Rethinking Comparative Political Economy: The Growth Model Perspective

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Rethinking Comparative Political Economy:

The Growth Model Perspective

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Abstract

This paper develops an analytical approach to comparative political economy that focuses on the relative importance of different components of aggregate demand—in the first instance, exports and household consumption—and dynamic relations among the “demand drivers” of growth. We illustrate this approach by comparing patterns of economic growth in Germany, Italy, Sweden and the UK over the period 1994-2007. Our discussion emphasizes that export-led growth and consumption-led growth have different implications for distributive conflict.

Keywords

Comparative Political Economy, Growth Models, Post-Keynesian Economics,

Varieties of Capitalism, Europe

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The comparative study of advanced capitalist political economies—comparative political economy or “CPE” for short—has a long and distinguished pedigree, going back to Andrew Shonfield’s *Modern Capitalism*.1 Despite many disagreements, contributors to this field of inquiry have emphasized institutional differences between countries and the way that such differences have refracted political and economic responses common economic shocks or opportunities. In the wake of the financial crisis of 2007-08 and the Great Recession of 2008-09, this broadly shared consensus seems to have fallen apart. Faced with new theoretical and empirical challenges—for example, growing earnings inequality, the rise of finance and household debt, and the interdependence of Eurozone member states—CPE scholars have split into two camps: on one side, those who emphasize the common, socially-regressive, trajectory of capitalism from the 1970s onwards and, on the other side, those who continue to underscore the resilience of national models or, in other words, cross-national diversity.

Seeking to transcend this glass-half-full-or-empty debate, we present an analytical framework that addresses commonalities as well as differences in the trajectories of advanced capitalist economies. Our main theoretical innovation is to return to Keynesian and Kaleckian insights neglected by CPE scholars. Borrowing from Post-Keynesian economics, we emphasize the demand-side of the economy and place the distribution of income, among households and between labor and capital, at the center of our analysis. We focus, in this paper, on cross-national diversity, but in contrast to the varieties-of-capitalism (VofC) literature inspired by Peter Hall and David Soskice,2 we do not conceive this diversity in terms of institutional equilibria that predate the crisis of Fordism in the 1970s. Our analytical framework identifies multiple growth models based on the relative importance of different components of aggregate
demand—in the first instance, household consumption and exports—and relations among
components of aggregate demand. Our “growth models” are more numerous and more
unstable than Hall and Soskice’s “varieties of capitalism.”

Empirically, we illustrate our approach with data for Germany, Italy, Sweden and the UK
over the pre-crisis period 1994-2007. In all four countries, the Fordist model of wage-led
growth ground to a halt as the institutional channels whereby productivity growth fed into
household consumption and investment—most obviously, collective bargaining based on strong
unions—eroded in the 1970s and 1980s. Germany, Sweden and the UK illustrate, we argue,
three different solutions to the problem of finding a replacement for the faltering “wage driver,”
while Italy is a case of persistent failure to solve this problem. Over the period 1994-2007, the
UK relied on household consumption as the main driver of economic growth, spurring
household consumption through a combination of real wage growth and the accumulation of
household debt. In marked contrast, Germany came to rely on export-led growth, repressing
wages and consumption to boost the competitiveness of the export sector. Sweden enjoyed
robust growth of both exports and household consumption. Italy, finally, experienced sluggish
growth in both domains and, hence, overall stagnation.

We argue that Sweden’s balanced growth model was made possible by the (growing)
importance of knowledge-intensive, high value-added, goods and services in the Swedish export
mix. Alongside this emphasis on the price sensitivity of exports, we seek to unpack the co-
evolution of growth patterns and inequality trends. We argue that the growth models
illustrated by Germany, Sweden and the UK represent responses to the shift of income from
labor to capital that began in the 1970s and that these growth models in turn have had
important implications for earnings inequality as well as the distribution of income between labor and capital. The expansion of low-wage employment in private services should be seen, we think, as a critical feature of the export-led growth model exemplified by Germany. Consumption-led growth in the UK as well as Sweden has generated labor-market conditions favorable to unskilled (service-sector) workers.

Two of our cases, Germany and Sweden, are consistently coded as Coordinated Market Economies, or CMEs for short, in VofC-inspired literature. The UK is, of course, conventionally considered to be an arch-typical Liberal Market Economy (LME) while Italy is typically assigned to the residual category of Mixed Market Economies (MMEs). The cases included in our analysis were selected to illustrate the diversity of post-Fordist trajectories among CMEs and similarities that cut across conventional CPE categories, but not to test specific causal hypotheses. We do not claim that our comparative analysis controls for competing explanations, nor do we claim that Germany, Sweden and the UK represent all possible growth models in the post-Fordist era. In our view, the CPE literature to date has been far too preoccupied with building typologies and classifying countries. The purpose of empirical analysis in this paper is not to defend a particular typology, but rather to illustrate our approach to comparative political economy.

The rest of the paper is divided into three parts. The first part engages in a critical review of existing literature and sketches our approach. The second part compares the growth experiences of Germany, Italy, Sweden and the UK over the period 1994-2007, illustrating and developing further the analytical framework set out in the first part. The third part concludes by identifying issues for future theorizing and empirical research.
Theoretical Discussion

We begin by briefly discussing the evolution of comparative political economy since the late 1970s and some limitations of the CPE tradition. Our critical discussion focuses on the VofC approach, the dominant paradigm of the last twenty years, but its main points pertain more broadly. In due course, we will introduce Post-Keynesian macroeconomics in the Kaleckian tradition and, against this background, present our conceptual approach to post-Fordist growth models.

Comparative Political Economy

As a field of inquiry spanning sociology and political science, comparative political economy emerged in response to the economic crisis of the 1970s. Early contributions to this new field sought to explain divergent government responses to the oil price shocks and the new phenomenon of “stagflation.” More broadly, CPE pioneers sought to map out how national economies were adjusting to changes in world markets and production technologies and to explain these adjustment strategies in terms of political institutions and producer-group coalitions.

While much of the early CPE literature focused either on the role of the state or the role of organized labor in the political economy, the “VofC approach” developed by Hall and Soskice in the 1990s placed firms and business networks center-stage. For Hall and Soskice, the first question that comparative political economists ought to ask is whether or not firms have the capacity to engage in strategic coordination and thereby overcome a wide range of collective-action problems. At the same time, Hall and Soskice synthesized key insights of previous CPE
scholarship and recast these insights in the analytical language of the economics of organization, conceiving “varieties of capitalism” as institutional equilibria from which rational actors do not have any incentive to deviate.5

Distinguishing between liberal and coordinated market economies, LMEs and CMEs, VofC scholars have insisted on the internal coherence of each type of capitalism and argued forcefully against the idea that liberal market economies are inherently more efficient or competitive. More or less explicitly, the VofC literature has, until recently, celebrated Germany’s coordinated market economy as a “worker-friendly” and egalitarian alternative to the neo-liberal model of stock-market capitalism. Most distinctively, VofC scholars have consistently argued that globalization, far from being a source of convergence between LMEs and CMEs, has served to accentuate the differences between these models of capitalism, with firms and governments seeking to gain (or maintain) competitiveness based on the distinctive comparative advantages bestowed by each model.6

In our view, the extent to which the CPE literature of the 1980s and 1990 was influenced by the anti-Keynesian revolution in economics has not been adequately appreciated. Assuming that governments could do little to affect rates of unemployment and growth by boosting aggregate demand, comparative political economists instead focused on the role of “supply-side institutions”—corporate finance systems, industrial relations regimes, vocational training systems and the like—in determining the sustainable (“non-inflation-accelerating”) rate of unemployment. The title of an edited volume published in 1991, Beyond Keynesianism, aptly captures this orientation. In his seminal contribution to that volume, Wolfgang Streeck argued that the German industrial relations system prevented German employers from responding to
intensified competition by cutting costs and, at the same time, allowed them to compete based on continuous improvements in labor productivity and product quality.⁷

Soskice incorporated Streeck’s argument about institutional supports for Diversified Quality Production (DQP) into his theory about comparative institutional advantage and capacities for innovation, but with a distinct twist. In Soskice’s formulation, German business (owners and managers) have a “pre-strategic” preference for preserving the institutions of coordinated capitalism, independent of unions’ or governments’ countervailing power, and this accounts for the resilience of the German model in the face of globalization and declining union power.⁸

The hegemonic role of the VofC paradigm should not be exaggerated. Critical commentaries and empirical studies challenging specific VofC propositions abound, but they do not add up to a coherent alternative framework or research agenda. Most importantly for our purposes, the VofC-critical literature focuses on the problem of explaining common trends among advanced capitalist political economies, typically conceived in terms of “liberalization.”⁹ The critics of VofC—ourselves included—have failed to generate alternative analytical categories for grappling with the core problématique of comparative political economy: the (national) diversity of capitalism.

Trends in earnings inequality illustrate the pertinence of this challenge. Earnings inequality has long featured as an important concern of comparative political economists. The conventional wisdom of the CPE literature holds that market forces, associated with technological change and globalization, have been a source of rising earnings inequality in OECD countries, but institutional arrangements characteristic of coordinated market economies have
muted or deflected these pressures. By and large, the existing literature conceives rising earnings inequality as an LME-specific phenomenon.\textsuperscript{10}

With LMEs shaded for illustrative purposes, Table 1 reports changes in earnings inequality, measured by the 90-10 ratio among full-time employees, over two time periods: 1975-95 and 1995-2011. Country trajectories over the first period conform closely to conventional CPE wisdom. The four LMEs for which we have data all experienced significant increases in the 90-10 ratio. Earnings inequality also increased in Italy and Sweden over the period 1975-95, but much less, and in most CMEs (or “non-LMEs”) it either held steady or declined. Turning to the more recent period, however, we no longer observe the same correspondence between varieties of capitalism and trends in earnings inequality. The US and Australia stand out as the two countries in which earnings inequality increased most sharply in this period, but a number of core CME countries, including Germany, have experienced more growth of earnings inequality than New Zealand, Canada and the UK, and Ireland stands out as one of the countries in which earnings inequality declined from 1995 to 2010.\textsuperscript{11}

[Table 1]

Table 1 clearly shows that earnings inequality has become a more pervasive, OECD-wide phenomenon and that CMEs have, on average, tended to catch up with LMEs. In our view, however, the variation in inequality growth among erstwhile “CMEs,” and also among erstwhile “LMEs,” over the last couple of decades poses a more interesting puzzle, inviting us to develop new analytical categories and perhaps leave behind the distinction between LMEs and CMEs altogether.
Brought to the fore by economic sociologists and heterodox economists rather than by CPE scholars, the topic of financialization illustrates the same basic point, at least if “financialization” is understood to entail rising household indebtedness. As documented by Lucy Barnes, there is no discernable difference between LMEs and CMEs, as conventionally coded, with respect to either levels of household debt or increases in household debt since 1995 and cross-national diversity with respect to rising household indebtedness cuts across the LME/CME divide.

In seeking to explain why inequality has grown in some CMEs, CPE scholars have emphasized dualizing institutional reforms and a growing divide between labor-market “insiders” and “outsiders.” Kathleen Thelen’s recent reformulation of the VofC framework distinguishes two different CME trajectories: “dualization” exemplified by Germany and “embedded flexibilization” exemplified by Sweden and Denmark. In our view, labor-market dualization is indeed a prominent feature of the German experience since 1990, but it should be seen as part of a larger transformation of the German political economy, involving a fundamental change in the relationship between domestic consumption and export competitiveness.

Like many other CPE scholars, Thelen treats deindustrialization as the main driver of institutional and political change in advanced capitalist political economies. By contrast, our approach assigns a key role to exports of services and manufactured goods and to the entrenchment of export-led growth at the expense of consumption-led growth. It is true, as Thelen notes, that manufacturing today accounts for less than 20% of employment in most, if not all, OECD countries. Relative to GDP, however, the size of the export sector has grown in
most OECD countries. In some countries, notably Germany, manufactured goods remain the main source of export earnings while in others, including Sweden and the UK, exports of services have become increasingly important. In both sets of countries, exports are more important to economic prosperity now than they were in the 1970s.

Our emphasis on exports and competitiveness represents a return to core themes of the CPE literature of the 1980s and the 1990s, but we depart from that literature in two crucial respects. Borrowing from Post-Keynesian economics in the tradition of Michal Kalecki, we treat distributive struggles as a key factor in the evolution of growth models. Secondly, and relatedly, we seek to break with the strong emphasis on supply-side institutions in the CPE literature and to bring macroeconomic dynamics to the fore.

We do not wish to imply that macroeconomics have been entirely absent from the CPE tradition. Some important contributions to the CPE literature have been centrally concerned with macroeconomic outcomes.17 It should also be noted that Soskice, the founder of the VofC school and himself a distinguished macroeconomist, has pleaded for “bringing macroeconomics back into CPE” for some time.18 However, we draw on Post-Keynesian and neo-Kaleckian macroeconomics rather than on New Keynesian macroeconomics. It is fair to say, we think, that the questions we address in this paper – how distributional shifts affect growth models and the role and interaction of different components of aggregate demand – have not featured prominently in the CPE literature to date.
**Neo-Kaleckian Macroeconomics**

For macroeconomists inspired by Kalecki, power and distributive conflict are critical for understanding macroeconomic relationships and outcomes (while rational expectations and inter-temporal optimization, so prominently featured in mainstream macroeconomics, are second-order concerns). *Prima facie*, this establishes an elective affinity with CPE scholarship.

Like Keynes, Kalecki was convinced that full employment could be achieved by stimulating demand. Unlike Keynes, he expected full-employment policies to be opposed by a coalition of capitalists and *rentiers*—the former motivated by concerns about labor’s bargaining power, the latter about the real value of financial assets.¹⁹ Most importantly for our purposes, Kalecki emphasized the connection between distribution and aggregate demand, stressing that low-income households have a higher propensity to consume than high-income households. In his most important wartime essay, he identified three ways to stimulate aggregate demand—deficit spending by government, stimulation of private investment through lower interest rates or targeted tax breaks, and redistribution of income from the rich to the poor—and argued in favor of redistribution as a reliable means to achieve and maintain full employment, while recognizing that it was also the most politically contentious option.²⁰

For Kalecki there was essentially but one path to growth or, in other words, one “growth model,” based on consumer demand stimulated by real wage growth, deficit spending and/or redistribution of income. Starting with Amit Bhaduri and Stephen Marglin’s seminal 1990 essay,²¹ macroeconomists building on Kalecki’s insights have proposed an alternative growth model based on rising profits.
For introductory purposes, the key question motivating the New Kaleckian approach to macroeconomics can be formulated as follows: How does an increase in the wage share affect aggregate demand and GDP? Tantamount to a decrease in the profit share, an increase in the wage share means that real wages increase while labor productivity remains constant. As wages and profits affect consumption, investment, exports, and imports in different ways depending on the context, the net effect of an increase in the wage share is a priori indeterminate. If the net effect is positive, the underlying growth model is said to be “wage-led”; if it is negative, it is said to be “profit-led.” Figure 1 provides a stylized representation of macroeconomic relationships in the Neo-Kaleckian model.

[Figure 1]

An increase in the wage share should lead to higher consumption and allow firms to increase capacity utilization provided that two assumptions hold. The first assumption is that the propensity to consume varies negatively with income, such that rich individuals (or households) consume less and save more than poor individuals. If there is no difference in consumption and saving propensities between labor and profit income, then the impact of an increase in the wage share on consumption is neutral. The second assumption is that there is spare capacity in the economy such that firms respond to an increase in demand by increasing output rather than prices. Writing during the Depression and in its immediate aftermath, Keynes and Kalecki both took this assumption for granted. If the spare capacity assumption does not hold, however, increased demand for consumption goods simply generates higher inflation.
Holding labor productivity constant, an increase in the wage rate equals a decrease in the profit rate. Assuming that capital accumulation depends positively on expected profits, the level of investment should decline with a distributional shift in favor of labor. At the same time, investment grows when aggregate demand increases. Thus the overall impact of a wage-share increase on investment depends on whether the negative profitability effect or the positive consumption effect dominates. In the latter case, the wage-share increase will produce both higher consumption and higher capital accumulation. In the former case, there will be higher consumption but lower investments, i.e., a short-term increase in the growth rate but a decline in the long-run growth rate.

A wage-share increase can also be expected to have a negative effect on the trade balance. All other things being equal, it increases domestic prices relative to foreign prices and thus leads to real exchange rate appreciation (unless the nominal exchange rate adjusts in the opposite direction). This should render exports more expensive while making imports cheaper. To the extent that imports are a positive function of domestic demand, they would be further stimulated by the increase in consumption and investment in a wage-led model. The size of net trade effects depends on the price elasticities of exports and imports and on the income elasticity of imports.

In short, a wage-share increase will boost aggregate consumption, possibly boost investment as well, but it will most likely lead to a deterioration of the current account balance. If this latter effect is small, the demand regime is wage-led. But if the wage-share increase has negative effects on net trade and/or investment and the consumption boost is not sufficiently large, the demand regime is profit-led. Even for wage-led economies, it is important to keep
goods and tradable services competitive and to reduce the income sensitivity of imports in order to increase the balance-of-payments-compatible growth rate. A current account deficit implies that there is dissaving somewhere in the economy (households, corporations or the public sector). At some point, such dissaving has to be corrected by reducing consumption, which in turn implies cutting output and employment.

The standard Neo-Kaleckian argument focuses on the effects of changes in the functional distribution of income between labor and capital. Based on the assumption that poorer individuals (households) consume more of the income than more affluent individuals (households), the underlying logic suggests the personal distribution of income (the distribution of wage income among wage-earners) also matters to the macro-economic relationships discussed above. Suppose that real wages increase while productivity remains constant, but all of this increase accrues to corporate managers and investment bankers. In this case, the increase in the wage share will likely have a negligible impact on aggregate consumption. Simply put, the impact of an increase (decrease) in the wage share depends not only on the growth model in place, but also on the distribution of the increase (decrease) in the wage share.

As noted by Lavoie and Stockhammer, the profit-led growth model, as conceived by Neo-Kaleckian macroeconomists, conforms to the logic of “trickle-down economics.” In trickle-down growth, policies that increase unit profits at the expense of unit wages have positive effects for the economy as a whole because they encourage investments and entrepreneurship, stimulating demand for products and for labor, and ultimately increasing the size of the pie to the benefit of everyone. The Neo-Kaleckian literature acknowledges trickle-down as a possible growth model, but challenges the idea that this is the only viable growth model, in much the
same way that the VofC literature challenges the idea that LMEs are inherently superior to CMEs. In the postwar era, all large advanced capitalist economies were “wage-led” in the sense that a rising wage share was positively associated with GDP growth.²⁸

*Post-Fordist Growth Models*

The New Kaleckian approach sketched above resonates with core ideas of the French Regulation School.²⁹ More so than New-Kaleckian macroeconomists, “regulationists” have emphasized that the rapid and remarkably stable growth characteristic of the 1950s and the 1960s was made possible by a set of institutional arrangements—in the first instance, collective bargaining and unemployment insurance—that boosted labor’s bargaining power and served to ensure that wage growth kept pace with productivity growth, thus feeding aggregate demand. As indicated above, much of the CPE literature has also been informed by the idea of a postwar settlement, loosely conceived as “Fordist,” coming undone from the 1970s onwards. However, CPE scholars have been strikingly oblivious to the distribution of income between labor and capital and to the ways in which inequality has shaped patterns of post-Fordist growth.³⁰

Measured as the share of nominal labor compensation in GDP at market values, the wage share peaked some time in the 1970s in virtually all OECD countries. The timing of the trend reversal and the extent to which the wage share has declined since 1980 vary across countries, but the broad OECD-wide pattern is quite striking. Indeed, the shift in income from labor to capital in the past 30 years would appear to be at least as pervasive and dramatic as the OECD-wide increase of household income inequality since 1990.³¹
Based on AMECO data, which adjust for self-employment, Figure 2 shows the evolution of the wage share from 1960 onwards in the four countries that will serve as illustrative cases in the empirical part of this paper. Consistent with OECD-wide trends, the trend is negative in all four countries. One striking feature of Figure 2 is that the wage share has held up better in the UK than in the other countries, all characterized by more coordinated systems of wage bargaining and by less dramatic declines of union membership. In Sweden, the wage share fell sharply in the wake of the economic crisis of the late 1970s and the devaluation of 1981, but has remained relatively stable, fluctuating between 66% and 69%, from the mid-1980s onwards. In marked contrast, the decline of the wage share continued through the 1990s and early 2000s in Germany and Italy.

To the extent that OECD economies have remained wage-led, the decline of the wage share (and the rise of inequality among wage-earners) implies a slowing down of growth. It seems reasonable to suppose, however, that economic stagnation generates pressure for policy innovations and institutional reforms that might trigger a change of growth model. From this perspective, the questions that need to be asked are the following: How have advanced capitalist political economies addressed the problem of finding a replacement for wage-driven growth? Have they all followed the same path? Have some countries been more successful than others in transitioning to another growth model?

Shifting to an alternative growth model involves a change in the importance of household consumption relative to other components of aggregate demand and/or a shift towards consumption financed by other means. In a national accounting sense, the other
potential “demand drivers” of growth are investment, government expenditures, and net
exports, i.e. exports minus imports. Note that investment might be either public or private. As
for the question of how household consumption is financed, there are, in principle, two
alternatives to wage growth: credit and redistributive government transfers.

It is commonplace to observe that household indebtedness increased sharply in the US,
the UK and a number of other advanced capitalist countries over one or two decades preceding
the onset of the crisis. It is also commonplace to argue that consumption-led growth financed
by credit is not a sustainable growth model over the long-run. High household consumption
tends to produce current account deficits. As noted above, countries with current account
deficits will sooner or later be forced to rebalance by exchange rate devaluation or internal
devaluation, but global financial flows have arguably relaxed this constraint, at least for some
countries, notably the US. As all growth models are fundamentally precarious, it makes sense,
we think, to think of credit-financed consumption as an alternative form of consumption-led
growth. In contrast to the Fordist model, the credit-financed consumption-led model
presupposes the existence of a large financial sector.

Some heterodox economists use “financialization” as an umbrella term for institutional
or regulatory changes that have moved advanced capitalist economies onto a profit-led growth
path. The core idea here is that cross-border capital mobility and deregulation of financial
systems have opened up a wide range of new investment opportunities for wealthy individuals
and thereby rendered investment more sensitive to profitability. Other heterodox economists
have pointed to exports as the primary channel whereby profitability has become increasingly
important to economic growth in the post-Fordist era.
Conceptually, we propose to distinguish three different alternatives to the traditional Fordist model of wage-led growth: consumption-led growth financed by credit, investment-led growth and export-led growth. As indicated above, “state-led growth” represents another conceivable growth model. In such a model, government consumption and investment would be the primary drivers of economic growth and the rate of investment would not be determined by the profit share. While there can no doubt that government spending contributes to aggregate demand, we cannot think of any country in which it can be said to have been the main driver of economic growth in the post-Fordist era. Similarly, the empirical relevance of the private-investment-led growth model, in its pure form, strikes us as dubious as far as the advanced capitalist political economies are concerned. The rate of investment has surely become more profit-sensitive since the 1970s, but investment (in physical capital) is simply not sufficiently important to drive the growth of these economies. (The investment-led model may be more appropriately applied to the experience of China and other countries engaged in “primitive accumulation”).

To simplify matters, the following discussion of empirical cases will focus on the relative importance of consumption and exports and the relationship between these potential demand drivers of economic growth. We argue that the UK prior to the onset of the crisis is a case of consumption-led growth supported by the inflow of financial capital from abroad. Importantly, the evidence presented below shows that household consumption was financed not only by credit, but also by rising real wages. In contrast to the UK, exports contributed significantly to the economic growth of both Germany and Sweden over the period 1994-2007. However, the experiences of these two countries diverge significantly with respect to the role of household
consumption in the growth process, calling into question the way that some of the Neo-Kaleckian literature conflates export-led growth with profit-led growth. From the late 1990s onwards, Germany appears to be a straightforward case of an export-led economy, relying on repression of wages and household consumption to grow or, in other words, the mirror image of the British economy. By contrast, Sweden in this period represents a hybrid growth model, combining robust consumption growth with export growth—resembling the UK more than Germany in some respects.

Whether or not export-led growth presupposes repression of domestic consumption hinges, we argue, on the price sensitivity of a country’s exports (be they goods or services). Our empirical discussion underscores this point and illustrates the need to distinguish between different types of export-led growth. By including Italy as a case, we also want to stress that there is nothing inevitable about countries finding substitutes for the Fordist wage driver. The Italian case illustrates, in our view, that persistent stagnation is always an option.

**Empirical Cases and Comparative Analysis**

The empirics presented in this part are organized as follows. First, we show that Germany, Italy, Sweden, and the UK relied on different combinations of exports and consumption as drivers of GDP growth in the period 1994-2007. Second, we discuss the way in which household consumption is financed and present data suggesting that debt financing as well as real-wage growth fuelled household consumption in both Sweden and the UK. Third, we explore the co-evolution between growth models and the structure of earnings inequality.
The Role of Exports and Domestic Consumption in Economic Growth

Table 2 reports on average annual growth of GDP, exports and household consumption for our four cases over the period 1994-2007. The recession of the early 2000s notwithstanding, 1994-2007 represents the longest period of sustained growth in the OECD area since the onset of the international recession of 1974-75. While Sweden and the UK both outperformed the OECD average by about half a percentage point per year, Germany and Italy both underperformed the OECD average by more than one percentage point per year.

Our main interest here concerns the relationship between growth rates for exports and household consumption. Germany stands out as the country in which exports grew the fastest and also as the country in which consumption grew the slowest. Exports grew faster than consumption in the other three countries as well, but for these countries the ratio of export growth to consumption growth was much lower than the ratio for Germany. Predictably, the UK stands out as the country in which household consumption grew at the fastest rate, nearly keeping up with the growth rate for exports. The ratio of export to consumption growth was just about the same in fast-growing Sweden and slow-growing Italy.

The significance of sector-specific growth rates for the economy as a whole obviously depends on the relative size of the sector in question. As shown in Figure 3, the Swedish economy was considerably more export-oriented than any of the other three (much larger) economies in 1994. All four economies became more export-oriented over the ensuing fourteen years, but the increase of exports relative to GDP was fastest for Germany. With the
share of exports in GDP doubling in Germany, the gap between Sweden and Germany was roughly halved from 1994 to 2007.

[Figure 3]

In Figures 4 and 5, we report the annual growth rate of net exports (exports minus imports) and household consumption, weighting each by its proportion of GDP. This provides a rough measure of the relative importance of net exports and consumption as drivers of growth. The dominant role of domestic consumption in the British economic growth emerges very clearly in these figures: while household consumption accounted for GDP growth of 2-3% per year, the contribution of net exports to GDP was consistently negative. Over the 1994-2007 period as a whole, the contribution of net exports to GDP growth was also negative for Italy. In both Italy and the UK, domestic demand was the primary driver of economic growth in this period, and more rapid growth of household consumption is the main reason why the UK economy grew at twice the rate of the Italian economy.

[Figures 4-5]

Most importantly for our present purposes, Figures 4-5 bring out a dramatic transformation of the German growth model. While the contribution of household consumption to GDP growth was much bigger than the contribution of net exports in 1994-98, the opposite holds for 2004-07. German growth became increasingly export-dependent over the period 1994-2007 and the growth of German exports appears to have occurred at the expense of household consumption. In contrast to Germany, net exports and household consumption contributed more or less equally to Swedish GDP growth over the entire period
1994-2007. Germany, but not Sweden, appears to have faced—and arguably continues to face—a trade-off between growth of exports and growth of domestic consumption.

The most obvious explanation for the existence of such a trade-off is that exports are price-sensitive. To the extent that exports are price-sensitive, growing exports requires repression of wages and consumption to prevent an appreciation of the real effective exchange rate. Table 3 reports the results of estimating simple models regressing yearly log change in exports (at constant prices) on yearly log change in the real effective exchange rate (REER) with data for 1994-2007. An increase in the REER means that domestic prices denominated in foreign currency rise relative to foreign prices denominated in foreign currency or, in other words, a loss of price competitiveness. The results indicate that export growth is negatively associated with REER increases not only for Germany, but also for Italy. For Sweden and the UK, by contrast, we do not observe any significant effect of the REER on export growth. For Germany, the elasticity is about 0.5, implying that a 1% increase in the REER leads to a 0.5% decrease in export growth.  

[Table 3]

The evidence presented here is not consistent with the conventional view of Germany’s export success as being based on high value-added, high productivity, and superior quality. “Diversified quality production” may well be an accurate characterization of the dominant trajectory of German industrial adjustment in the 1980s. However, the DQP model appears to have become exhausted in the course of the 1990s, for some combination of reasons having to do with domestic institutional changes—the removal of the “enabling constraints” identified by Streeck—and the emergence of new competitors in Germany’s export markets.
Pertaining essentially to traditional manufacturing, the DQP thesis fails to shed light on why it is that Swedish exports are apparently less price-sensitive than German exports. The emergence of the ICT sector as the new flagship of Swedish exports in the wake of the economic crisis of 1991-94 must figure prominently in any effort to address this puzzle. Critically, Sweden’s export success from the early 1990s onwards appears to have been facilitated by the expansion of university education in the 1980s rather than the supply of vocational skills associated with DQP.

As shown in Table 4, ICT and services accounted for a significantly larger percentage of total exports by Sweden and the UK than by Germany and Italy in 1996. However, Table 4 brings another, arguably more important, difference in the composition of exports between the two pairs of countries. For both Sweden and the UK, we observe a dramatic shift in the composition of exports towards services over the period 1996-2007. For Germany, services accounted for the same share of total exports in 2007 as in 1996 and, for Italy, the service share actually declined over this period. Table 5 in turn presents data on the balance of trade in products and services in 2005-07. Consistent with conventional wisdom, Germany enjoyed a huge surplus in products and a substantial deficit in services while the opposite holds for the UK. Again, Sweden emerges as a more balanced economy, with trade surpluses for both products and services.

[Tables 4-5]

For 2005-07, Table 6 reports trade balances for Germany, Sweden and the UK in all tradable services in which at least one of these countries ran a current surplus or deficit exceeding 0.1% of GDP (data missing for Italy). Not surprisingly, the UK stands out as the
exporter of financial services *par excellence*. For the purposes of this paper, the more important thing to note is that Sweden outperforms Germany and compares well with the UK in most other categories of high-end services.

[Table 6]

To summarize, the data presented above suggest that German growth in 1994-2007 was pulled by manufacturing exports and that German exports were quite sensitive to relative price differences with international competitors. Germany exemplifies a manufacturing-based, export-led growth model, which depends critically on keeping domestic costs down and hence on repressing domestic consumption. At the other end of the spectrum, the UK represents a consumption-led growth model. Exports do not constitute a large portion of British GDP and the high-end services in which the UK has a comparative advantage are not very price-sensitive. Thus consumption-led growth has not constrained the expansion of British exports.

Swedish in the period 1994-2007 can be characterized as a distinctive model in which exports and household consumption both contributed significantly to overall growth. This growth model involved—and, we believe, critically depended on—an ongoing shift towards greater reliance on exports of high-tech manufacturing and high-end services, making Swedish exports, overall, less vulnerable to price competition than German exports. Finally, Italy resembles the German case in that its exports are price-sensitive and domestic consumption grew very sluggishly from the early 1990s onwards. In contrast to Germany, however, Italian export industries failed to make sizeable gains in world-market shares. The reasons for this failure arguably have to do with Italy’s sectoral specialization in labor-intensive manufactures,
the emergence of new competitors in these industries, and the negative consequences of Eurozone membership for the ability of Italian producers to compete on the basis of price.\textsuperscript{41}

There can be little doubt that the introduction of the Euro strengthened Germany’s reliance on export-led growth over the period 1994-2007. Fixed exchange rates from 1999 onwards prevented Germany’s main European trade partners from making nominal adjustments that would have re-equilibrated real exchange rates with Germany.\textsuperscript{42} At the same time, the introduction of the Euro meant that Germany’s real exchange rate became systematically undervalued, boosting the price competitiveness of German goods in international markets. This initially stimulated German net exports inside the Eurozone and later allowed Germany to capture increased demand (especially for investment goods) coming from China and the other BRICS.\textsuperscript{43}

\textit{Household Indebtedness and Wage Growth}

It is commonplace to suppose that liberal market economies like the UK have experienced slower growth of average earnings, more rapid growth of earnings inequality, and a more dramatic shift of income from labor to capital than coordinated, export-oriented economies like Germany over the last two or three decades. At least until recently, VofC scholars and Neo-Kaleckians alike seem to have accepted this stylized depiction. The obvious question becomes, why then did the UK economy grow considerably faster than the German economy in the period leading up to the crisis of 2008-09 and, in particular, why did British household consumption grow so much more rapidly than German household consumption? The standard answer to this question holds that British household consumption was financed by credit (and therefore
unsustainable over the long run). The story is similar to the conventional account of the US experience: British governments engaged in financial deregulation to boost the international competitiveness of its financial-services industry and encouraged household indebtedness in an effort to sustain electoral support (perhaps regime legitimacy as well) in the face of slow income growth and rising inequality. While this interpretation surely contains important elements of truth, it leaves something to be desired from a comparative perspective.

Consider first the data on household debt presented in Figure 6. At the end of the 1990s, outstanding liabilities represented, on average, about 115% of the disposable income of German and British households alike. In the following seven years, the indebtedness of British households increased by more than 50%, to reach an all-time high of nearly 180% in 2007, while the indebtedness of German households actually declined. The sharp divergence of the British and German trajectories conforms to conventional wisdom, but Figure 6 also shows that the Swedish experience closely resembles the British. From 1995 to 2007, the average indebtedness of Swedish households increased from 90% to 160% of disposable income. Starting from a much lower level, Italy experienced a significant expansion of credit to households over this period as well.

Figure 7 graphs annual real growth of average hourly labor compensation and Figure 8 graphs the evolution of labor productivity for the economy as a whole. In the data on average labor compensation growth, as in the wage-share data presented in Figure 1, the mid-1990s stand out as the moment when a gap begins to open up between, on the one hand, the trajectories of the Sweden and the UK and, on the one hand, the trajectory of Germany.
Critically for our purposes, Figure 8 shows that Germany’s falling wage share cannot be attributed to high productivity growth. On an economy-wide basis, labor productivity grew at more or less the same rate in Germany, Sweden and the UK over the period 1994-2007. Figures 7-8 also serve to highlight the distinctive stagnationist tendency of the Italian economy in this period, as the growth of real wages and productivity ground to a halt in the 1990s.

Credit-financed household consumption played an important role in economic growth in both Sweden and the UK over the period 1994-2007, but the more rapid growth of household consumption in these two countries, relative to Germany and Italy, also reflected the fact that average earnings (and disposable incomes) fared much better. This suggests that consumption-led growth is more likely to boost real wages than export-led growth. We argue in the next section that this holds particularly for the wages of low-skilled workers.

**Growth Models and the Structure of Earnings Inequality**

Finally, let us briefly explore the relationship between growth models and the distribution of income among wage-earners. To keep things relatively simple, we focus here on the distribution of individual earnings before taxes and transfers, leaving aside the thorny question of how growth models might affect and be affected by fiscal redistribution. Based on the same OECD source as Table 1, Table 7 presents more disaggregated measures of earnings inequality among full-time employees in 1994 and 2008 for our four illustrative cases. The first and second panels report on 90-50 and 50-10 earnings ratios (i.e., the ratio of earnings in the 90th percentile to earnings in 50th percentile and the ratio of earnings in the 50th percentile to earnings in 10th
percentile). The bottom panel in turn reports on the incidence of low pay, defined as the percentage of full-time employees earnings less than 50% of the median earnings of full-time employees.

[Table 7]

From 1994 to 2008, earnings inequality not only grew more rapidly in Germany than in the other three countries, but it grew in a distinctive way. The 90-50 ratio actually increased more in the UK than in Germany, but the 50-10 ratio increased very little in the UK while it increased sharply in Germany. With the proportion of employees earning less than 50% of the median wage remaining essentially unchanged in the UK, Germany caught up with the UK with respect to the incidence of low pay as well as the overall level of earnings inequality. It is also noteworthy that Sweden resembles the UK rather than Germany in that the 90-50 ratio increased more than the 50-10 ratio.

There can be little doubt that the rising high-end earnings in Britain are closely related, as both cause and effect, to the rise of financial services as the leading export sector. In the Swedish case, rapidly rising wages for high-skilled employees in the ICT sector and high-end tradable services appear to have been the single most important factor behind rising earnings inequality.\textsuperscript{46} In marked contrast to Germany, export growth in Sweden, and also in the UK, involved the expansion of sectors of the economy in which collective bargaining over wages was never well established. Not surprisingly, high-skilled workers do better when they are not constrained by unions and/or centralized wage bargaining.\textsuperscript{47}

The next question becomes, why is it that low-skilled workers fared so much better in Sweden and the UK than in Germany over the period 1994-2008? Declining union density,
declining bargaining coverage and the expansion of fixed-term employment, made possible by partial deregulation of labor markets, are undoubtedly an important part of the story of rising low-end earnings inequality in the German case. The “dualization” of German labor markets has been widely noted and discussed by CPE scholars, most recently and most comprehensively by Thelen.48 It is important to note, however, that many institutional developments associated with dualization also occurred in Sweden during this period. Though union density remains much higher in Sweden than in Germany, it has fallen sharply since the early 1990s and coordinated wage bargaining has increasingly allowed for firm-level negotiations over the distribution of centrally-agreed wage increases in Sweden as well as Germany.49 Furthermore, Swedish governments in the 1990s and early 2000s also deregulated temporary employment.50

The key difference between Germany and Sweden is, we believe, that German export firms, by virtue of the price sensitivity of their products, were less willing to concede to the wage claims of their own employees and also pushed much harder than Swedish export firms to ensure that wage increases in the export sector would not spill over into economy-wide increases in labor costs.51 In this effort, they were aided by the weakness of service-sector unions or, in other words, the dominance of export-sector unions within the German labor movement.

Macroeconomic conditions must also be taken into account in order to explain the divergent inequality trajectories of Germany and Sweden. While Swedish unemployment remained high by pre-1990 standards, it fell from nearly 12% in 1997 to less than 6% in 2002. From 2000 onwards, the German unemployment consistently exceeded the Swedish unemployment rate by at least two percentage points. Sweden recovered from its early 1990s
crisis through an export boom, but export earnings in turn generated demand for domestic goods and, above all, domestic services. The Social Democratic government held public spending in check, but, in contrast to the German government, it did not intervene to dampen private consumption. In Sweden, much as in the UK, robust growth of domestic consumption boosted demand for less skilled labor, shoring up real wages at the lower end of the earnings distribution.

Figure 9 graphs the evolution of the ratio of hourly labor compensation in manufacturing to low-end private services (retail commerce, hotels and restaurants) from 1994 to 2007. Through the recession of the early 2000s, German manufacturing wages tracked economy-wide productivity growth closely (at least until 2005) while wages in low-end private services were essentially flat, even declining slightly (Panel A). By contrast, wages in both manufacturing and low-end services tracked economy-wide productivity in Sweden (Panel B) as well as the UK (Panel C), where manufacturing increases exceeded productivity growth. In Italy (Panel D), productivity growth was much more sluggish than in the other three countries and manufacturing as well as low-end service-sector wages grew at a still slower rate. The similarity of inter-sectoral wage developments in the UK, with a less coordinated system of wage bargaining than Germany, and Sweden, with a more coordinated system, is striking. The approach that we have sketched in this paper arguably provides a more compelling explanation of this similarity than the standard institutionalist approach of the CPE literature.

The decoupling of wages in manufacturing and low-end services was arguably a critical component of the willingness of German manufacturing workers and their unions to exercise
wage restraint as export earnings boomed from 1995 onwards, promoting export-led growth based on price competitiveness. Most obviously, and most immediately, falling relative wages for unskilled wages in the service sector kept domestic prices low and allowed manufacturing workers to maintain or even increase their purchasing power at constant nominal wages. A second mechanism deserves to be noted: as low-wage employment has spread, there are very few jobs outside manufacturing that pay nearly as well as manufacturing jobs but do not require a university degree, leaving manufacturing workers and their unions keenly interested in preserving existing jobs.

Finally, we want to stress that Italian experience of 1994-2007 should not be construed as a story of “solidaristic institutions” successfully resisting “market-driven inequality.” In our view, economic stagnation and, in particular, slow growth of exports is the key to the stability of the distribution of earnings (and disposable income) in Italy prior to the crisis.

By Way of Conclusion

The analytical framework presented in this paper situates recent trajectories of advanced capitalist political economies in the context of the crisis of the Fordist model of wage-led growth and a common (cross-country) income shift in favor of capital and high-income households. The experiences of Germany, the UK, and Sweden over the 15 years preceding the onset of the Great Recession illustrate different solutions to the problem of finding a replacement for the faltering “wage driver,” while Italy is a case of persistent failure to find a solution to this problem. The growth models illustrated by the three “success cases” are distinguished by: (a) the relative importance of consumption and exports, (b) different ways of financing
consumption, and (c) the presence or absence of trade-offs between consumption growth and export growth. As we have seen, these models are associated, as both cause and effect, with distinct inequality trajectories.

Two observations deserve to be highlighted by way of conclusion. To begin with, our analysis calls into question the idea that consumption financed by credit and consumption financed by wages are substitutes. Based on a comparison of these four cases, household indebtedness and wage growth would appear to be complementary supports of consumption-led growth in the post-Fordist era. The second, and more important, point is that the implications of export-led growth depend crucially on the composition of exports or, in other words, their degree of price-sensitivity. Some forms of export-led growth can more readily be combined with consumption-led growth than others.

Politics need to be introduced into our analytical framework in a more systematic fashion than we have managed to do so far. In future work, we intend to develop the intuition that growth models rest on and are supported by clearly identifiable “social blocs,” i.e., coalitions of social forces, typically straddling the class divide, that can legitimately claim to represent the “national interest.” In the case of Germany, it seems clear that export-oriented manufacturing firms and what is left of the worker aristocracy of skilled workers constitute a cohesive and dominant social bloc in this sense. By contrast, recent work by Thelen suggests that Sweden’s balanced growth model might the expression of political-economic stalemate rather than the preferences a dominant social bloc. According to Thelen, two opposing coalitions, one centered on manufacturing (exports) and the other on non-exposed services (consumption), have been battling one another since the late 1990s.
As for the British case, any hegemonic social coalition must arguably include the financial sector, which has played a crucial role in enabling the UK to run persistent current-account deficits, benefitting workers as well as capitalists. As for Italy, finally, the key question to ask is which actors, if any, benefit from economic stagnation. Our hunch is that the country is trapped in an “equilibrium of fear” related to the dilemma of whether or not to stay within the Euro. Exiting would plausibly reanimate export-led growth, but would also reanimate inflationary pressures threatening the interests of various social groups, notably rentiers and pensioners.

We intend to explore the implications of growth models for partisan politics and macro-economic policy choices in future research. Our working hypothesis in this regard is that governments of different partisan colors will pursue similar macro-economic policies when the growth model is relatively “pure,” dominated either by household consumption, as in the British case, or by price-sensitive exports, as in the German case. When growth is consumption-led, we would expect Center-Right governments as well as Center-Left governments to respond to economic downturns by stimulating domestic consumption. When growth is export-led, by contrast, we would expect governments, regardless of their ideology and the distributive interests of their core constituencies, to pursue more restrictive macroeconomic policies, designed to boost cost competiveness. Government partisanship should matter most when consumption and exports contribute to economic growth in more or less equal measure and, as a result, “economic imperatives” are relatively ambiguous.

Seeking to distinguish our approach from the CPE mainstream, we have deliberately downplayed the role of supply-side institutions in this paper. In future work, we wish to strike a better balance between supply-side and demand-side considerations by exploring the
conditions that have allowed some countries, such as Sweden and the UK, to establish themselves as exporters of high-end services. Public investment in higher education—a topic that has recently received a great deal of attention by CPE scholars—to must obviously be taken into account as we seek to answer this question. Other factors to be considered include national systems of innovation, corporate finance, and linkages between high-end manufacturing (ICT in particular) and tradable services. More distinctively, collective-bargaining institutions and macroeconomic conditions favoring less skilled workers in sheltered sectors can be seen as a new type of enabling constraint, pushing exporters of both services and manufactured goods to rely on product and process innovations to compete in world markets.

While we have relied on Germany, Sweden and the UK to illustrate three distinct growth models in the period 1994-2007, we do not wish to reify these three examples: other countries may have followed different paths; some growth models may be more sustainable than others; and growth models surely do evolve over time. We have shown, we hope, that the growth model perspective, addressing simultaneously macroeconomic and distributive factors and the institutional and political forces impinging on them, provides a useful framework for understanding trajectories of post-Fordist growth in advanced political economies.
Figure 1: Schematic representation of macroeconomic relationships in the Neo-Kaleckian model
Figure 2: Labor compensation in percent of GDP (“wage share”), 5-year moving averages: 1960-2010.

Source: AMECO
Figure 3: Exports at constant prices in percent of GDP, 1994-2007.

Source: AMECO Database
Figure 4: The contribution of net exports to annual GDP growth, 1994-2007.

Note: the contribution of net exports to growth is calculated by multiplying the annual growth rate of net exports by the share of net exports in GDP at t-1.


Source: AMECO Database
**Figure 5**: The contribution of final private consumption to annual GDP Growth, 1994-2007.

Note: the contribution of final private consumption to growth is calculated by multiplying the annual growth rate of final private consumption by the share of final private consumption in GDP at t-1.


Source: AMECO Database.
Figure 6: Household debt as % of net disposable income, 1995-2007.
Figure 7: Real average hourly compensation, deflated with the CPI: 1994-2007 (1994=100).
Figure 8: Labor productivity, 1994-2007.

Real productivity per hour worked in Euro

Source: Eurostat
Figure 9: Hourly labor compensation in manufacturing and low-end private services, 1991-2007

Note: “manufacturing” includes sectors with NACE codes D21 through D37: Paper and pulp, petroleum products, chemicals, rubber and plastics, non-metallic mineral products, metal products, machinery, electrical and optical equipment, transportation equipment, and manufacturing NEC; “services” includes NACE codes G52 (retail trade) and H (hotels and restaurants).

Source: EU KLEMS for wages, OECD for productivity

A. Germany:
B. Sweden:

Sweden 1994-2007

- Real hourly compensation (CPI) 1994=100
- Manufacturing, Services, Productivity

Graph showing the trend of real hourly compensation in Sweden from 1994 to 2007.
C. UK

UK 1994-2007

- Manufacturing
- Services
- Productivity
D. Italy

Italy 1994-2007

- Manufacturing
- Services
- Productivity

Real hourly compensation (CPI) 1994=100
Table 1: Average annual change in 90-10 earnings ratios, 1975-95 and 1995-2011.

<table>
<thead>
<tr>
<th>Country</th>
<th>1975-95</th>
<th>1995-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>.042</td>
<td>.040</td>
</tr>
<tr>
<td>New Zealand (84-)</td>
<td>.033</td>
<td>.036</td>
</tr>
<tr>
<td>UK</td>
<td>.024</td>
<td>.035</td>
</tr>
<tr>
<td>Australia</td>
<td>.017</td>
<td>.029</td>
</tr>
<tr>
<td>Italy (86-)</td>
<td>.012</td>
<td>.028</td>
</tr>
<tr>
<td>Sweden</td>
<td>.010</td>
<td>.026</td>
</tr>
<tr>
<td>Netherlands (77-94)</td>
<td>.001</td>
<td>.022</td>
</tr>
<tr>
<td>Japan</td>
<td>-.005</td>
<td>.020</td>
</tr>
<tr>
<td>West Germany (84-)</td>
<td>-.011</td>
<td>.013</td>
</tr>
<tr>
<td>Finland (77-)</td>
<td>-.017</td>
<td>.012</td>
</tr>
<tr>
<td>France</td>
<td>-.021</td>
<td>.012</td>
</tr>
</tbody>
</table>

Note: Unless otherwise indicated in parentheses, the figures refer to change in 90-10 ratios from 1975 to 1995 and from 1995 to 2010. Total change over each period has been divided by the (country-specific) number of intervening years. For France, the data refer to net earnings (post-tax) earnings from employment; for all other countries, they refer to gross (pre-tax) earnings.

Table 2: Average annual real growth rates, 1994-2007

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>(A) exports</th>
<th>(B) household consumption</th>
<th>A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1.7</td>
<td>7.7</td>
<td>0.9</td>
<td>8.6</td>
</tr>
<tr>
<td>Italy</td>
<td>1.6</td>
<td>4.2</td>
<td>1.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.3</td>
<td>7.3</td>
<td>2.7</td>
<td>2.7</td>
</tr>
<tr>
<td>UK</td>
<td>3.3</td>
<td>5.2</td>
<td>3.6</td>
<td>1.4</td>
</tr>
<tr>
<td>OECD</td>
<td>2.8</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Annualized quarterly change in logged variables (volume series).

Source: OECD Quarterly National Accounts.
Table 3: Sensitivity of changes in exports to changes in real effective exchange rates 1994-2007 (OLS regressions)

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>Italy</th>
<th>Sweden</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>REER (CPI-based)</td>
<td>-0.478*</td>
<td>-0.645**</td>
<td>-0.137</td>
<td>0.0780</td>
</tr>
<tr>
<td></td>
<td>(0.226)</td>
<td>(0.258)</td>
<td>(0.258)</td>
<td>(0.235)</td>
</tr>
<tr>
<td>Constant</td>
<td>7.309***</td>
<td>4.465***</td>
<td>6.983***</td>
<td>5.184***</td>
</tr>
<tr>
<td></td>
<td>(0.754)</td>
<td>(1.071)</td>
<td>(1.085)</td>
<td>(1.123)</td>
</tr>
<tr>
<td>Observations</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.290</td>
<td>0.362</td>
<td>0.025</td>
<td>0.010</td>
</tr>
<tr>
<td>Durbin’s test</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Note: The dependent variable is the yearly log change in exports at constant prices and the independent variable the yearly log change in the real effective exchange rate (REER), based on relative CPI, standard errors in parentheses (** p<0.01, * p<0.05, * p<0.1, two-sided tests). The constant term captures changes in exports independent of changes in REERs. A higher constant signifies a higher capacity of the economy to attract international demand. We obtain essentially the same results with REERs based on unit labor costs (available upon request).

Source: Eurostat.
**Table 4:** ICT products and overall services in percent of total exports, 1996 and 2007.

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ICT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Italy</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sweden</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>UK</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Italy</td>
<td>28</td>
<td>22</td>
</tr>
<tr>
<td>Sweden</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>UK</td>
<td>34</td>
<td>66</td>
</tr>
</tbody>
</table>

Source: Eurostat.
Table 5: Balance of payments for goods and services, in percent of GDP, 2005-07 averages.

<table>
<thead>
<tr>
<th></th>
<th>Goods</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>+7.4</td>
<td>-1.4</td>
</tr>
<tr>
<td>Italy</td>
<td>-0.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>+4.8</td>
<td>+2.7</td>
</tr>
<tr>
<td>UK</td>
<td>-5.8</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Source: Eurostat.
Table 6: Balance of payments for selected service sectors, in percent of GDP, 2005-07 averages.

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>Sweden</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>0.15</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Business</td>
<td>0.14</td>
<td>1.14</td>
<td>1.31</td>
</tr>
<tr>
<td>Finance</td>
<td>0.10</td>
<td>0.18</td>
<td>1.72</td>
</tr>
<tr>
<td>Insurance</td>
<td>0.01</td>
<td>0.13</td>
<td>0.19</td>
</tr>
<tr>
<td>computing, information</td>
<td>0.01</td>
<td>0.47</td>
<td>0.31</td>
</tr>
<tr>
<td>royalties, licenses</td>
<td>-0.08</td>
<td>0.58</td>
<td>0.17</td>
</tr>
<tr>
<td>Transportation</td>
<td>-0.28</td>
<td>0.72</td>
<td>-0.14</td>
</tr>
</tbody>
</table>

Source: Eurostat.
Table 7: 90-50 ratios, 50-10 ratios and the incidence of low pay, 1994-2008.

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>90-50 ratio</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>1.72</td>
<td>1.81</td>
<td>+.09</td>
</tr>
<tr>
<td>Italy</td>
<td>1.56</td>
<td>1.56</td>
<td>+/-0</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.61</td>
<td>1.66</td>
<td>+.05</td>
</tr>
<tr>
<td>UK</td>
<td>1.87</td>
<td>1.98</td>
<td>+.11</td>
</tr>
<tr>
<td><strong>50-10 ratio</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>1.71</td>
<td>2.01</td>
<td>+.30</td>
</tr>
<tr>
<td>Italy</td>
<td>1.49</td>
<td>1.45</td>
<td>-.04</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.36</td>
<td>1.37</td>
<td>+.01</td>
</tr>
<tr>
<td>UK</td>
<td>1.81</td>
<td>1.83</td>
<td>+.02</td>
</tr>
<tr>
<td><strong>low-pay incidence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>15.5</td>
<td>20.1</td>
<td>+4.6</td>
</tr>
<tr>
<td>Italy</td>
<td>8.8</td>
<td>8.0</td>
<td>-0.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>19.5</td>
<td>21.2</td>
<td>+0.7</td>
</tr>
</tbody>
</table>

Source: see Table 1.
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NOTES


5 In addition to the oft-cited introduction to *Varieties of Capitalism* by Hall and Soskice, see Soskice, "Divergent Production Regimes" in Herbert Kitschelt, Peter Lange, Gary Marks and John Stephens, eds., *Continuity and Change in Contemporary Capitalism* (New York: Cambridge University Press, 1999), 101-134.


7 Streeck, "On the Institutional Preconditions of Diversified Quality Production" in Egon Matzner and Wolfgang Streeck, eds., *Beyond Keynesianism* (Aldershot: Elgar, 1991), 21-61. See also Streeck, "German Capitalism" in Colin Crouch and Wolfgang Streeck, eds., *Political Economy of Modern Capitalism* (London: Sage, 1997), 33-54. Streeck’s analysis of German capitalism in the latter chapter is carefully hedged, acknowledging the need to balance quality requirements and cost considerations and noting that trade liberalization, labor migration, and financial
liberalization could potentially undermine the institutions underpinning diversified quality production.

8 Soskice, “Divergent Production Regimes.”


10 E.g., Hall and Gingerich, "Varieties of Capitalism and Institutional Complementarities,” 477-479.

11 Note that the figures in Table 1 refer to absolute changes in the ratio of earnings in the 90th percentile to earnings in the 10th percentile. Because CMEs had lower 90-10 ratios to begin with, measuring change in percentage terms renders the growth of inequality in CMEs more pronounced relative to LMEs. For example, the German 90-10 ratio increased by 10.2% while the US 90-10 ratio increased by 9.6% from 1995 to 2011. Note also that restricting the analysis to 1995-2007 does not significantly change the picture: in all countries, 90-10 ratios changed very little during the Great Recession.


16 Thelen, Varieties of Liberalization, 25.


18 Soskice, "Macroeconomics and Varieties of Capitalism" in Hancké, Rhodes and Thatcher, eds., Beyond Varieties of Capitalism, 89-121.


27 Lavoie and Stockhammer, "Wage-Led Growth."


30 In the CPE literature, the term “Fordism” is typically employed to describe capital-intensive mass production of standardized consumer goods. Like the French regulationists, we instead conceive of Fordism as a mode of macroeconomic regulation.

31 On the pervasive rise in personal income inequality, see OECD, *Divided We Stand* (Paris, 2011).

32 In the UK, union density peaked at 51.8% in 1978 and fell by 23.7 percent from its peak to 2010. The corresponding figures for the other countries are as follows: Sweden, 87.4% (1994), -18.5; Germany, 36.0% (1991), -17.4; and Italy, 50.5% (1976), -15.0. On the sources and consequences of union decline, see Jonas Pontusson, "Unionization, Inequality and Redistribution," *British Journal of Industrial Relations* 51, no. 4 (2013): 797-825.

33 Torben Iversen and David Soskice, "Modern Capitalism and the Advanced Nation State" in Nancy Bermeo and Jonas Pontusson, eds., *Coping with Crisis* (New York: Russell Sage, 2012), 35-64.


Government transfers play an important role in sustaining household consumption, especially during economic downturns, but we would argue that their role is a supporting one—making up for shortcomings in the other sources of consumption demand.

Our results for Germany are consistent with econometric evidence presented by Sebastian Breuer and Jens Klose, "Who Gains from Nominal Devaluation?," *The World Economy* (2014): 1-24. Estimating our simple model with 1974-90 data for West Germany produces a much smaller, entirely insignificant, coefficient for the real effective exchange rate (results available upon request). In other words, German exports appear to have become more price-sensitive over time.


47 Data on top income shares confirms the observation that the growth of income inequality has been more “top heavy” in the UK and Sweden than in Germany. The share of total pre-tax income accounted for by the top 1% of income earners increased from 9.9% to 15.4% in the UK over the period covered by our analysis. It also increased in Sweden and Italy over this period, but to a lesser extent. Quite strikingly, the increase in the capital-gains-inclusive top 1% income
share from 1992 to 2007 was twice as large in Sweden as in Germany. Source: Alvaredo Facundo, Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez, The World Top Incomes Database, http://topincomes.g-mond.parisschoolofeconomics.eu/, 19/03/2015.

48 Thelen, Varieties of Liberalization.


50 The German score of the OECD index of temporary-employment regulation dropped from 3.25 in 1994 to 1 in 2004 while the Swedish score dropped from 4.1 in 1991 to 1.44 in 1997 and 0.8 in 2008. According to the OECD, temporary employment increased from 14.6% to 17.3% of total employment in Sweden between 1997 and 2007. The corresponding figures for Germany are 11.7% and 14.7%. In both countries, the regulation of regular employment changed very little over the period 1990-2010.

51 Baccaro and Benassi, "Throwing out the Ballast."


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