominantly on exports, Germany is different from other large Eurozone countries, such as France or Italy, which are instead still predominantly wage-led.

The focus of the historical part is on industrial relations institutions, and specifically on the organizational crisis of trade unions, the weakening of sectoral bargaining through opening clauses, and the various reforms of labor market institutions and employment contracts[2]. There is coevolution between industrial relations shifts and the emergence and consolidation of the export-led model. The industrial relations changes have contributed to the shift in growth model by weakening the institutional channels through which productivity increases feed into domestic consumption and by facilitating wage repression. In turn the shift in macroeconomic regime contributes to the deterioration of industrial relations institutions.

The remainder of the paper is organized as follows: in section 2 we develop the argument about the shift in the German growth model; in section 3 we provide an historical account of the liberalization process from the golden age of the German model to the new export model; and in section 4 we conclude by discussing theoretical implications for the study of contemporary capitalism.

2. A shifting growth model?

This section draws on the attempt by various heterodox macroeconomists (Bhaduri and Marglin 1990; Stockhammer *et al.* 2011; Hein and Mundt 2012, Lavoie and Stockhammer 2012; Onaran and Galanis 2012; Storm and Naastepad 2012;

[2] Although there is evidence that the German financial system is also undergoing liberalization (Höpner 2001; Streeck 2009; Culpepper 2010), the econometric evidence does not suggest that German investments are significantly more sensitive to profitability than in other countries, or that they have become more sensitive over time (Stockhammer *et al.* 2011; Onaran and Galanis 2012). Partly for these reasons, and also to keep the paper within reasonable limits, we do not deal with financial institutions and corporate governance here, even though a fuller treatment should incorporate them.

Storm and Naastepad 2012) to develop an alternative to the standard NAIRU-based macroeconomic framework which has inspired labor market policy in the past 30 years (OECD 1994; e.g. Layard *et al.* 2005; Blanchard 2006; Carlin and Soskice 2006).

NAIRU-based macroeconomics is based on the idea that there is a non-inflation-accelerating rate of unemployment (NAIRU), i.e. a rate of unemployment at which prices grow at a stable rate. Attempts to reduce such «natural» rate through expansionary monetary and fiscal policies are doomed to failure and would only generate an inflationary spiral, which would then have to be quashed through restrictive economic policies in classic «stop-and-go» mode. The NAIRU is determined not by aggregate demand, as in Keynesian macroeconomics, but by supply-side conditions such as the strength of organized labor and the extent of labor market rigidities boosting labor power.

Although the NAIRU framework does not rely on the assumption of perfect markets – on the contrary it assumes oligopolistic markets, mark-up pricing, and wage determination through collective bargaining – its policy implications are virtually indistinguishable from those of a neoclassical economic framework in which the labor market clears and voluntary unemployment does not exist. In NAIRU-based macroeconomics all institutional rigidities cause the NARU to rise, with one exception: coordinated wage bargaining. This institutional arrangement is considered beneficial because it is associated with wage moderation: in centralized bargaining large, encompassing wage setters internalize the systemic repercussions of excessive wage demands (Tarantelli 1986; Calmfors and Driffill 1988). This makes price stability compatible with a lower level of unemployment (Layard *et al.* 2005). The logical implication of the theory is that lowering the NAIRU implies targeting the institutional rigidities that prop it up (Blanchard and Wolfers 2000; Nickell *et al.* 2005).

In contrast with the NAIRU framework, the heterodox approach goes back to one of Keynes' foundational ideas: unemployment is first and foremost determined by aggregate demand and not by supply-side conditions. Another source of inspiration is Kalecki's emphasis on the importance of the functional income distribution between wages and profits (Stockhammer and Stehrer 2009). The propensity to consume is generally higher for wage income than for profit income.

Therefore, a distributional shift favoring profits over wages may depress aggregate demand and have a negative impact on employment, unless it is compensated by growth in other components, such as investments, government expenditures, or net exports (exports minus imports).

To the extent that investments depend on profitability, real wage growth (when it is not compensated by productivity increases and leads to a reduction of unitary profits) may have a negative impact on investments. Net exports, too, may be negatively affected by wage growth since they tend to be negatively affected by increases in domestic prices relative to international competitors (if uncompensated by exchange rate devaluations). In brief, real wage growth is not an unconditional boon for an economy and may in some circumstances reduce GDP growth through its negative impact on investments and net exports.

Figuring out empirically a demand regime implies estimating which of these causal paths prevails. If the sum total of the various effects associated with a marginal decline in the wage share (equivalently, an increase in the profit share) is a decline in GDP, then the economy in question is wage-led. If vice versa, the marginal effect is positive, for example because the decline in consumption is more than counterbalanced by the increase in investments and net exports, then the economy is profit-led. Recent econometric analyses suggest that most advanced economies are wage-led (Onaran and Galanis 2012; Storm and Naastepaad 2012a), but as we will see later in the section Germany may be an exception.

By incorporating the role of aggregate demand and redistribution in the analysis of political economic developments, this framework promises to shed light on certain dimensions that are generally underplayed by other comparative political economy perspectives, such as the Varieties of Capitalism (VoC) one (Hall and Soskice 2001). The intellectual foundations of VoC were elaborated in the 1980s when Keynesian demand management was discredited and supply-side economics was rising to prominence. The key theoretical concepts of the VoC approach («production regime», «coordination», «skill-specificity», etc.) all capture particular features of the supply-side of a national political economy. Just as in the case of NAIRU-based macroeconomics, the demand side and the functional distribution of income play little or even no role at all in VoC analyses

(exceptions are Carlin and Soskice 2009; Iversen and Soskice 2012). Furthermore, while the crucial distinction between *co-ordinated* and *liberal* market economies tends to be static in VoC since it is rooted in long-standing features of European societies, the distinction between *wage-led* and *profit-led* outlined above is more dynamic. Wage-led economies may turn into profit-led ones if domestic consumption is repressed long enough, if investments become more sensitive to profitability as a result of international shifts such as capital openness, and if exports become a large component of aggregate demand. In turn, a country's growth model exerts a decisive influence on domestic political economic developments, as illustrated by Bhaduri and Marglin's (1990, p. 388) illuminating analysis of how globalization tends to move countries away from wage-led growth and how this shift alters the economic policies of even left-of-center governments:

> A dominant trade effect tends to make the stagnationist [i.e. wage-led] logic increasingly irrelevant in a world characterized by high trade interdependence. The left social-democratic emphasis on wage-led expansion derived from the stagnationist logic may be given up in the pursuit of export surplus by following restrictive macroeconomic policies to keep down real wages (and inflation) for greater international price competitiveness. Further, so long as successful export performance maintains a high enough level of employment to overcompensate a relatively low real wage rate, cooperation between labor and capital may continue to be feasible ... The only problem with this strategy is that it is impossible for all countries to achieve a trade surplus simultaneously. *And yet, the lure of this impossibility has contributed substantially to the disintegration of the traditional social democratic ideology without any coherent alternative taking its place.* (emphasis ours)

In profit-led economies, the primacy of profits in spurring growth is determined by essentially two conditions: high sensitivity of investments to (current and future) profitability and high sensitivity of exports to changes in relative unit labor costs. Relative unit labor cost increases (unless corrected by exchange rate devaluation, which is difficult with fixed exchange rates and impossible in a common currency regime) tend to decrease the competitiveness of domestic manufactures and of internationally traded services and to increase the price competitiveness of imports. Both the impact of investments and exports is contingent on their becoming a sizeable portion of aggregate demand.

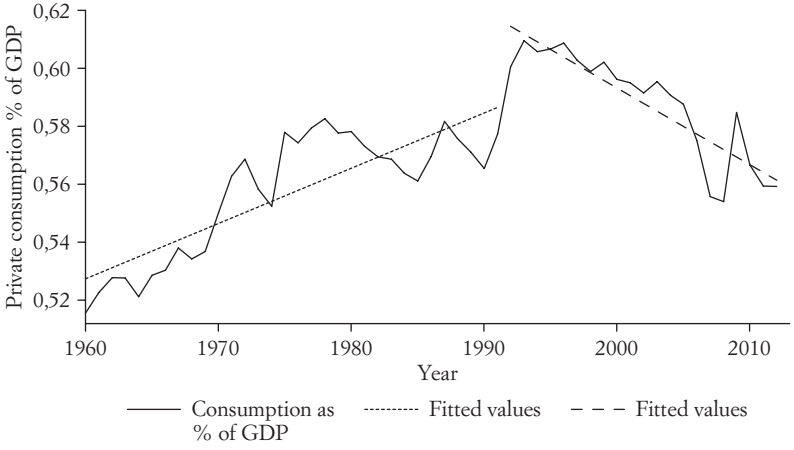

FIG. 1. Trajectory of private consumption as a percentage of GDP.
Source: AMECO Database.

Figure 1 and 2 begin to illustrate how these ideas contribute to explain the trajectory of the German economy in the last 30 years. Figure 1 plots the evolution of private consumption as a percentage of GDP in Germany. The graph shows a rising trend until 1990, a step increase corresponding to the unification shock around 1990, and then a steadily declining trend from 1990 on[3]. Figure 2 shows the trend of exports as a percentage of GDP. These have been growing steadily between 1960 and 2010. However, the growing trend is markedly steeper from 1990 on. Germany has become a much more export-dependent economy in the 20 years after unification and exports as percentage of GDP have increased from 20% to more than 50% – a percentage generally seen in small open economies. Imports have followed suit, but to a lesser extent. Imports are somewhat endogenously linked to exports because exports also include imported intermediate goods that are offshored to foreign countries and then

[3] The slack in private consumption was not picked up by investments. In fact, investments declined until the late 1980s, then improved until the late 1990s (corresponding to the unification period), and then went through a new decline in the 2000s. The least that can be said about German investments is that they are not the driving force of German growth.

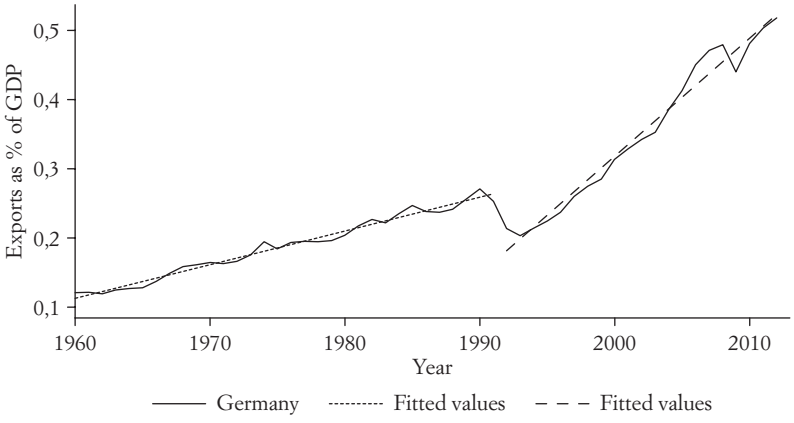

FIG. 2. Exports as percentage of GDP.
Source: AMECO Database.

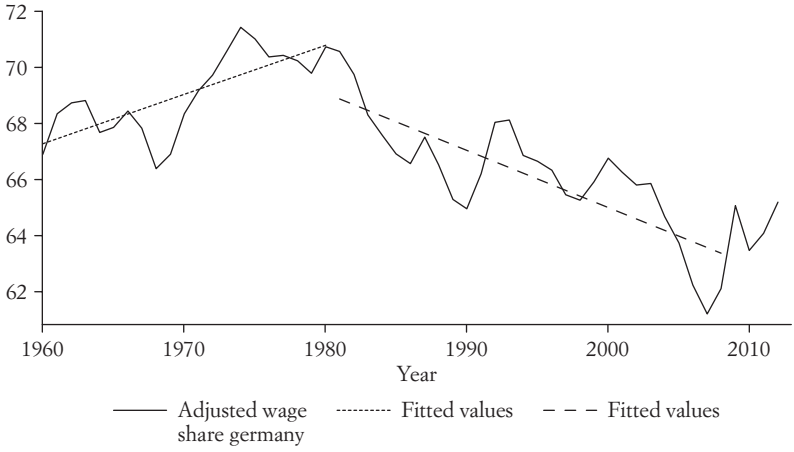

FIG. 3. Trajectory of the wage share.
Source: AMECO Database.

incorporated into the final phases of production. According to data reported in Stockhammer (2011, p. 14), the import content of German exports in 2000 was 38% and had grown for 40 years. Figure 3 shows that the wage share of GDP has declined continuously for 30 years until 2008. The response to

TAB. 1. *Elasticities of various components of aggregate demand (1961-2007)*

dC/dW (1)	0.71
dC/dR (2)	0.09
dI/dπ (3)	0.59
dX/dRULC (4)	–0.31
dM/dRULC (5)	0.00

Source: Onaran and Galanis (2012).

(1) C = consumption; W = wages
(2) C = consumption; R = profits
(3) I = private investments; π = profit share (long-run coefficient from ECM equation)
(4) X = exports; RULC = real unit labor costs (≈ wage share)
(5) M = imports; RULC = real unit labor costs (≈ wage share)

the financial crisis of 2008 (labor hoarding) led to a modest increase in the wage share, but it was largely insufficient to make up for lost ground.

Hence, three trends stand out: a decline in the wage share; the compression of domestic consumption from 1990 on, and the acceleration in exports as a percentage of GDP in the same period.

To understand what these developments may imply for the German growth model, we rely on recent estimates of the sensitivity of various components of German aggregate demand to changes in the wages and profits. These estimates are from Onaran and Galanis (2012) and are based on an econometric analysis for the period between 1961 and 2007. The time series are short, and possibly for this reason no robust evidence of a structural break (i.e. a significant change in parameters over time) is found, even though Stockhammer *et al.* (2011) find a sizeable increase in the sensitivity of exports to the ratio between export prices and import prices after 1987.

The relevant estimates are reported in Table 1. They show that German consumption is heavily sensitive to wage movements, and that a decline of 1% in wages reduces consumption by close to 1% (0.71%). The impact on consumption of a reduction in profits is unsurprisingly much lower (0.09%) since profit income is characterized by a lower marginal propensity to consume. German investments seem rather sensitive to profits: they increase considerably when the profit share is higher (0.59%). However, the share of investments in GDP has been declining, and therefore the overall impact on the growth model has been declining too. Finally, exports are sensitive to movements in the wage share: a marginal increase in the

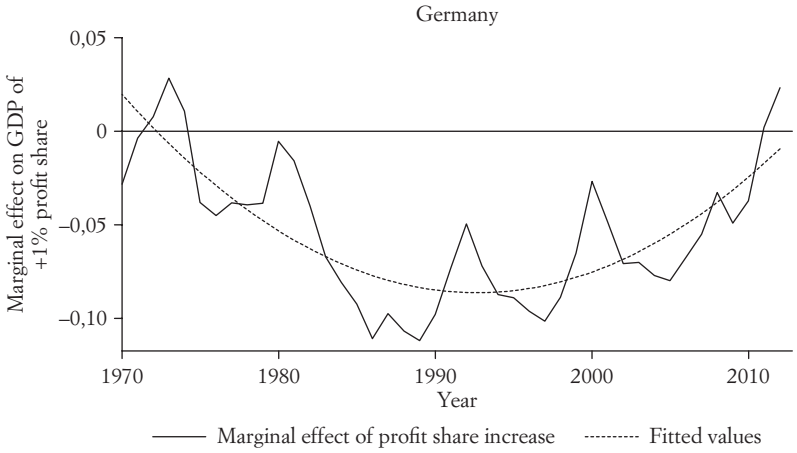

FIG. 4. Impact on GDP of a 1% increase in the profit share: Germany.
Source: see text.

wage share (decline in the profit share) reduces exports. Since exports have grown dramatically as a share of GDP, and are negatively affected by the wage share, it seems that reducing the wage share has contributed to stimulating exports, possibly through the increase in competitiveness.

In Figure 4 the elasticities reported in Table 1 are transformed into marginal effects by multiplying them by the time-varying values of consumption, investment, and exports as a share of GDP. The resulting graph shows the overall impact of a 1% increase in the profit share (1 minus the wage share). For comparison purposes, Figures 5 and 6 display the same marginal effect for two large Eurozone economies: France and Italy.

In the case of Germany the negative impact on GDP growth of a reduction in the wage share has been steadily declining from the 1990s on. In other words, Germany has been moving steadily away from a wage-led and towards a profit-led model from the early 1990s on. At the beginning of the 2010 decade the country was almost at a point of indifference between a wage-led and profit-led growth[4]. The trajectory of France and

[4] If the multiplier, i.e. long-term effects, is factored in, Germany is in 2010 exactly indifferent between wage-led and profit-led (multiplier calculations and corresponding graph not shown here).

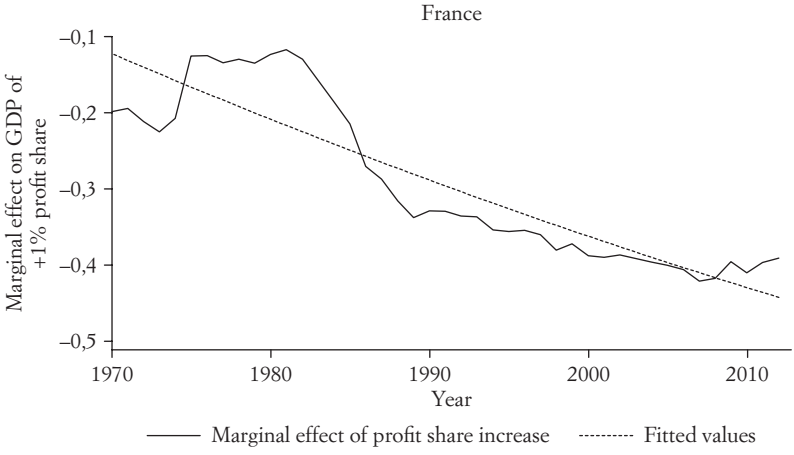

FIG. 5. Impact on GDP of a 1% increase in the profit share: France.
Source: see text.

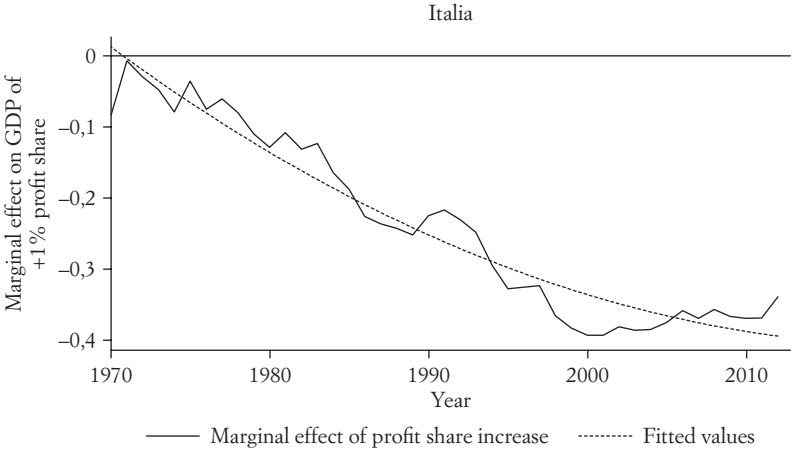

FIG. 6. Impact on GDP of a 1% increase in the profit share: Italy.
Source: see text.

Italy is instead very different and these two countries remain strongly wage-led: a reduction in the wage share depresses growth because the decline in domestic consumption prevails over the stimulation of investments and exports.

This analysis suggests that Germany is not quite a profit-led economy yet but is clearly moving in that direction. Hence policies of wage repression, which bring havoc to other large Eurozone countries such as France and Italy, do not have the same negative impact in Germany. In addition, Germany is becoming a particular type of profit-led model: investments do not play a large role any more, and the economy is pulled almost exclusively by exports.

None of the effects analyzed above reflect deep underlying economic necessities. The transformation from wage- to profit-led is at least partly a matter of distributive conflict and associated politics. The softening of industrial relations and other labor market institutions has weakened the wage-led channel, and through the effect on competitiveness, has strengthened the export-led one. We examine these developments in the next section.

3. The erosion of German industrial relations (1970-2010)

a) The German model as it once was

Traditional accounts of the German model of production emphasized the beneficial constraints of vocational training and industrial relations institutions (Streeck 1991). Since the end of the seventies German companies shifted away from mass production to the so called model of «Diversified Quality Production» (DQP), characterized by a broad variety of innovative and technologically advanced manufacturing products (Sorge and Streeck 1987). The strategy of moving upmarket, which partly relieved the competitive pressure on labor costs, was facilitated by institutional rigidities.

The German vocational training, co-financed by employers and the state, provided a large supply of skilled workers who could cope with the technologies and the complex work organization of DQP. Indeed, management and works councils collaborated to create a work organization which relied on teamwork, task rotation, and mutual trust in order to better exploit the high professionalism of the workforce (Kern and Schumann 1984; Streeck 1991).

Strong and encompassing industrial relations institutions at workplace, sectoral and national level prevented employers from

cutting labor costs. Thus employers were «nudged» to invest in technology, innovation, and training in order to maintain high productivity rates. First, high dismissal protection limited employers' casualization strategies, constituted an incentive to long-term staff planning, and was functional to the complex work organization of German firms (Streeck 1992, p. 32; Iversen and Soskice 2001). Second, sectoral bargaining prevented whipsawing by marginal firms. The high coverage rate of sectoral agreements was due both to union strength and, especially, to high employers' cohesion. In 1984 the employers' organizational density covered 74.5% of the employees (Silvia 1997, p. 193). Metal sectoral agreements covered around 80% of the workforce. Third, highly unionized works councils with codetermination rights at company level implemented sectoral agreements and bargained over additional issues such as non-wage benefits, bonuses and working time (Jürgens 1984).

Furthermore, the system of pattern bargaining ensured that the benefits of high productivity in manufacturing spread across sectors: IG Metall acted as pace-setter in the collective bargaining system and oriented its bargaining goals towards the productivity rates of the economy as a whole instead of the sectoral rates, setting a floor for the negotiations of other sectoral unions (Schulten 2001, p. 5). As a result, at the beginning of the nineties Germany had one of the lowest rates of intersectoral wage dispersion among OECD countries after Belgium and the Scandinavian countries (Hassel and Schulten 1998, p. 487). The pattern bargaining system contributed to the success and the stability of the traditional German model of production because it allowed for coordination between the negotiations of the social partners and the directives of the independent Federal Bank for an anti-inflationary wage growth (Hall 1994).

Even though the classic literature on the German model mainly focused on the supply-side of the DQP model (e.g. high skills, rigid institutions), industrial relations played an important role also on the demand-side of the economy, ensuring that mass DQP matched mass consumption. Thanks to encompassing bargaining institutions, productivity increases fed into wage increases and the purchasing power of different segments of the labor force remained approximately constant (Schulten 2004, p. 5). These institutions reveal interconnections also in their redistributive function: thanks to pattern bargaining, the

productivity of the core manufacturing sector was redistributed to low-value added sectors (e.g. services), while sectoral bargaining redistributed from workers in most productive companies to workers in less productive ones. At company-level, works councils were constrained by sectoral agreements in their bargaining freedom and made sure that these were applied to all workers in the firm along the supply chain.

b) The liberalization process

The current literature acknowledges that the German model as laid out in stylized form above no longer exists (e.g. Hassel 1999; Bispinck *et al.* 2010). However, there is still disagreement as to the extent to which this process has involved the whole German political economy, including the DQP sectors, or rather only the service sector. The deterioration of wages and working conditions in the service sector has been well-documented (Bosch and Weinkopf 2008; Doellgast 2009; Jaehrling and Méhaut 2012). Among others, Bosch and Weinkopf (2008) have illustrated the expansion of low-wage work in low-end services such as retail, catering and call centers due to eroding bargaining institutions and to the diffusion of mini-jobs and other atypical contracts. In contrast, industrial relations in core manufacturing sectors have been argued to still reflect the characteristics of the traditional German model, which are considered key to the export success of Germany, while the deregulated service periphery contributes to keep labor costs low (Palier and Thelen 2010; Hassel 2014). As the core manufacturing sectors are critical for assessing the extent of the process of liberalization, they are the focus of the remainder of this section.

We identify the start of the liberalization process with the unions' battle to reduce working time in 1983, which set in motion a decentralizing trend in collective bargaining. In a context of slow growth rates and high unemployment, unions shifted the bargaining focus from wages to qualitative issues such as work-life balance and work organization arrangements. This increased the relevance of company-level bargaining because work organization and flexible work arrangements are better regulated between works councils and management. In line with the new qualitative orientation, IG Metall demanded

a working time reduction to 35 hours a week in the 1983 bargaining round. This bargaining strategy was also meant to tackle high unemployment rates (Artus 2001, pp. 88 ss.). Employers' initial refusal was followed by a seven-week strike, until IG Metall and Gesamtmetall agreed on a working time reduction in steps, starting with 38.5 hours a week. In exchange, unions made the concession for increased bargaining room over working time flexibility at workplace through the introduction of opening clauses (French 2000, p. 203).

Even though the goal of 35 hours/week was achieved only in the Western metal and printing industry, the selective reduction of working time in establishments affected by economic downturn spread massively during the economic crisis in 1993-94 (Lehndorff 2001, p. 19). To this trend contributed also the metal collective agreement achieved in Eastern Germany in 1996, which gave companies in difficult economic conditions the opportunity to introduce opening clauses on wages and working time under the approval of a commission constituted by representatives of IG Metall and Gesamtmetall. This agreement was the outcome of the compromise reached by IG Metall and Eastern metal employers after Gesamtmetall's suspension of the staged waged agreement of 1991 (*Stufenplan*), which linked the wage rates in the East to Western rates in order to achieve wage parity by 1994 (French 2000, pp. 206-209). The hardship clauses quickly spread across sectors (Bahnmüller *et al.* 1999, p. 57) and soon became a common instrument also in Western Germany.

Indeed, in the nineties Western Germany, too, entered a period of economic recession, characterized by high unemployment rates. In those years the employers' associations – especially Gesamtmetall – gave signs of withdrawing support from sectoral bargaining institutions as their members – especially small and middle-sized companies – complained about high wage levels and demanded flexible company-level solutions (Hassel and Rehder 2001, p. 5). In order to prevent them from leaving the employers' associations altogether, the latter introduced the option for membership without applying the sectoral agreement (*Ohne Tarifbindung (OT)-Mitgliedschaften*). The metal bargaining round in 1994 was characterized by high levels of industrial conflict. It froze wages for one year and allowed works councils to bargain short-time work arrangements (up to 30 hours/week) at company level in exchange of employment security (Turner 1998, pp. 102-106).

The increased bargaining room at company-level was negotiated while works councils were already under pressure for concessions because of the credible threat of disinvestment and of high unemployment rates (Turner 1998, p. 100). Companies had started restructuring their value chain into modules, which could be carried out by suppliers both in Germany and abroad. While the value chain of big automotive firms became increasingly disintegrated and fragmented (Jürgens 2004, p. 419; Doellgast and Greer 2007), the new markets in Eastern Europe opened up new outsourcing possibilities for companies to access close and cheap production sites (Jürgens and Krzywdzinski 2006, p. 3).

Thus, opening clauses – the so called «Pacts for Employment and Competitiveness» (PECs) – were often bargained under the threat of outsourcing, and the works councils were made co-responsible for the competitiveness of the production site (Rehder 2003, pp. 113-116). According to a survey conducted among works councils in the manufacturing sector between 2003 and 2005, 44% of big companies with more than 1,000 employees threatened works councils to outsource some production segments abroad, while another 20% actually transferred part of their production abroad (Jürgens and Krzywdzinski 2010, p. 211). Differently from company-level pacts in the Eighties, PECs could amend and worsen collective agreements at sectoral level (Hassel and Rehder 2001). As a result, PECs quickly spread across sectors. They mainly included measures regarding working time, work re-organization, early retirements, and wage cuts or freezes (Seifert and Massa-Wirth 2005).

Parallel to the progressive bargaining decentralization, at the national level a tripartite consultation arena called «Alliance for Jobs» was launched in 1995 and then in 1998 with the aim of keeping unemployment under control through national policy interventions. Despite union opposition, the outcomes of both the first and second Alliance were the relaxation of employment protection for small companies, welfare state cuts, and wage moderation (Bispinck and Schulten 2000; Hassel 2001).

However, the most far-reaching regulatory changes were introduced through unilateral national-level policy interventions, and particularly through the package of labor market, tax, and welfare reforms known as *Agenda 2010*. Agenda 2010, adopted by the Red-Green government in 2003, was mainly based on the proposals of the so-called «Hartz Commission»,

which aimed to halve the unemployment rate over three years by reforming the active and passive labor market policies and by deregulating the labor market (Menz 2005, p. 204). The Hartz reforms came into force between 2003 and 2005.

Hartz I and II deregulated the use of atypical work. Hartz I lifted the limitations to the use of agency work, which dramatically increased also in the core manufacturing sectors (Benassi and Dorigatti 2014). Companies could hire on agency contracts without specifying the reason for the fixed-term and without offering any guaranty of a permanent job afterwards. Dismissal protection was lowered as agencies could employ workers on contracts of the same duration as their assignment at the hiring company. The equal pay principle could be amended by collective agreement (Bundesagentur für Arbeit 2011, p. 5). Due to unforeseen competition with the Christian unions, the DGB bargaining body could sign a collective agreement setting low wage standards (Vitols 2008). Hartz II created employment contracts with lower social security contributions and tax rates. These so called «mini-jobs» and «midi-jobs» can generate respectively an income of maximum 400€ and 800€ a month. The reform lifted the limitation of 15 hours/week which used to apply to marginal employment, offering employers an exit option from the collective agreements (Weinkopf 2009, p. 13). Hartz IV, which reformed the system of social and unemployment benefits, shortened the length and the amount of unemployment subsidies and tightened the eligibility criteria for unemployment assistance. Furthermore, the criteria defining the acceptability of a job were changed, pushing workers in low-end labor market segments to accept any job position (Hassel and Schiller 2010, pp. 26-34).

In synthesis, German industrial relations have been undergoing a process of erosion and decentralization since the Eighties, which has affected the coordination between sectoral and company-level agreements and prevented the redistribution of productivity gains across companies and sectors. At the national level the Alliance for Jobs and the Hartz reforms have favored the expansion of flexible low-wage jobs, further contributing to the segmentation of the workforce. As a result, the German model has considerably changed from the traditional *Modell Deutschland* of the Eighties, as the following section illustrates.

FIG. 7. Trends in real wages (high-end manufacturing and low-end services) and labor productivity (total economy) (1991-2007).

Source: Table from Baccaro and Benassi (2014), EU KLEMS database.

c) Industrial relations in the new German export model

The wage trend represented in Figure 7 clearly shows the difference between services and manufacturing, but also the declining wage trend in core sectors. In low-end services, the trend of real wages in regard to productivity is declining and is increasingly divergent in respect to the trend in core manufacturing sectors. In line with the literature mentioned above on the dualization of the German economy (Palier and Thelen 2010; Hassel 2014), the figure suggests that the system of pattern bargaining has eroded and service unions do not manage anymore to follow the pace set by the German manufacturing unions. However, the figure also shows that real wages in high-end manufacturing have not kept up with labor productivity since mid-2000s either (Baccaro and Benassi 2014).

The declining trend of real wages in core manufacturing sectors is due to different reasons such as the eroding power of unions, the decline of bargaining coverage and the diffusion of atypical contracts. Union density has been declining since the post-unification membership boom, reaching the downward peak of 18.6% in 2010 (ICTWSS 2011). However,

TAB. 2. *Bargaining coverage in core manufacturing sectors and low-end service sectors*

	% plants with works councils		% sectoral bargaining agreements		% company-level agreements	
year	manufacturing	services	manufacturing	services	manufacturing	services
1995	15,3[a]	5,05	59,3	43,4	4,34	7,63
2000	10,7	7,26	47,8	40,5	2,61	2,34
2005	7,74	5,22	36,5	30,7	2,91	2,09
2010	8,74	5,91	26,2	29,4	1,53	1,97

[a] Refers to 1994.

Source: Table adapted from Baccaro and Benassi (2014), data from the IAB establishment panel.

one third of union members are still organized by IG Metall (DGB 2013). The overall employers' density – in terms of employees' coverage – in 2006 was 63% but it is lower in the metal sector (Bispinck *et al.* 2010, p. 19). In Western Germany employers' density was around 58% in 2004, and in Eastern Germany the rate was 40% lower (Silvia and Schroeder 2007: 1440). Furthermore, Gesamtmetall reports that 2,400 companies out of the 6,300 Gesamtmetall members have an *OT-Mitgliedschaft* – that is, they do not apply any collective agreements (Gesamtmetall 2013).

The decline of associational membership is reflected in the eroding bargaining coverage. Table 2 reports the bargaining and works councils' coverage rates of establishments in core manufacturing sectors[5] and in low-end services[6] based on the establishment panel of the Institute for Employment Research (IAB). It shows that the collective bargaining coverage of establishments has declined from almost 60% in 1995 to 26% in 2010 in manufacturing sectors, while in services it dropped from 43% to almost 30%. In both industries, the coverage rate of company-level agreements decreased until 1.5% (manufacturing) and almost 2% (services). In addition, the establishment coverage of works councils in manufacturing has almost halved between 1995 and 2010, dropping from 15.3% to 8.7%.

[5] Automotive, chemical, electrical engineering, machine tool building, metal processing, precision mechanics and ship and plane building.

[6] Hotel and catering, retail, waste disposal and the category «other services».

Furthermore, the already low percentage of establishments covered by collective agreements makes extensive use of opening clauses, especially in export manufacturing sectors which are subject to competition. According data reported in Baccaro and Benassi 2014, in the years 2005 and 2007 50% of the manufacturing plants covered by collective agreements made use of opening clauses, which concerned working time issues (between 70 and 80%) and wage issues (between 24 and 38%).[7]

Another «exit option» from collective agreement and company-level bargaining is the use of subcontractors and atypical contracts. Subcontractors are often poorly organized and not covered by collective agreements, and their use for logistics, catering, maintenance and even for production modules has been found common in the manufacturing sector (Doellgast and Greer 2007; Helfen 2011). Also agency workers, who are generally not covered by sectoral agreements (at least not at the beginning of their employment), have been increasingly employed in the manufacturing sector (Benassi and Dorigatti 2014). The IAB data collected by Baccaro and Benassi (2014) show that in 1996 45% of companies in core manufacturing sectors employed, on average, 2% of their workforce on agency contracts. Before the crisis in 2008 over 90% of the companies employed agency workers, which constituted on average 8% of the company workforce. Mini-jobs have also been constantly increasing in the German labor market since beginning 2000s and are particularly common in the service sector where 5.77 Million mini-jobbers are employed – compared to 1 Million in manufacturing (Weinkopf 2011).

These changes in the arena of industrial relations and of the labor market have contributed to increasing inequality in Germany. Indeed, according to the OECD report on income inequality published in 2008, Germany is the country where inequality and poverty have been growing faster within the OECD since 2000 (OECD 2008). The tables below report some data regarding these trends, showing that Germany has progressively got closer to inequality levels typical of liberal market economies such as the United Kingdom. Figure 8 shows the development from the 1990 to 2010 of the P50/

[7] Data from the IAB establishment panel.

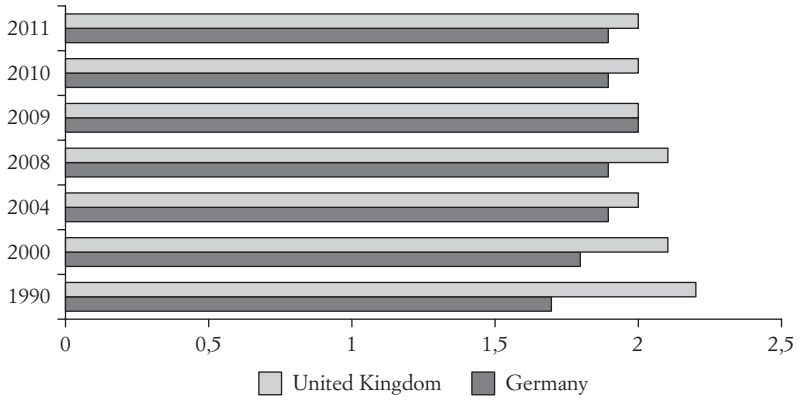

FIG. 8. P50/P10 Disposable income decile ratio (1990-2010) Source: OECD Database on Income Distribution and Poverty.

Source: OECD Database on Income Distribution and Poverty. Yearly data not always available for both countries.

P10 ratio, which is the ratio of median income to the upper bound value of the first decile of the income distribution. The difference between Germany and the UK is clearly visible in 1990 but it decreases until the ratios reach the same level in 2009. The Gini coefficient (calculated before taxes and transfers) presents a similar trend in Germany, growing from 0.43 in 1990 to 0.51 in 2011 (OECD 2014). Together with growing inequality, the relative poverty rate in Germany, measured through the rate of population below the poverty line (50% of median income), has been progressively increasing between 1990 and 2009 (with a slight drop in 2010-2011), while it has been declining in the UK since the end of the nineties (see Figure 9).

To summarize, the redistributive mechanisms which characterized the German model have been negatively affected by the liberalization of industrial relations. Sectoral bargaining institutions have become less encompassing, and low bargaining coverage and the opening clauses impair inter-sectoral (and intra-sectoral) redistribution. Furthermore, works councils have found it increasingly difficult to enforce collective agreements because of the diffusion of opening clauses and of the increase of agency work and subcontractors. These trends are visible even in core manufacturing sectors, showing that the

FIG. 9. Poverty rate after taxes and transfers, poverty line 50% (1990-2010).

Source: OECD Database on Income Distribution and Poverty. Yearly data not always available for both countries.

liberalization of industrial relations has reached the core of the German political economy.

Overall, the facts and figures presented in this section seem to corroborate the argument that the erosion of the social forces and institutions (primarily trade unions and sectoral collective bargaining) which once stimulated the demand side of the economy by transferring productivity increases into domestic consumption has contributed to weakening the wage-led engine and to moving the Germany economy towards an exclusively export-led model. The increasing reliance on exports, in turn, has put further pressure on industrial relations actors and institutions by making considerations of external competitiveness and cost containment a matter of national interest for the country as a whole.

4. Concluding remarks

In this paper we have argued that the German political economy is undergoing a fundamental transformation from wage-led to profit-led, and specifically: export-led. In an export-led economy policies that compress the wage share have beneficial consequences for economic growth because the stimulation of

exports prevails over the repression of consumption and domestic demand, while the opposite happens in a wage-led economy.

We have also argued that the weakening of industrial relations institutions has played a key role in this transformation and there is a relationship of coevolution between macroeconomic developments and industrial relations institutions. The liberal transformation of industrial relations has facilitated the pursuit of an economic strategy based on external competitiveness and cost-cutting while the decline of household consumption has contributed to lock-in the export-led model. The new German model of industrial relations is very different from the one of the golden age: real wages are increasingly decoupled from productivity increases in all sectors, especially in the service periphery but recently also in the manufacturing core, and with a coverage rate of less than 25% of establishments in manufacturing, collective employment relations seem to have become more the exception than the rule in Germany.

These developments have allowed the German economy to rekindle its process of economic growth in the last few years after a prolonged period of stagnation but at the prize of a serious deterioration in distributive outcomes and social cohesion. Poverty and low-end inequality have risen to levels once unheard of for a supposedly coordinated market economy. We would argue that the process of export-led growth is not on solid ground, as it depends on demand being thriving elsewhere. In 2012 37% of German exports were purchased by Eurozone countries, which were by far the largest destination market. As these and other countries are now in recession as a result of multi-year austerity, the German economy is negatively affected as well. Far from being a model for other countries, the German economic strategy is viable only if it remains an exception and other countries do not follow suit example. As Bhaduri and Marglin reminded us (1990, p. 388), a strategy of export-led growth becomes a logical impossibility (and contributes to global stagnation) if all countries pursue it simultaneously.

Interesting analytical perspectives open up for comparative political economy (CPE) by entering into a dialog with heterodox macroeconomics. The main theoretical frameworks of CPE have been elaborated in the 1980s, an era of crisis for Keynesian macroeconomics and policy-making. Similar to mainstream NAIRU macroeconomics, these frameworks focus on the supply-side characteristics of an economy – general *vs.*

industry-specific skills, production regimes, incremental *vs*. radical innovation, etc. – and generally ignore macroeconomic factors.

This paper has shown that bringing in shifts in demand regimes and trends in the functional income distribution between labor and capital contributes to explaining important political economic developments such as the trajectory of the German industrial relations system. To be sure, the distinction between wage-led and profit-led is too coarse to do justice to cross-country variation among advanced countries. Nonetheless, relative to the available theoretical frameworks in CPEs, a hybrid theoretical approach that integrates themes from heterodox macroeconomics with the traditional CPE analysis of actors and institutions has the distinct advantage of providing clear analytic tools to link international and domestic factors. The parameters determining whether an economy is wage-led or profit-led change with the degree of openness of an economy. Globalization makes it more difficult to sustain a wage-led regime because it renders investments more sensitive to movements in international rates of return on capital and exports more important for total aggregate demand and possibly more sensitive to price differences. With such a hybrid framework it becomes easier to explain not just how and why advanced countries are different from one another – something CPE has traditionally excelled in – but also why they are, despite all differences, moving in the same direction.

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Softening industrial relations institutions, hardening growth model: The transformation of the German political economy

Summary: In contrast with recent literature which sees the German model as either a fundamentally resilient model of coordinated capitalism, or as undergoing liberalization only in the peripheral service sectors but not in the core manufacturing ones, in this paper we make two arguments. First, we argue that a fundamental change is taking place in the German growth model, which is drifting away from the typical wage-led growth pattern of other large Eurozone economies and moving towards exclusively export-led growth. Second, we document a liberalizing trend in German industrial relations institutions in both the manufacturing sectors and in the service sectors, and argue that it stands in a relationship of coevolution with the growth model shift: the liberal erosion of industrial relations institutions has facilitated the pursuit of an economic strategy based on external competitiveness and cost-cutting, while the decline of household consumption as a driver of growth has contributed to lock-in the export-led model and to generate further pressure for industrial relations liberalization.

JEL Classification: ???