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International Monetary Regimes and the German Model

Fritz W. Scharpf



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Abstract

The end of the Bretton Woods regime and the fall of the Iron Curtain deepened the export orientation of the German model of the economy. Only after entry into the Monetary Union, however, did rising exports turn into a persistent export–import gap that became a problem for other eurozone economies. This Discussion Paper shows why the present asymmetric euro regime will not be able to enforce their structural transformation on the German model. Neither will German governments be able to respond to demands that would bring the performance of the German economy closer to eurozone averages. Instead, it is more likely that present initiatives for financial and fiscal risk sharing will transform the Monetary Union into a transfer union.

Keywords: German model, export surpluses, currency regimes, Monetary Union, structural divergence, risk sharing

Zusammenfassung

Das Ende des Bretton-Woods-Regimes und der Fall des Eisernen Vorhangs vertieften die Exportorientierung der deutschen Wirtschaft. Aber erst unter der Währungsunion führten deutsche Exporte zu einer dauerhaften Export-Import-Lücke und erzeugten damit ein Problem für die anderen Mitgliedsländer. Das asymmetrische Euro-Regime kann deren strukturelle Transformation nach deutschem Vorbild nicht erzwingen. Ebenso wenig könnte die deutsche Politik eine strukturelle Transformation des deutschen Modells erreichen. Wahrscheinlicher ist es, dass die gegenwärtigen Initiativen zur finanziellen und fiskalischen Risikoteilung die Währungsunion zur Transferunion verändern werden.

Schlagwörter: deutsches Modell, Exportüberschüsse, Währungsregime, Währungsunion, strukturelle Divergenz, Risikoteilung

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International Monetary Regimes and the German Model

1 Introduction: From sick man to employment champion and eurozone hegemon

When Germany joined the Monetary Union in 1999 at a somewhat overvalued exchange rate and with a current account deficit, the economy was just recovering from its post-unification recession and unemployment was beginning to fall somewhat from its 1997 peak. As usual, moreover, the inflation rate was the lowest in the eurozone. In the following years, however, GDP per capita declined until 2003, and unemployment increased to a post-war peak of 11.3 percent in 2005 (OECD 2017a; 2017b). In the early years of the Monetary Union, therefore, Germany was seen as the “the sick man of the euro.”¹

By 2007, however, unemployment was going down. It hardly rose again even in the worldwide financial and economic crisis of 2008–2009, and since then the decline has continued to levels as low as those in West Germany at the end of the 1980s (OECD 2017b). Even more remarkably, employment rates – traditionally hovering below the OECD average at around 65 percent of the working-age population – have since then risen to more than 74 percent, matching or exceeding the levels of former employment champions such as the United States, the United Kingdom, the Netherlands, or Denmark (OECD 2017c). At the same time, current-account surpluses and capital exports have led to a steep rise in the net international investment position (NIIP) and to large surpluses on the Target-2 balance sheets of the European Monetary Union. All this is also reflected in Germany’s bargaining power in creditor–debtor negotiations at ECOFIN and summit meetings.

There is no question that the Monetary Union’s ill-designed regime has been a cause of the decline as well as the recovery of the German economy over the past 15 years or so. It is equally clear, however, that the impact of this monetary regime was conditioned by the heterogeneity of eurozone economies. Hence, specific outcomes cannot be explained without reference to existing economic and political structures and to policy legacies and practices that are presently shaping and constraining interdependent national responses to the common monetary regime. In the German case, present structures and practices are the outcome of their co-evolution with a succession of post-war international monetary regimes.

The text has benefited greatly from my ongoing discussions with Martin Höpner and from comments by Marina Hübner. I also thank Ann-Christin Klein for extensive data searches and for producing the figures and tables.

1 The Economist, June 3, 1999: <http://www.economist.com/node/209559>; Dustmann et al. (2014).

2 1949–1969: West Germany under the Bretton Woods regime

In Germany's economic history, even less so than in its political history, the end of World War Two was not a "*Nullpunkt*." Perhaps one needs to go back to the last quarter of the nineteenth century, with its political coalition of "iron and rye" (Gerschenkron 1943; Gourevitch 1986; Schonhardt-Bailey 1998), an industrial structure based on coal, steel, research-based chemical and electrical engineering and machinery, and the beginnings of the Bismarckian welfare state (Allen 1989a). Or one might look to the 1920s, when German automakers, specializing in hand-built luxury cars, had to be taught mass production by Henry Ford and General Motors (Streeck 1984). And while the autarchic policies of the mid-1930s might have favored a re-orientation from exports to domestic demand,² that was counteracted by the increasing emphasis on military rearmament, as consumer industries were "hardest hit by the New Plan – because they were deemed 'unnecessary' to Germany's economic development" (James 1989, 253),³ effects that surely became more deeply entrenched by the wartime expansion (and limited destruction) of industries producing military hardware. In any case, the industrial potential had largely survived the war and post-war dismantling, and it was initially suited to producing investment goods for domestic and European reconstruction, technically demanding products for export, but also mass-produced consumer goods for the home market.

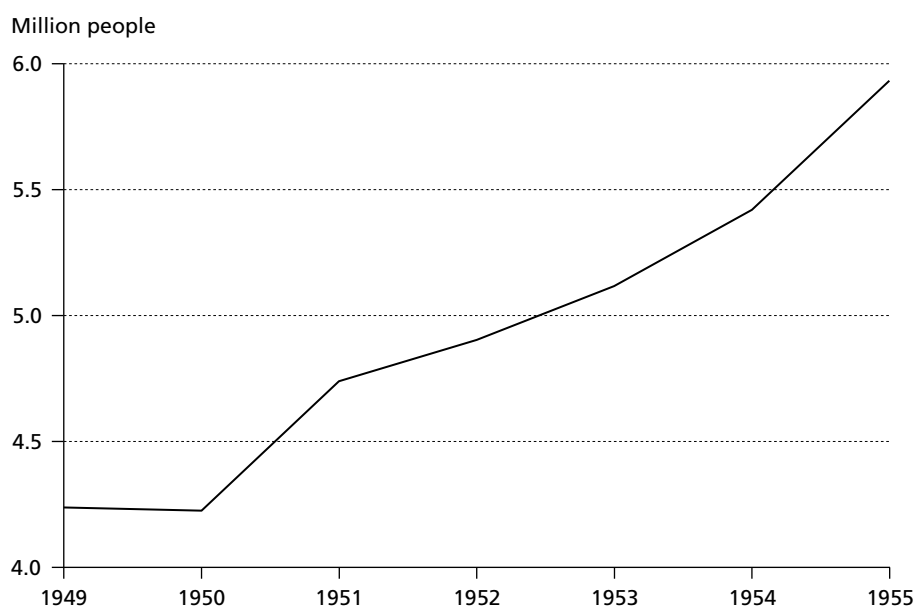
The original model: Wage moderation and monetary constraints

In West Germany, reconstruction could begin in earnest only in the summer of 1948, when the new *Deutsche Mark* (DM) replaced the hyper-inflated *Reichsmark* at a discount of 10:1, and when the post-war wage and price controls were suddenly removed by Ludwig Erhard. At that time, however, there was no functioning capital market to finance the investments required by reconstruction. A currency reform that favored real assets over money savings, tax rules that greatly favored retained profits, and highly *dirigiste* government policies channeling capital (including the "revolving" counterpart funds of Marshall aid) into the bottleneck investment areas of coal and steel production and transport all helped (Abelshauser 2011, 140–52; Stolper and Roskamp 1979, 395–97), but the main source of finance driving reconstruction in the early 1950s was reinvested profits (Abelshauser 1983, Table 12) generated by wage settlements below increases in labor productivity (Wolter 1984, Table 2).

2 Alfred Sohn-Rethel (1987, Chapters 3–5) provides a fascinating account, based on participant observation in the mid-1930s, of how rearmament rescued German heavy industry (which had supported the Nazi takeover) but destroyed the export-oriented business model of science-based quality producers in the "Siemens camp," including "firms such as Zeiss or Leitz or the German machine tool firms" (p. 43).

3 Similarly, during the Korean War in 1951, the U.S. High Commissioner for Germany asked for government intervention in German industry favoring defense products rather than inessential goods (Katzenstein 1987, 87; Abelshauser 2011, 163–66).

Figure 1 The rise in industrial employment in West Germany, 1949–1955



Sources: Statistisches Jahrbuch 1953, 1957, 1958.

To some extent, the initial wage restraint of German unions – which had overcome the political divisions of the interwar period and were now organized by industrial sectors – is explained by their weak bargaining power in the face of unemployment rising from 4.1 percent in 1948 to 11 percent in 1950 as a consequence of the shocks of currency reform and wholesale liberalization. Even more important was the labor supply increase brought about by the mass immigration of expellees from Eastern Europe and refugees from East Germany, increasing the West German population from 46.5 million in 1949 to 49.5 million by 1954 (Stolper and Roskamp 1979, 379). Moreover, the unions' strategic priorities in the early 1950s were institutional reforms, focusing on political legislation and industrial action to secure codetermination and the establishment of autonomous collective-bargaining rights (Müller-Jentsch 2011). Nevertheless, effective wage restraint had also been a strategic choice: for industrial workers and their unions, job creation and industrial reconstruction appeared to be an immediately more important interest than wage increases. And in fact, profit-led investment after 1948 had facilitated a steep rise in industrial employment (Figure 1).

The strategic acceptance of wage restraints was subsequently acknowledged in a famous article by Victor Agartz (1953), at that time still the chief theoretician of the German Federation of Trade Unions (DGB).⁴ Arguing that reconstruction and the modernization

4 True to his socialist convictions, Agartz had long opposed the idea of “social partnership” and the unions' priority of codetermination. He also maintained contacts with colleagues and authorities in the German Democratic Republic (GDR) which, at the height of Cold-War anti-communism, led to his resignation from the directorship of the DGB's Institute of Economic

of industrial capacity were by 1953 approaching the point where normal patterns of investment financing could and should again prevail, Agartz called for a conceptual re-orientation from profit-led to demand-led economic growth that was to be implemented through a strategy of wage expansion (*expansive Lohnpolitik*). And though Agartz's new concept was not adopted as an official union strategy, real wages did in fact rise steeply after the early 1950s.⁵ Hence, consumer demand also helped the "economic miracle" to continue, with an average growth rate of 6.3 percent and rapidly falling unemployment until the end of the decade, while total employment increased by 5 million or 24 percent during the 1950s. Nevertheless, the rate of inflation remained below 2 percent throughout the decade (Wolter 1984). It is the latter that, finally, points to the role national and international monetary regimes played in the context of the "German miracle."

On the domestic side, the *Bank deutscher Länder* (BdL) – the predecessor of the *Bundesbank* – had been set up by the Western military governments on March 1, 1948; that is, more than a year before the creation of the Federal Republic in May 1949 and before the establishment of a federal government in September. It was organized as a joint undertaking of the existing central banks of West German *Länder*, rather than as the instrument of a central government. Initially under direct Allied control, its mandate to ensure price stability and external balance came under pressure in the first years after the currency reform of June 21, 1948 (that had established the new Deutsche Mark at an exchange rate of 1 : 3.33 to the US dollar). Ludwig Erhard, responsible for the economic administration of the American–British "Bizonie," had disregarded British warnings by announcing the end of post-war price and wage controls right after the currency reform. The initial effect had been a dramatic rise in domestic prices (Abelshauser 2011, 153), which the Bank's monetary policy was unable to counteract because commercial banks were initially well supplied with central bank money (Buchheim 1998, 134). Instead, when the British pound and other European currencies devalued by 30.5 percent against the US dollar, the new federal government, at its first cabinet meeting after taking office on September 20, 1949, also asked the Allied High Commission for a devaluation of the Deutsche Mark, but only by 20.6 percent (which amounted to an effective revaluation against European competitors) to reduce inflationary pressures (Holtfrerich 1998, 370). As imports had also been liberalized to a greater extent than elsewhere, the immediate effects were current account deficits and a severe balance-of-payments crisis in 1949 and 1950, which had the effect of constraining imports required for industrial production.

Hence, when monetary policy finally took effect, rigorous restraint to reduce domestic demand also cut the inflation rate from 7.6 percent in 1951 to 2.1 percent in 1952, and to –1.7 percent in 1953 (Abelshauser 1983, 63–65). At the same time, below-average inflation stimulated German exports. Thus, current accounts turned into surplus in 1951

Research (WWI) in 1955 and subsequently to an indictment for treasonable conspiracy with GDR authorities, of which he was acquitted (Krämer 1995).

5 From 1950 to 1960, the cost-of-living index increased from 100 to 120, whereas hourly wages in industry rose to 209 (Stolper and Roskamp 1979, 394).

and balance-of-payments worries were definitely over by 1952 (Holtferich 1998, 383). In the words of the BdL president, that indeed proved to be the guidelines of the Bank's "mercantilistic"⁶ monetary policy in the early 1950s: "we depend on increasing exports, and these depend on maintaining relatively low price and wage levels ... In other words, keeping prices below levels abroad is the crucial point of our efforts at the central bank" (Vocke, May 17, 1951, as cited in Holtferich [1998, 383]; my translation). And even though, after the mid-1950s, real wages increased significantly in an increasingly tight labor market, inflation rates remained below the international average – never exceeding 2 percent until the end of the decade and remaining below 3 percent until the end of the "economic miracle" in the mid-1960s (Statistisches Bundesamt 2011).

The high-growth period of the West German economy came to an end in 1965.⁷ In retrospect, mainstream German economists (Giersch 1967; 1983; Kloten, Ketterer, and Vollmer 1985; Göbel 1988) have generally attributed its success to the combination of stability-oriented monetary policy and union wage moderation. The persistence of this beneficial pattern is usually explained by the historically rooted institutions and cooperative habits of sectoral "corporatism" (Abelshauser 2011). These supply-side interpretations are not wrong, but they underemphasize the demand-side effects these domestic practices were able to achieve under the international economic and monetary regime of the post-war period.

Benefiting from the asymmetry of the Bretton Woods regime

Under the post-war international regime, trade among industrialized economies was gradually liberalized through a succession of GATT agreements, and it was steadily increasing. By contrast, capital mobility was low and states were free to use capital exchange controls in managing national currencies. Under the Bretton Woods system of pegged but adjustable exchange rates, all member currencies were linked to the US dollar, and the dollar itself was linked to gold at the rate of 35 dollars per ounce. In the

6 The term is used by Holtferich (1998, 380) to describe monetary and fiscal policies from 1951 to 1956.

7 The economy continued to grow at annual rates above 5 percent until 1965, and full employment was maintained until 1966. But then growth declined by 0.1 percent in 1967 and unemployment rose from 0.7 percent in 1966 to 2.1 percent in 1967. This first postwar recession was caused by the Bundesbank's intervention against a rise in the inflation rate from 2.4 percent in 1964 to 3.3 percent in 1966 (Statistisches Bundesamt 2011), which was generally ascribed to excessive budget deficits before the 1965 federal elections. The first post-war recession caused a political earthquake that ended Ludwig Erhard's chancellorship and replaced the conservative-liberal governing coalition with a grand coalition which, for the first time since the War, included the Social Democrats in the national government. The immediate result was the "Keynesian" interlude of Karl Schiller's *Konzertierte Aktion* which, between 1967 and 1969, succeeded in engineering a brilliant recovery from the mini-recession, but which then collapsed in a crisis, to which I will turn below.

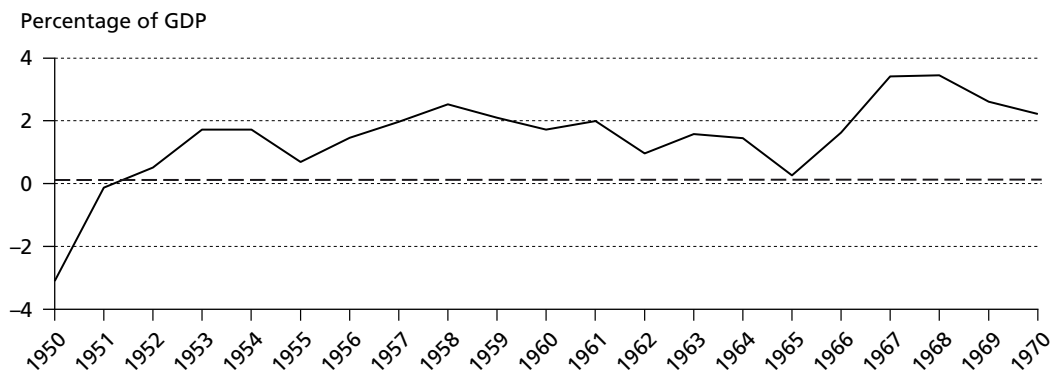
absence of a central clearing-house, international transactions were conducted through central banks, which had to settle mutual accounts through the transfer of gold or dollar “reserves.” In order to keep their currencies within a narrow bandwidth of 1 percent to the official exchange rate, states were obliged to employ their internal (monetary, fiscal, regulatory) or external (capital controls, trade controls) policy instruments to influence imports, exports, and capital flows so as to stabilize the exchange rate. Short-term liquidity problems could be overcome by credits from the International Monetary Fund (IMF). And in the case of a “fundamental disequilibrium,” a state could apply for a change of the official exchange rate of its currency in order to avoid a balance-of-payments crisis (Bordo 1993; Obstfeld 1993a).

That such crises could arise was due to the asymmetric adjustment requirements of the Bretton Woods regime, which Keynes had criticized and where his proposals had been overruled by the American side (Zoche 2015, 60–91; Ikenberry 1993, 174). Keynes had emphasized the economic and political asymmetries of the adjustments needed to avoid balance-of-payments crises in a fixed exchange rate system. States with current account deficits would need to reduce wages and prices (in other words, achieve “internal devaluation”), requiring painful cuts in employment, wages, and public spending, whereas surplus countries could more easily increase domestic demand, wages, and prices.⁸ But Keynes was overruled, and the adjustment rules of the Bretton Woods regime focused asymmetrically on deficit states in danger of a balance-of-payments crisis. External surpluses as such were of no official concern, and if the nominal exchange rate of a surplus economy was pushing against the upper limit of the bandwidth, its central bank could easily correct that by selling its own currency.

In the ideal world of neoclassical economics, with perfectly flexible wages and prices and complete information, persistent imbalances should of course not occur (Obstfeld 1993b, 207–11). In the real world perceived by Keynes, however, wages and prices were downward-inflexible, and economies with a chronic trade deficit would continuously struggle with balance-of-payments crises. British governments, for instance, trying to maintain full employment and the status of the pound sterling as a reserve currency in the 1960s, were forced to resort to stop-go macroeconomic policies, and at times to price and wage controls, foreign-exchange controls, and repeated rescue credits from other governments and the IMF, without, in the end, being able to avoid devaluation (Obstfeld 1993b, 228–34; Bordo, MacDonald, and Oliver 2009). In West Germany, by contrast, initial wage restraint and the rapidly falling rate of inflation did allow industrial exports to benefit from rising international demand and dollar inflation during the Korean War of 1950–1953. As a consequence, the trade balance turned positive by

8 To achieve symmetrical adjustment requirements, Keynes had proposed an International Clearing Union that would manage all net transactions among its member states. It would have charged progressive interest rates for deficits as well as for surpluses above predefined quotas; and at the end of each year, all surpluses exceeding the quota would be forfeited. In short, surplus states would have even stronger incentives than deficit states to avoid and correct substantial imbalances of their current accounts (Skidelsky 2005, 20–22; Lavoie 2015).

Figure 2 Net export surplus in the German trade balance as a percentage of GDP, 1959–1970



Sources: Statistisches Bundesamt; own calculations.

1952 and remained in surplus until the end of the Bretton Woods period (Bordo 1993, 55; Figure 2).

In theory, of course, even in a more realistic version of the neoclassical model, persistent surpluses should not have happened under the Bretton Woods regime, either. While persistent deficits might be plausibly explained by the assumption of downward-sticky prices and wages,⁹ the reverse assumption seems less obvious: if high export surpluses, converted into domestic currency, are causing a rise in domestic demand, there is no general mechanism in economic theory that should prevent an upward movement of domestic prices and wages. In that case, then, “imported inflation” would reduce the price competitiveness of exports, increase the demand for imports, and thus restore the theoretically expected external balance.

In the real world, however, the performance of national economies under the Bretton Woods regime was shaped not only by the aggregate effect of microeconomic interactions that are reflected in economic theories. From a more comprehensive (“political economy”) perspective, at any rate, it seems obvious that outcomes may also be shaped by the strategic action of macroeconomic actors – primarily the government, the central bank, and perhaps the unions – that will attempt and at times succeed in exploiting the regime to advance their own purposes.

In the comparative political economy literature, much of the credit for the German economy’s exceptional post-war performance is assigned to the strategic capacity and macroeconomic rationality of German industrial unions, whose comparative advantage

9 This widely accepted explanation is disputed by Maurice Obstfeld (1993b, 216), who shows that wage and price rigidity did not differ that much between the gold-standard period (when imbalances were rare) and the post-war period. In his view, the main difference is that democratic post-war governments came to intervene in the adjustment of wages and prices in order to maintain full employment and domestic growth.

was seen to be derived from their post-war organizational structure. Unlike French and Italian unions, they had overcome the party-political divisions of the Weimar period; and in comparison with the United Kingdom, their sectoral monopolies also avoided the leap-frogging wage competition among independent unions in the same industry or the same firm. Moreover, union leaders could generally rely on economically competent staff and, through codetermination, they were aware of sales, prices, costs, and profits in their respective sectors. By and large, therefore, wage settlements tended to favor employment and rising real wages rather than inflationary increases of nominal wages.¹⁰ In international comparison, therefore, German unions did not interfere with the success of post-war economic reconstruction (Carlin 1994; Hetzel 2002).

But there is little reason to overstate their strategic capacity. Post-war unions were acting in a macroeconomic context that was determined by the government and the central bank. The government – or more precisely Ludwig Erhard, the dogmatically liberal (economically speaking) director of the bi-zonal economic administration in 1948, and then Adenauer's minister of economic affairs – had adopted a series of nearly irreversible (and high-risk) framework decisions that shaped and constrained all subsequent political and economic options. These included the removal of post-war rationing and price regulations on the occasion of the currency reform, the early (and premature) liberalization of imports, and the early liberalization of capital exchanges and currency convertibility.

Within this context, as already shown, the central bank, with the implicit compliance of the unions, had been able to avert a balance-of-payments crisis through internal devaluation. A few years later, however, when current account deficits turned into external surpluses, the Bundesbank's mercantilist strategy of maintaining a somewhat undervalued currency faced the theoretically expected counteracting effects: since export revenues were converted into national currency, domestic demand, prices, and wages would also increase. Moreover, as soon as balance-of-payments problems had been overcome, the German government was again the first in Europe to liberalize currency markets. With the convertibility of the Deutsche Mark, however, Germany was facing Robert Mundell's (1960; 1963) famous theoretical trilemma, according to which only two of three goals – capital mobility, monetary autonomy, and external balance – could be realized at the same time. If the Bank chose to defend price stability by raising interest rates, its effect would be counteracted by capital inflows that increased the domestic money supply and generated additional pressures of imported inflation.¹¹ With regard to this trilemma, the Bundesbank's priority was clear:

-
- 10 That did not rule out severe industrial conflict which, however, tended to focus not on wages but on industry-wide or economy-wide rule changes, such as codetermination, sick pay for workers, and working time reductions. The one exception was the wave of wild-cat strikes in 1969, which will be discussed below.
- 11 At the time, the German trade balance, while in deficit vis-à-vis the United States, was in surplus vis-à-vis the rest of Western Europe. Currency inflows thus also reduced the scarce reserves of other European economies and generated political pressure for demand reflation in Germany (Holtfrerich 1998, 400–413).

When the choice was between external concerns and the requirements of safeguarding the internal value of the money, the Bank's priority could never be in doubt. The defense of price stability is of fundamental importance for economic development, whereas further increases of capital inflows are more easily controlled and corrected than a decline on the slippery slope of accelerated price increases. (Bundesbank 1960, 3; my translation)

In effect, therefore, the Bank, supported by the government, tried to “sterilize” capital inflows through discriminatory regulations and to fight inflation by raising minimal reserve requirements and through deflationary open market policies (Obstfeld 1993b, 220–21). Nevertheless, the pressure of capital inflows continued, and wages also rose more steeply in the tight labor market at the end of the decade. At that point, the Bank was finally ready to compromise its mercantilist concern for German exports and to support a (too modest) revaluation of the Deutsche Mark by 5 percent in March 1961 (Holtfrerich 1998, 400–413).

Essentially, the pattern of low inflation, a moderately undervalued currency, moderate export surpluses and full or over-employment (at unemployment rates below 1 percent) continued until 1966, when it was disrupted by a mini-recession, triggered by the Bundesbank's intervention against the pre-electoral budget deficits of the Erhard government. Since that government was quickly replaced by the first “grand coalition” that included the Social Democrats, the recession was overcome by an interlude of Keynesian concertation. With the hesitant cooperation of the Bundesbank, the agreed combination of fiscal expansion, union wage restraint and monetary accommodation did in fact succeed in restoring price stability by 1967 and over-employment by 1969 – albeit with repercussions that will be discussed in the next section.

Toward the end of the 1960s, however, as dollar inflation was rising as a consequence of the Vietnam War, capital inflows increased to such an extent that the Bundesbank was again reaching the limits of its regulatory and monetary tools for defending domestic price stability against the pressures of imported inflation. As early as September 1968, therefore, it joined foreign and domestic critics of the undervalued Deutsche Mark to ask the government for a substantial revaluation of the nominal exchange rate. As expected, the government's reluctant concession of a 4 percent surcharge on exports and a symmetrical cut of import taxes in November proved insufficient (and could have at best affected the trade balance, but not capital inflows). Hence, the Bank intensified its campaign for nominal revaluation until, immediately after the elections of September 1969, the new social-liberal government announced a revaluation of 8.5 percent. After an extended period in which Germany alternated between capital exchange controls and temporary floating, the Smithsonian Agreement of December 18, 1971 produced a general currency realignment entailing an additional DM/USD revaluation of 13.6 percent – only to be followed by the official end of Bretton Woods and the turn from pegged to free floating exchange rates on February 14, 1973.

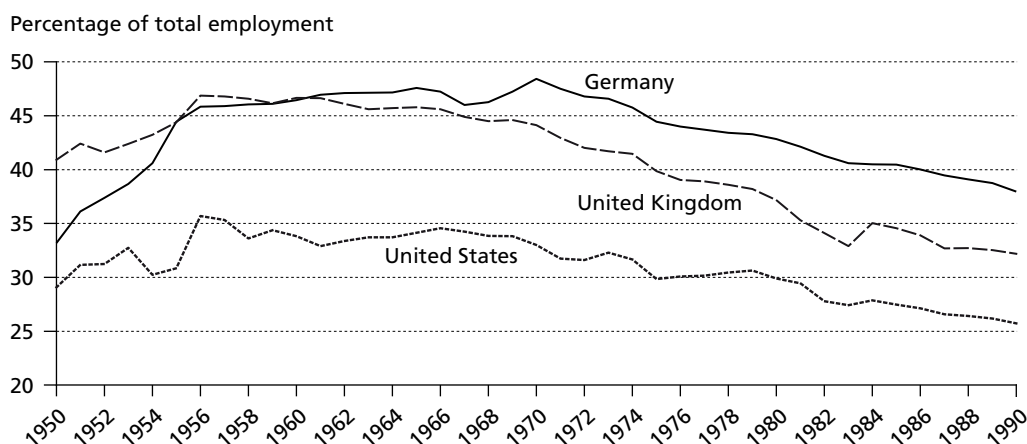
Conclusion

Under the international Bretton Woods regime, West Germany's post-war political economy benefited mainly from the uncoordinated interaction effects between the quasi-fixed preferences of two policy actors whose authority preceded the creation of the Federal Republic. The central bank, de facto politically autonomous, was uncompromising in its pursuit of price stability – which it initially justified as mercantilist support for German exports but maintained unchanged even when it implied currency revaluation that would hurt exports. On the side of the government, Ludwig Erhard, the immensely popular father of the economic miracle, had not only defied Allied opposition by lifting wage and price controls right after currency reform, but as minister of economic affairs he also liberalized trade and then currency exchanges far ahead of other Western European economies. In combination, these quasi-dogmatic and non-strategic policy commitments shaped the German response to the constraints and opportunities of Bretton Woods.

Early trade liberalization had deepened the balance-of-payments crisis with which the central bank was struggling at the beginning of the 1950s, and it added urgency to its supply-side support of export competitiveness. When the government also liberalized capital exchanges, however, export surpluses produced new problems for the Bank. As was to be expected, incoming revenues would expand the domestic money supply, and if interest rates were raised to fight inflation, capital inflows would exacerbate the problem. From the mid-1950s onward, therefore, the Bundesbank was continuously struggling to defend price stability through open market operations and minimum-reserve requirements that reduced domestic liquidity and through additional administrative measures that impeded capital inflows. To the extent that these policies succeeded, a moderately undervalued exchange rate did support moderate export surpluses (see Figure 2). But when these defenses were overwhelmed by speculative inflows, the Bank's priority was clear: to defend price stability it would rather ask for DM revaluation than accept the inflationary effects of defending the exchange rate – which it could have done by intervening in currency markets (Holtfrerich 1998, 428). From this perspective, the Bank's ideal was achieved with the turn to floating exchange rates after the demise of Bretton Woods.

For the West German economy as a whole, the 1950s and 1960s were a period of rapid growth and deep structural change. In line with grand theories of sectoral change (Fourastié 1949; Bell 1973), employment in agriculture had declined rapidly, and job losses were easily absorbed by the rise of industrial employment, whereas public and private services increased at a slower rate (Scharpf 1986). But though German industry continued to expand until the end of the 1960s, it was also affected by massive structural change, which was driven primarily by the government's early and persistent commitment to trade liberalization (Figure 3).

Figure 3 Industrial employment as a share of total employment in Germany, the United Kingdom, and the United States, 1950–1990



Sources: OECD Historical Populations data and Projections; Statistisches Bundesamt: Statistisches Jahrbuch 1956–57; own calculations. 1950–1955: estimates.

By and large, Germany did not try to protect the domestic market against foreign competition, with the consequence that price-sensitive consumer goods such as shoes, textiles, clothing, and even cameras and other low-priced hardware were no longer supplied by German producers. And in contrast to France and Italy, lower-price Japanese cars were common on German roads already in the 1960s (Katzenstein 1989, 143). Similarly, the rise of South Korean competition in steel production in the mid-1960s and of shipbuilding in the 1970s were softened by rationalization and upmarket specialization, rather than by raising barriers to imports. In order to survive even in the domestic market, therefore, German industry had to concentrate on product lines in which its traditional comparative advantages – in research-based chemical and electrical engineering and high-quality manufacturing depending on qualified workers and cooperative industrial relations – made the most difference.

These changes in production profile, it should be noted, were driven primarily by import competition in the domestic market. Even though, as we have seen, the need for higher exports had motivated mercantilist concepts of the central bank in the early 1950s when balance-of-payments deficits had been a major worry, the size of the export sector in the total economy had actually remained quite small, amounting to only 21 percent of GDP in 1970 – compared with 15 percent in France and 22 percent in the United Kingdom (OECD 2017d). But of course, the product portfolio that could hold its own against imports in the domestic market would also shape the success of German industry in export markets, where they had additionally benefited from the price advantage of an undervalued currency.

3 1969–1989: Struggling with volatile exchange rates

The decline of Bretton Woods in the late 1960s had increased the pressures of imported inflation (Tietmeyer 2005, 30–35). Under the influence of industrial employers and unions, the grand coalition government had ruled out revaluation but responded by adopting a 4 percent import subsidy and export penalty in the fall of 1968. It was insufficient and could, in any case, have reduced only the trade surplus, but not capital inflows. After elections in the fall of 1969, the incoming social-liberal government was finally able to respond to Bundesbank pressure by adopting an 8.5 percent revaluation of the DM/USD rate (from 4.00 to 3.66 DM/USD). Nevertheless, speculative inflows continued even after another revaluation by 13.8 percent in December 1971. And when the final collapse of the Bretton Woods regime was followed by a period of floating exchange rates, the Deutsche Mark continued to rise from 3.19 DM/USD in 1973 to an all-time high of 1.83 DM/USD in 1979, whereas other European currencies devaluated even against the weakening US dollar.

These differences reflect the combined effects of currency speculation and national policy responses during the “stagflation” period following the oil-price crises of 1973–1974 and 1980–1981 in which the dramatic increase in the price of an essential resource had confronted all industrial economies with the dual challenge of cost-push inflation and demand-gap unemployment (McCracken et al. 1977). In this situation the initial response of the United States and most European countries had emphasized the stabilization of aggregate demand and employment through fiscal and monetary reflation, whereas Germany (and Switzerland) had prioritized the fight against inflation.

Monetarist coordination and the economic costs of hard-currency policies

In the German case, this outcome is explained largely by a conflict between union wage policies and Bundesbank stability policy, which was dramatically won by the Bank and followed by a period in which neither the unions nor the government cared to challenge the monetary constraints defined in Frankfurt (Kloten, Ketterer, and Vollmer 1985; Scharpf 1991, chapter 7).

The battle had followed upon the only instance of successful Keynesian “concertation” in Germany (Allen 1989b). With the reluctant cooperation of the Bundesbank, it had quickly overcome the first post-war (mini-)recession of 1965 through a combination of agreed-upon union wage restraint, fiscal reflation, and monetary accommodation. It worked so well that by 1969 full employment was back, the economy was booming, profits exploding, and wage-drift increasing, whereas union wages were fixed by the low settlements adopted in the previous year. Challenged by wild-cat strikes in Germany’s version of the *autunno caldo* of 1969, the unions needed to restore their authority through very aggressive industrial action and in fact inflationary wage settlements

for 1970–1971. When they returned to moderation in 1972, however, (imported) inflation continued to increase despite the stabilization efforts of the Bundesbank and the government. As a consequence, union economists had concluded that the fight against inflation was lost and that very high nominal settlements would be needed to avoid real wage losses. In March 1973, however, all attempts to stabilize the Bretton Woods regime were finally abandoned, and the Bundesbank was then free to adopt deflationary policies without seeing their effect frustrated by capital inflows. Instead, deflationary effects would be reinforced by currency revaluation. And when escalating oil prices in the fall of 1973 added a cost-push impulse to domestic inflation, the Bank saw no reason to soften its monetary restrictions.

At the beginning of 1974, moreover, the civil service union (ÖTV) launched its long-delayed campaign to catch up with the large wage gains that industrial unions had achieved in preceding years. After weeks of extremely unpopular stoppages affecting local garbage collection and local transport, the bargaining cartel of federal, state, and local governments had to accept two-digit wage increases which, largely repeated in other industries, increased real wages by 8.1 percent and pushed the adjusted labor share of the gross national product to the postwar record level of 64.5 percent in 1974.¹²

In hindsight, however, these gains could not be counted as a union success. Like everybody else, union economists had misjudged the impact of the sudden tenfold increase in oil prices on inflation and domestic demand. Everywhere in Europe, therefore, wage increases adopted in 1973–1974 contributed to higher inflation and more unemployment than expected. In most countries, however, governments and central banks tried to stabilize employment through fiscal and monetary reflation. In Germany, similar efforts by the government were defeated by the Bundesbank's brutally restrictive monetary policy.¹³ In effect, consumer-price inflation, which had peaked at 7.3 percent in 1973, declined steadily from 7.0 percent in 1974 to 2.7 percent in 1978. Except for Switzerland, therefore, Germany was least affected by the OECD-wide rise in inflation in the second half of the 1970s (Scharpf 1991, chapter 7). But the price of the monetarist triumph was a steep economic decline: GDP growth declined from 4.3 percent in 1972 to –0.9 percent in 1975 (OECD 2017d). At the same time, the unemployment rate shot up from 0.9 percent in 1972 to 4 percent in 1975 – a level from which it would never again return to full employment (OECD 2017b).

The Bundesbank, however, had demonstrated both the destructive power of monetary contraction and its own determination to defend price stability at the expense of economic decline and rising unemployment; and it was able to transform this demon-

12 AMECO Database 2017; own calculations.

13 During most of 1972, the discount rate had been at 3 percent and the Lombard rate at 4 percent. After June 1, 1973, these rates were raised to 7 and 9 percent, respectively, and kept at that level until September 1974 – after which they were gradually reduced to prior levels starting in September 1975 (Deutsche Bundesbank, Zinsstatistik).

stration into the establishment of an informal but well-understood regime of asymmetric monetarist coordination. In it, the Bank would pre-announce annual targets for the growth of the money supply, which it defined with reference to the economy's potential for non-inflationary growth. This potential would be realized if public sector deficits and wage increases respected the monetary limits. But if these limits were ignored, monetary policy would fight inflation regardless of the anticipated rise in unemployment (Kloten, Ketterer, and Vollmer 1985, 390–95). By and large, this asymmetric regime – which had been elaborated by the Council of Economic Experts (Deutscher Bundestag 1976) – was accepted, or at least taken into account, by governments and unions from 1975 onward.¹⁴

As an immediate response, real unit labor costs in manufacturing declined by 0.3 percent in 1975, and even by 2.0 percent in 1976; and subsequently alternated between low annual increases and moderate declines until the end of the 1980s (OECD 1999). Similarly, the government's initial response was fiscal consolidation, followed by close coordination between the Cabinet and the Bank. And once it considered inflation to be under control, the Bank even accepted the government's commitment to the reflationary “locomotive” role that had been urged on Germany at the G7 Summit of 1978. But when, in the second oil price crisis, the deflationary response of Volcker's Federal Reserve generated a world-wide escalation of real interest rates, the Bundesbank chose to follow suit in order to avoid devaluation and another push to inflation¹⁵ – which brought about another deep recession, steeply rising unemployment, and the fall of Helmut Schmidt's relatively union-friendly social-liberal coalition government in 1982 (Scharpf 1991, chapter 7.6).

When there was no longer any hope for monetary or fiscal full employment policies, the metal workers' union (IG Metall) attempted to stop the decline of industrial employment through work sharing. Its 1984 campaign to reduce the standard working week from 40 to 35 hours without a wage reduction (!) provoked one of the fiercest industrial battles of the postwar decades. In the end, the average working week was in fact reduced to 38.5 hours over a period of three years. As was to be expected, the employment effects of the settlement were too small to be measurable (Seifert 1991).¹⁶ In compensa-

14 Since the Bank's “monetary targeting” was in fact shaping expectations, there is no point here in discussing the empirical and theoretical validity of its assumptions (Braun 2015).

15 In a review of Bundesbank policies in the 1970s and 1980, Baltensperger (1998, 484–87) explains the severity of monetary restraint in 1981 by the Bank's determination to wipe out the effect of its “mistake” in 1978, when it had accommodated the government's “locomotive” policy.

16 Scharpf (1991, 273–74): If the working week is reduced in small steps (for example, 30 minutes per year, as in the 1984 settlement achieved by IG Metall), potential employment effects will be absorbed by productivity-increasing changes in work organization. Large reductions, however, which would generate a need for additional workers (for example, 5 hours over a three-year period), would have negative aggregate employment effects, either through a steep rise in unit labor costs (if adopted with full wage compensation) or through a significant decline in domestic demand (if adopted without wage compensation). Thus, employment effects would depend on the willingness of the government to subsidize either the wage costs of employers

Table 1 Economic indicators 1969–1989

	DM exchange rate 1989 as % 1969	Cumulative consumer price inflation	Cumulative GDP growth	Change of total employment rates	Change of employment rates industry
Germany	0,00	79,73	54,75	-6,98	-24,37
Netherlands	-18,15	106,42	60,16	1,35	-28,33
Belgium	-39,05	123,95	63,82	-9,23	-42,38
France	-61,13	168,39	71,12	-9,90	-30,49
Sweden	-61,57	167,80	52,01	12,36	-18,32
United Kingdom	-67,16	202,63	58,42	1,76	-26,51
Italy	-78,09	237,76	71,81	-2,51	-26,76

Sources: Bundesbank; IMF (International Financial Statistics); World Bank (National Accounts); OECD (National Accounts and Annual Labour Force Statistics); own calculations.

tion, moreover, the union had to accept a more flexible working-time regime, whose management was to be left to local negotiations between plant-level management and works councils. The problematic implications of this settlement would come to the fore in the following decade.

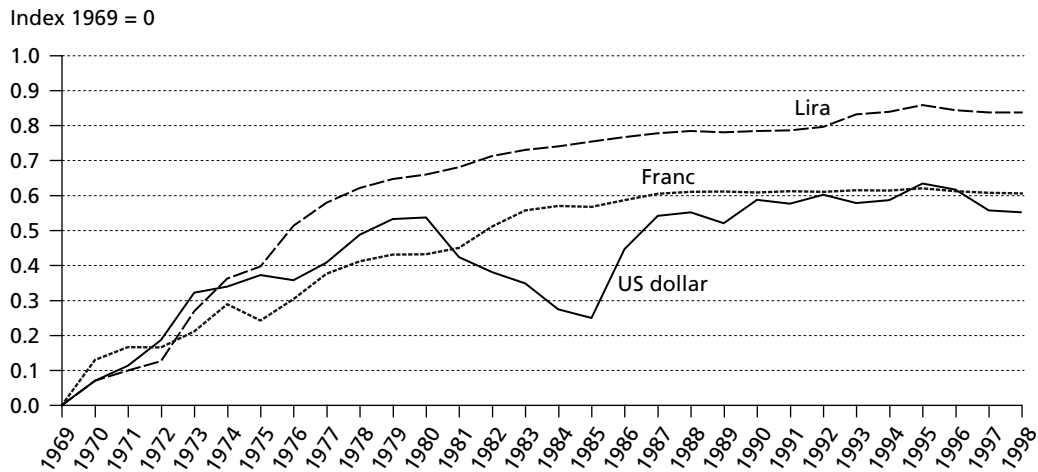
In the international context of floating exchange rates, the overall economic impact of the Bundesbank's uncompromising commitment to price stability was negative. It imposed continuous constraints on the growth of domestic demand and investment (Schettkat and Sun 2009). And whereas under Bretton Woods below-average inflation rates had improved the price competitiveness of German exports, now the dramatic rise of nominal exchange rates increased the competitiveness of imports and became a serious problem for exports. In the end, therefore, Germany could (and did) pride itself on having the hardest currency and the lowest rates of inflation, but in comparison with its European peers, it paid for this achievement with comparatively low economic growth and significant employment losses (Table 1).

Floating and exchange rate coordination

For the Bundesbank the move to floating currencies had meant that it could pursue its stability policy without having to fight against imported inflation. At the same time, the move was supported by monetarist theorists (for example, Friedman 1953) promising that it would remove the Bretton Woods problems of under- and over-valued currencies because floating exchange rates would reflect the “underlying fundamentals,” namely trade balances and differences in interest rates among economies. In the 1970s, however, such expectations failed dramatically in practice, and exchange rate volatility was also recognized in theory (cf. Carlin and Soskice 2015, chapter 9). The basic reason is that currencies are not only instruments of trans-border payment, but also highly liquid tradable assets and potential objects of speculation. But even if exchange rates

or the wage incomes of workers, which might be financed from the hoped-for decline in public expenditures on unemployment (Reissert, Scharpf, and Schettkat 1986).

Figure 4 Appreciation of DM exchange rate vis-à-vis the US dollar, the franc, and the lira after the end of Bretton Woods, 1969–1998



Sources: Bundesbank; own calculations.

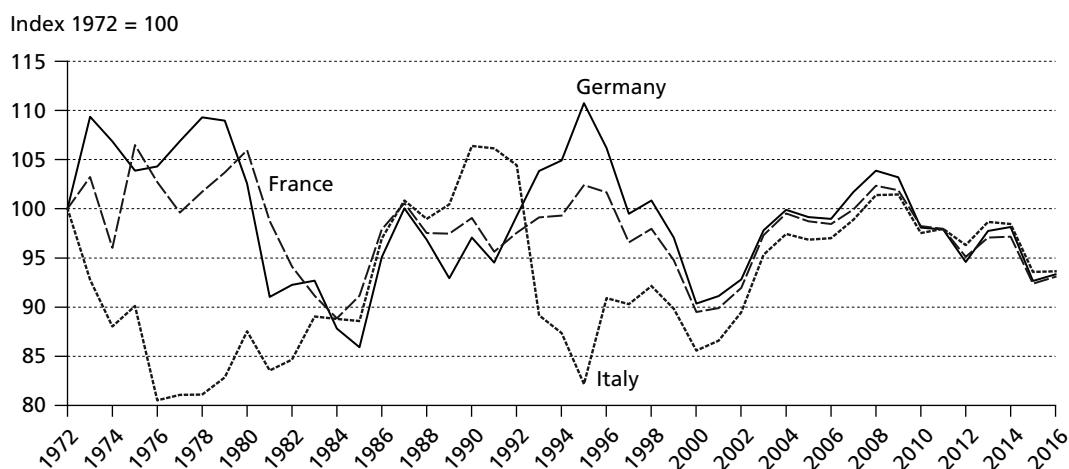
are not determined by trade balances, that does not invalidate the reverse implication: of course, international trade is affected by exchange rates, regardless of how they are determined (Figure 4).

When floating started in March 1973, the Deutsche Mark had already appreciated by 20 percent against the US dollar compared with 1969. Nevertheless, the exchange rate rose by another 30 percent until the end of the year, and continued to increase as the Bundesbank's monetary restraint began to take effect in 1974, whereas inflation rates elsewhere escalated. Inevitably, the dramatic divergence of nominal exchange rates would affect imports and exports, but their impact on effective demand would be moderated by the price-setting behavior of exporting and importing firms and, above all, by the inflation rates of the respective trading partners, which are reflected in the statistics on real effective exchange rates (REER; Darvas 2012).

If we take 1972, the last year before floating commenced, as a baseline for assessing subsequent changes in REER, it appears that the German currency was indeed overvalued throughout the 1970s in exchanges with the rest of the world, but also that it became significantly undervalued in the 1980s, when the US dollar appreciated dramatically as a consequence of the Fed's turn to extreme monetary constraint and of the return to a regime of pegged exchange rates among European economies in the European Monetary System (EMS; Figure 5).

In effect, therefore, the impact of rising nominal exchange rates on German exports was at least mitigated by the countervailing effects of lower inflation on the REER. Nevertheless, the social-liberal government, which had been willing to raise the Deutsche Mark exchange rate after 1969, was greatly concerned about the negative economic and employment effects of uncontrolled currency speculation. Hence, even before the of-

Figure 5 Real effective exchange rates against 67 trading partners, CPI-based; Germany, France, and Italy, 1972–2016



Source: Bruegel.

ficial end of Bretton Woods it sought to create some form of exchange rate coordination, at least in Europe. The “Snake in the Tunnel” of April 1972 was meant to organize a joint float of European currencies against the dollar, while limiting the bandwidth of fluctuations among the participating currencies. It broke down after 1974, when member economies were individually struggling with “stagflation” in the wake of the first oil price crisis (Johnson 1998; Hetzel 2002). In 1979, however, Helmut Schmidt and Giscard d’Estaing succeeded in launching the “European Monetary System” (EMS). At the core, it consisted of an Exchange Rate Mechanism (ERM), which obliged central banks to intervene in currency markets in order to keep their national currency within a bandwidth of plus or minus 2.25 percent in a network of agreed-upon bilateral exchange rates. If interventions failed, the deviant currency could be devaluated or revaluated by consensus (Ludlow 1982; Artis and Taylor 1993; Höpner and Spielau 2015).

In contrast to the Bretton Woods regime, the EMS was meant to be symmetric: all member states were to use monetary and fiscal policies to keep their own currency close to the agreed exchange rate, and central banks were obliged to intervene in exchange markets in support of a member currency approaching the upper or lower margins of its bandwidth. If these measures failed, a realignment of exchange rates could be adopted by consensus in the ECOFIN Council of the European Community. Initially, realignment was quite frequent, and there was a clear dividing line between hard-currency countries that would mostly, or in the case of Germany and the Netherlands always, revalue, on one hand, and soft-currency countries that would generally, or in the case of Italy always, devalue, on the other (see Table 1).

What seems more remarkable, at first sight, is the fact that among the total of 62 realignments over the life of the EMS, there was a majority of 36 instances of revaluation (Höpner and Spielau 2015, Table 1). In other words, adjustment was not imposed

exclusively on weak currencies, and the EMS at least initially did not seem to work as a regime designed to restore the advantages of an undervalued exchange rate for German industry. The reason is, again, the strong role of the Bundesbank: exchange rates were – at the Bank’s insistence (Tietmeyer 2005; Marsh 2009, 87–89) – defined bilaterally, rather than in relation to the European Currency Unit (ECU) representing a weighted basket of all currencies (which was merely used as a common *numeraire*). Under these rules, Frankfurt would have had to act whenever the DM exchange rate of a member currency was approaching the lower boundary of its bandwidth. In that case, it was supposed to use its monetary policy to weaken the international attractiveness of the Deutsche Mark and, if necessary, to intervene in the international markets in order to strengthen a weak currency. Obviously, both of these commitments would increase the domestic money supply, with direct effects on the rate of inflation – which the Bank was otherwise committed to avoiding.

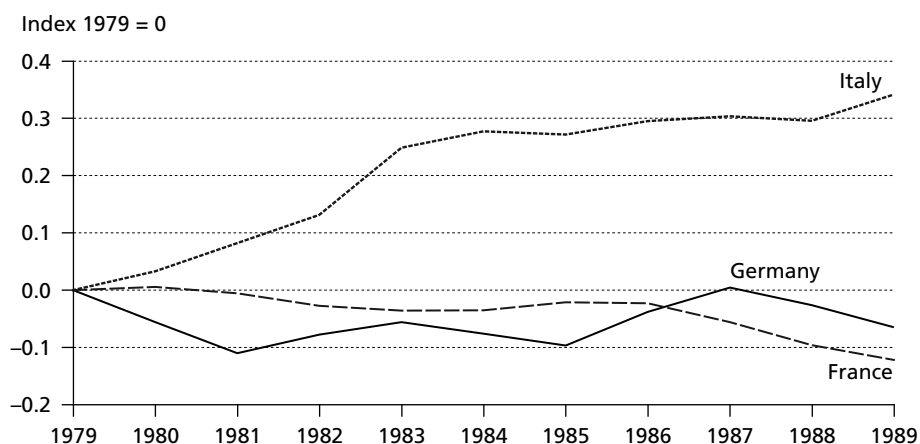
In other words, when confronted in practice with the theoretical Mundell Trilemma of currency regimes, according to which exchange-rate fixity, capital mobility, and autonomous monetary policy cannot be fully maintained at the same time (Mundell 1963; Fleming 1962; Carlin and Soskice 1990), the Bank had a clear preference for defending its autonomous commitment to price stability in the German economy. Thus, when Helmut Schmidt had come to Frankfurt to seek its public support for the EMS, the Bank insisted on the assurance (subsequently detailed in the [in]famous “Emminger letter”), that it would not have to violate its mandate to ensure domestic price stability (Marsh 2009, 88–89; Tietmeyer 2005, 79–80).

In effect, therefore, the EMS hardly affected German monetary policy (Tietmeyer 2005, 66–83). If imbalances could not be corrected through limited interventions, the Bank asked the government to renegotiate the exchange rates affected. Hence, though currency realignments were politically costly and had only been meant as a last recourse, they were remarkably frequent during the first eight years of the EMS. But since they were politically costly, they generally were delayed by antagonistic intergovernmental bargaining over who should devalue or revalue and by how much. Hence, even though revaluations were more frequent than devaluations in the currency realignments of the 1980s (Höpner and Spielau 2015), the German REER declined in intra-European exchanges after 1979 and remained somewhat under-valued until the end of the decade (Figure 6).

As a consequence, German exports benefited again from a somewhat undervalued currency in European exchanges.¹⁷ At the same time, however, the Bundesbank’s single-minded insistence on its monetary autonomy was a source of continuing tension among EMS member states. As the Deutsche Mark was the currency with the lowest rate

17 In the “Plaza Accord” of September 22, 1985, the central banks of Japan, Germany, France, and the United Kingdom had agreed to American demands to bring about a devaluation of the US dollar (Bergsten and Green 2016). Hence, the German REER rose more vis-à-vis the rest of the world after 1986 (see Figure 5).

Figure 6 Real effective exchange rates vis-à-vis EU-15, Germany, France, and Italy, 1979–1998



Sources: AMECO; own calculations.

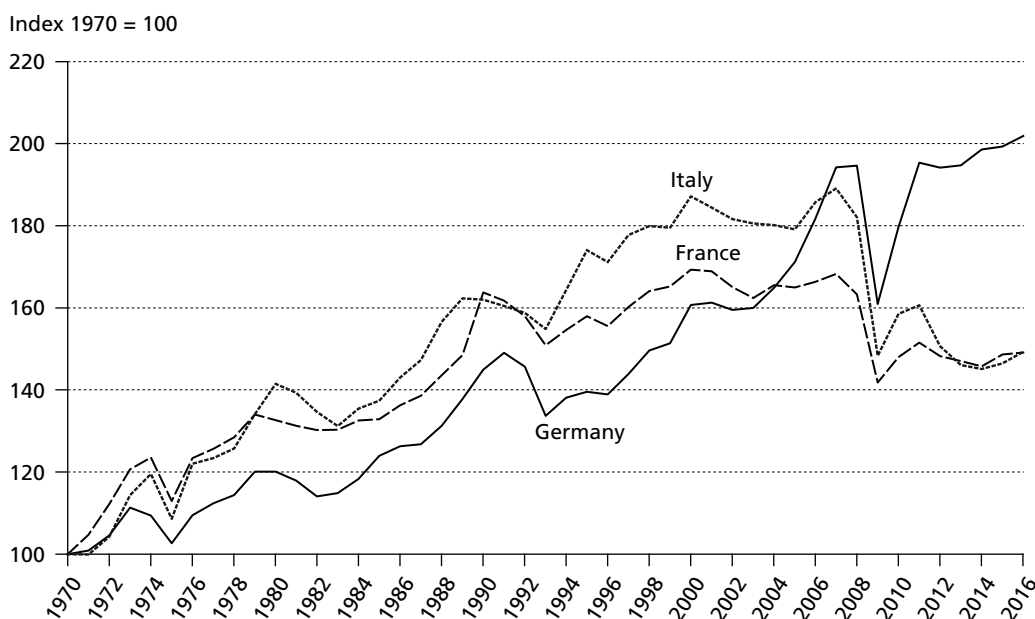
of inflation, other central banks would either have to mirror Frankfurt policy, regardless of conditions in their own economy, or demand another realignment of exchange rates. In the end, therefore, governments resenting their asymmetric dependence on the Bundesbank came to prefer Monetary Union, even though that meant losing all national control over monetary policy (Marsh 2009, 74–124).

In 1992, moreover, after the political decision to create a Monetary Union had already been taken, such misgivings were dramatically confirmed. As Helmut Kohl had initially hoped to deficit-finance the costs of German unification without tax increases, inflation had increased in 1991. The Bundesbank's draconian response, however, not only pushed unified Germany into a deep recession, but also had the effect of catapulting the United Kingdom and Italy out of the EMS and throwing Sweden into deep crisis (Marsh 2009, 148–81). That brought the EMS to a definite end, and if the eventual completion of the Monetary Union had initially been quite uncertain, the currency crisis of 1992 created a major political impetus toward its speedy realization (Padoa-Schioppa 2000).

Diversified quality production

In Germany, the relative decline of production and employment in the industrial sector had begun only after 1970 – later than in other industrial economies (see Figure 3). And while the volume of production did of course continue to increase, the rate of growth after 1970 was lower than in France and Italy, which is attributed primarily to the impact of the Bundesbank's rigorous stabilization policy on the domestic sector of the economy. There, high real interest rates had constrained consumer demand, investment, and employment (Schettkat and Sun 2009), while the overshooting nominal exchange rate had increased the price competitiveness of imports in the domestic market (Figure 7).

Figure 7 Growth of industrial production in Germany, France, and Italy, 1970–2016



Sources: OECD Main Economic Indicators; own calculations.

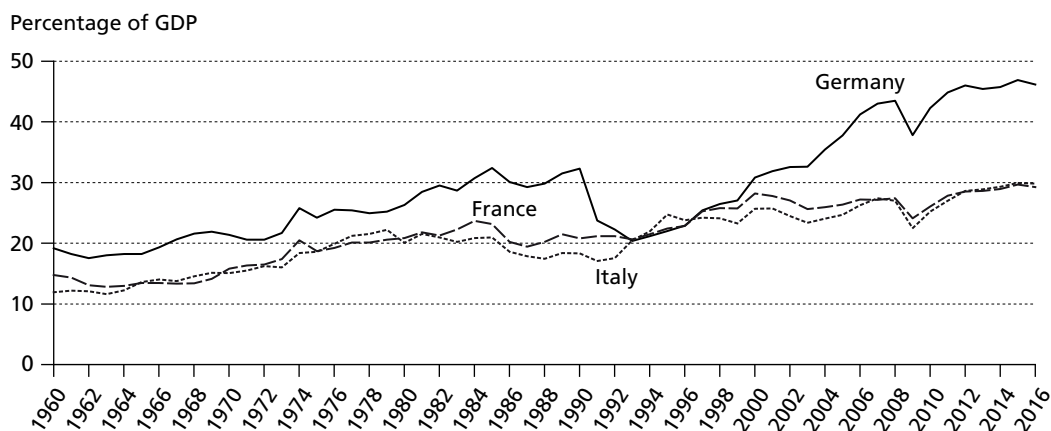
Given these domestic constraints, and the government's continuing free-trade position, the "flight into exports" was, perhaps, pre-ordained in the German industrial tradition. At any rate, export performance appears to have been remarkably unaffected by the sea change in the international currency regime from Bretton Woods to uncontrolled floating (Figure 8). Starting on the somewhat higher level that had been achieved by the end of the 1960s, the share of exports in GDP increased throughout the 1970s, roughly in parallel with the exports of other large European economies whose currencies had significantly devaluated against the Deutsche Mark, and whose labor costs in manufacturing were significantly lower (Vitols 1997).

Initially, this resilience of German exports benefited from the fact that, in contrast to Germany, the first response to the oil-price crisis of 1973–1974 had been monetary and fiscal reflation in most industrial countries. Another factor was the willingness of firms to defend their export markets by dampening the impact of rising exchange rates on export prices, at the expense of profits and investments (Scharpf 1991, 131). At the same time, however, German export industry also began to adjust to the loss of price competitiveness by "moving upmarket."

This move was facilitated by the comparative advantages of a strong engineering tradition, a highly skilled industrial labor force, generally cooperative labor relations on the firm level,¹⁸ and a large share of flexible and export-oriented small and medium-sized

18 By separating conflict-prone wage bargaining on the level of unions and employers' organizations from co-determination within firms, German industrial relations facilitated relatively

Figure 8 Exports of goods and services as a percentage of GDP in Germany, France, and Italy, 1960–2016



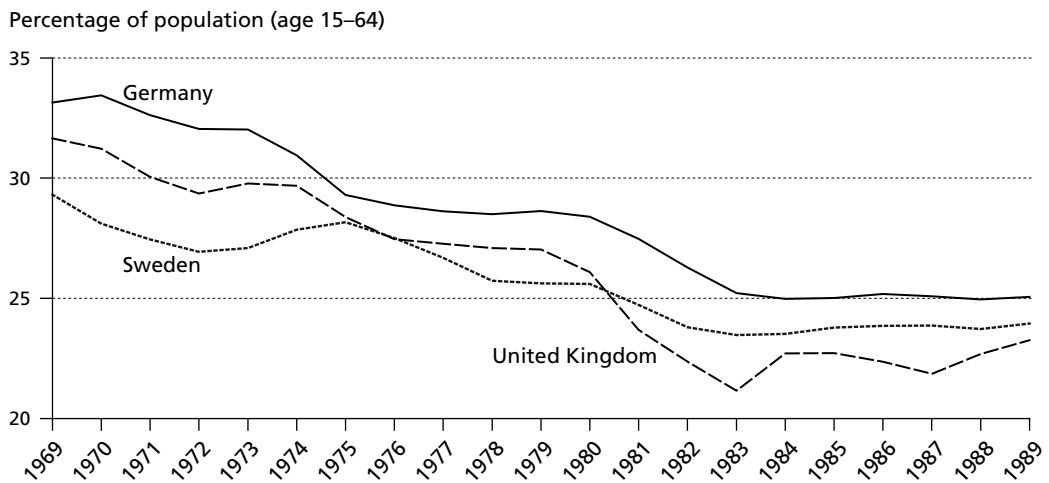
Sources: AMECO; own calculations. Data through 1990 refer to West Germany.

industrial firms in the economic structure (Bagnasco and Sabel 1995; Söllner 2014). Under these conditions, firms were able to seek or defend external markets by specializing in less price-sensitive product lines in investment goods and high-quality consumer durables. With the further benefit of computer-assisted flexibility in manufacturing processes, German industry moved from “Fordist” mass production to a profile of “diversified quality production” (Sorge and Streeck 1988; Streeck 1991; Sorge and Streeck 2016), which allowed high-wage German export industry to hold its own until the end of the 1980s, not only in Europe and the United States, but also in competition with lower-wage and increasingly competent South-East Asian competitors (Streeck 1997a).

At the same time, governments did their best to modernize and effectuate policies intended to stabilize the industry-based growth model. While Germany lacked a French-style coherent industrial policy, research and technology policy on the national level began to focus on product and process innovation in the industrial sector (Hauff and Scharpf 1975), governments at the *Land* level used the establishment of *Fachhochschulen* (engineering schools below university level) to provide practice-oriented academic education and R&D capacities, focusing on the specific opportunities and needs of small and medium-sized firms in specialized “industrial districts” (Piore and Sabel 1984; Allen 1989a; Herrigel 1993). Even though financial aid from the federal *Kreditanstalt für Wiederaufbau* (KfW) mattered in this context, effective programs were generally designed and implemented by “meso-corporatist” networks of local governments, business associations, regional banks, unions, and state-financed R&D and training institutions (Hull and Hjern 1982; Allen 1990; Vitols 1997; Herrigel 2000). In effect, therefore, public infrastructure policies and cooperative policy networks at the regional and local levels amounted to a kind of industrial policy that supported the specialization of Ger-

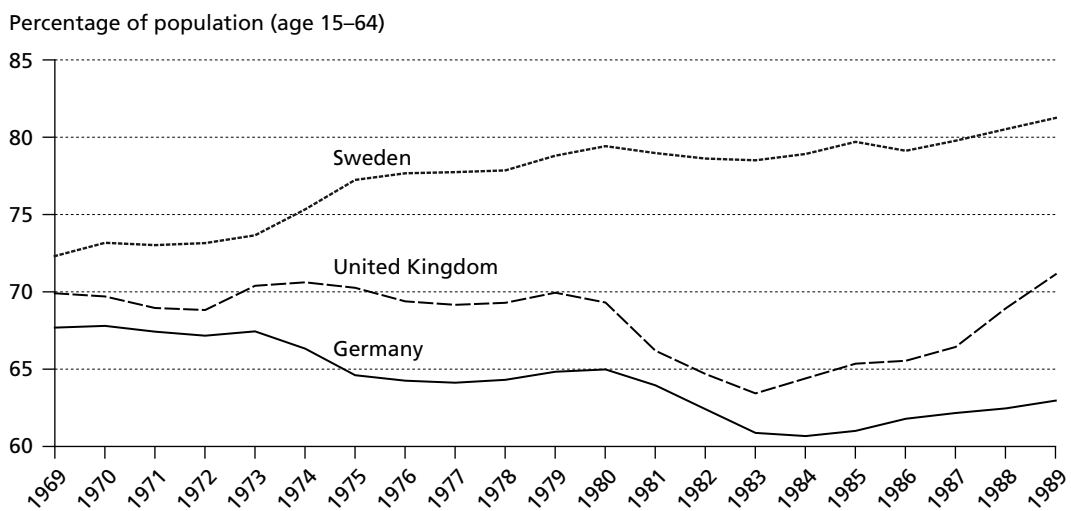
cooperative bargaining over work organization and working conditions at the level of management and works councils (Streeck 1984; 1997).

Figure 9 Industry employment rates as a percentage of population (age 15–64) in Germany, Sweden, and the United Kingdom, 1969–1989



Source: OECD Annual Labor Force Statistics; own calculations.

Figure 10 Total employment rates as a percentage of population (age 15–64) in Germany, Sweden, and the United Kingdom, 1969–1989



Sources: OECD Annual Labor Force Statistics; own calculations.

man industry in the less price-sensitive segments in the markets for investment goods and for “diversified-quality” consumer durables (Matzner and Streeck 1991; Streeck 1991). In combination, these efforts helped to maintain the international viability of German industry despite an overvalued currency. And the steady decline of employment was in fact halted in the second half of the 1980s (Figure 9).

But while all efforts were concentrated on defending the industrial sector, their relative success could not restore full employment in the economy. Instead, innovations in production technology and work organization and the higher skill requirements of diversified quality production had the effect of reducing employment opportunities for low-skill workers in German industry – and the rise of long-term (“structural”) unemployment¹⁹ points to the fact that these losses in industry were not compensated by a rise in employment elsewhere. And whereas overall employment also declined in France and Italy during the 1970s and 1980s, there were other European countries whose employment performance was much better (Figure 10).

And as will be seen, Germany’s dismal employment performance is due largely to specific constraints in the service sector.

How the welfare state is constraining the rise of the service economy

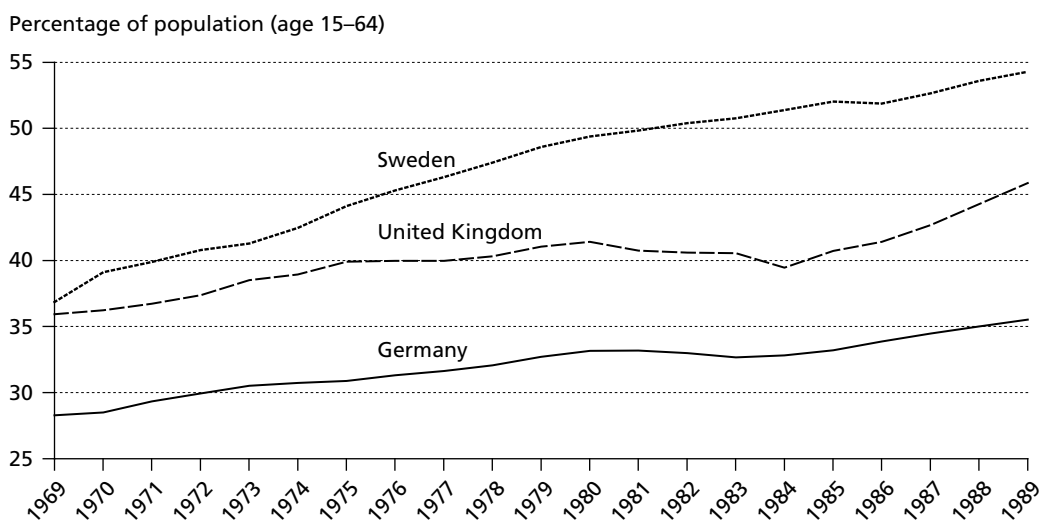
According to grand theories of post-industrial society (Bell 1973; Fourastié 1949), the secular shift of employment from agriculture to industry was expected to continue with the decline of industrial employment, which would be compensated for by the rise of the service economy. For a while, Germany appeared to be a deviant case, as industrial employment had held up until the end of the 1960s when it was already declining elsewhere. After 1970, however, it became clear that Germany had merely been a latecomer on the general trajectory of deindustrialization. And even though employment rates in German industry continued to be higher than elsewhere, they no longer sufficed to stabilize overall employment.

But whereas the decline of industry proceeded roughly at the same speed in advanced industrial economies, that was definitely not true of the predicted rise of the service economy. Though service employment increased everywhere, trajectories differed dramatically among advanced capitalist economies – and here Germany was among the extreme laggards (Figure 11).

In the comparative political economy of capitalist welfare states, the divergence of service employment is explained by structural differences between Scandinavian (or “Social Democratic”), Anglo-American (or “Liberal”), and Continental (or “Bismarckian”) welfare states (Scharpf 1986; Flora 1986; Esping-Andersen 1990; Alber and Gilbert 2010). In the lean Liberal welfare state, low tax burdens and unequal income distribution are associated with the growth of privately provided and privately financed services – suggesting that high-income households are creating jobs for low-wage service workers. In the high-tax Scandinavian welfare states, at the other extreme, state-provided services

19 The share of the long-term (>1 year) unemployed in total unemployment rose from 10 percent in 1975 to 31 percent in 1989 (Bundesanstalt für Arbeit 1976; 1990).

Figure 11 Employment rates in the service sector as a percentage of population (age 15–64) in Germany, Sweden, and the United Kingdom, 1969–1989



Sources: OECD Annual Labor Force Statistics; own calculations.

in education, health care, and social services for the young, the sick, the disabled, and the aged expanded rapidly after the 1960s.

By contrast, “Bismarckian” welfare states, including Germany, were still bound by their original model of work-based social insurance, with relatively generous and status-maintaining cash transfers for the “male breadwinner” and his family in cases of sickness, disability, and unemployment, and in retirement. At the same time, essential caring services for the young, the sick, and the aged were still being performed by mothers, wives, and daughters in the family. Hence, employment in publicly financed social services was as low, or even lower, than in the United States and the United Kingdom (Alber 1986; Scharpf 1986; Scharpf and Schmidt 2000; Palier and Martin 2008; Palier 2010).

But the relative generosity of social transfers and pensions presupposed long-term and full-time employment. Hence, the system was poorly designed for a decline in standard employment and for a rise in unstable work histories, insecure self-employment – and for family patterns that no longer conformed to the stable breadwinner model. In short, under the impact of economic crises and societal changes from the 1970s onward, the part of the population that was well-served by the German welfare state was shrinking. At the same time, efforts to extend its coverage in the face of declining industrial employment without changing its insurance-based source of finance had the perverse effect of undermining the growth of non-industrial employment opportunities (Manow and Seils 2000).

From the 1970s onward, labor market policy, as well as unemployment and pension insurance, were used to soften job losses in the industrial sector and to limit their politically salient impact on unemployment statistics. Thus, the number of “guest workers” was cut back after 1974. Beyond that, the labor supply was reduced through early and

flexible retirement – options that had been introduced before the crisis but were further extended in response to the common interests of employers and unions in avoiding mass layoffs. They facilitated *sozialverträgliche* (socially acceptable) exit options for older workers by combining a period of employer-subsidized unemployment at 59 (later at 57) and early retirement at 60, with full pension claims. As a consequence, the decline of overall employment was only partly reflected by the rise of registered unemployment.²⁰ As the conditions of German fiscal federalism made it difficult to finance this generosity through tax increases, the burden fell mainly on social insurance contributions, which were rising continuously, from 11.1 percent of GDP in 1970 to 15.6 percent in 1985 (IW 2013, Table 7.1).

These contributions – to unemployment insurance, disability insurance, health insurance, long-term care insurance, and pension insurance – are generally paid on a parity basis by employers and workers. Unlike income taxes, however, they have no lower threshold (but an upper cut-off), the schedule is proportional, and the overall incidence is regressive. In the OECD series on “Taxing Wages,” therefore, Germany was then (and still is) listed among the countries with the highest “tax wedge” on low wage incomes (OECD 2017e). At the lower end of the wage scale, the burden is twice as high as it is in liberal Anglo-American states or in Switzerland, and it is nearly as high as it is in social-democratic Sweden. In combination with the reservation wages provided by the relatively generous level of wage-related unemployment benefits, therefore, this tax wedge had the effect of pricing low-skilled work out of the private market, not only in industry but also in services.

In Sweden, of course, most services were provided in the public sector, whereas the German employment rate in the public sector was even lower than it was in the United States. At the same time, however, German employment in private-sector services was as low as it was in Sweden (Scharpf 1986). As a consequence, long-term and “structural” unemployment continued to rise as low-skilled workers were squeezed out of skill-intensive industrial employment and found no place either in the public or in the private sector of the German service economy. In other words, in contrast to both Social Democratic and Liberal welfare states, Germany and similar Bismarckian systems were on the way to providing “welfare without work” (Hemerijck et al. 2000; Scharpf 1997; 2000).

20 The appropriate measure would have been the rise of the “inactivity rate,” defined as the percentage of the working-age population relying on income-replacing public transfers (Hemerijck, Manow, and van Kersbergen 2000; Hemerijck and Schludi 2000), which, however, was neither reported in the official statistics nor an issue in public debate.

The German model at the end of the 1980s

Remarkably, however, neither Helmut Schmidt's social-liberal government nor that of Helmut Kohl, his conservative-liberal successor after 1982, made the structural reform of an increasingly dysfunctional and unsustainable welfare state a political priority. Instead, political and public attention remained focused on strengthening the competitiveness of German industry under hard-currency conditions. And from this perspective, Germany appeared to be relatively successful. For export industries, the EMS of the late 1980s was better than the excessive exchange rate swings of the 1970s; and after the successful transition to diversified quality production, the slow rise of industrial exports continued despite the constraints of an overvalued currency and the high wages of a skilled labor force. Hence, as the decline of industrial employment flattened out in the mid-1980s while employment in services continued its slow increase, even the very low overall employment rate began to rise a little again (see Figure 10).

At the end of the 1980s, therefore, the German model appeared to be in relatively good shape. In comparison with other advanced economies, the industrial sector had not declined as deeply and seemed to have achieved a stable course. In the absence of a low-wage sector, wage equality was nearly as good as in Sweden, and much better than in Anglo-Saxon economies.²¹ And in comparison with the supply-side radicalism of Thatcher and Reagan, the moderate liberalization policies adopted by the conservative-liberal Kohl government under the multiple-veto constraints of German federalism also did not appear to challenge the political, economic, and social institutions of the German model (Lehmbruch et al. 1988; Zohlnhöfer 2001). In retrospect, therefore, the end of the 1980s could indeed be seen as a period when "German capitalism" and its institutions of an internationally competitive, stability-oriented, cooperative, and fairly egalitarian "social market economy" appeared more attractive in socio-economic terms than most other advanced capitalist political economies (Streeck 1997a; Iversen and Wren 1998; Kenworthy 2004). Basic reforms of the welfare state, however, were not on the political agenda.

21 Comparative OECD data are available only from the mid-1990s onward, when wage inequality was already increasing in Germany. By that time, the dispersion of hourly full-time wages (D5/D1, D9/D1 and D5/D1) in Germany was higher than in Sweden, but lower than in the United Kingdom, and much lower than in the United States: OECD Employment Database – Earnings and Wages. http://stats.oecd.org/Index.aspx?DatasetCode=DEC_I#.

4 The German model in the 1990s: Unification and the rise of global capitalism

In 1985, the European Community's "Single-Market" program had included the free movement of capital among the "economic liberties" guaranteed by the EC Treaty, and the Commission began to promote its "one-market-one-money" vision of further economic integration. On its recommendation, the Hannover Summit of June 1988 then installed a committee to study monetary integration which, chaired by Jacques Delors, included the governors of all EC central banks. In its "Delors Report" of April 1989, this committee unanimously recommended the creation of a European Monetary Union in three stages, the first of which would remove all obstacles to free capital movement by 1994. And in June 1989 (that is, before the fall of the Berlin Wall), the Madrid Council agreed to initiate the first stage in July 1990. At this point, however, the ultimate German agreement was still uncertain. The Bundesbank resented the loss of its autonomy; public opinion was attached to the "strong D-Mark [DM]"; and the Kohl government thought that a (still unspecified) "Political Union" ought to precede Monetary Union. But all of these misgivings were soon pushed aside by the explosive transformation of the political and economic context ignited by the fall of the Berlin Wall on November 9, 1989. Among its most immediate effects was Helmut Kohl's acceptance of French demands for a Monetary Union in order to calm apprehensions over the economic and political dominance of a united Germany, and to demonstrate its continuing commitment to deeper European integration (Katzenstein 1997; Tietmeyer 2005, 130–41). But before that was going to happen, the German model had to face its own challenges.

The costs of unification

In Germany, unification began with the creation of a German monetary union on July 1, 1990, and it was formally completed on October 3, 1990 on the basis of a bilateral Treaty (embedded in an international "Two-plus-Four Treaty") that incorporated the GDR into the constitutional, institutional, and legal structure of the Federal Republic of Germany. Though the GDR currency had traded at an exchange rate of 10:1 to the West German Deutsche Mark, East German cash holdings, wages, and rental payments were converted at a rate of 1:1 and larger bank accounts at the rate of 2:1. Moreover, institutional incorporation meant that East Germans were included in the West German social insurance system (counting working years in the East as fictitious contribution years), and that West German unions and employers' associations would organize industrial relations and collective bargaining in (soon to be privatized) East German industries.

In contrast to countries such as the Czech Republic, Slovakia, Poland, and Hungary, which had adopted competitive exchange rates, one effect of the German monetary union was the radical deindustrialization of East Germany, where formerly viable firms lost their markets in COMECON countries, while they had no products that could

compete on quality and at DM-denoted prices in Western markets (Sinn and Sinn 1994). Another economic effect of the generous conversion rate and social transfers was a steep rise in East German consumer demand for Western products and a short boom in the West German economy, generating high wage increases and a rise in inflation from 2.6 percent in 1990 to 5.1 percent in 1992. And as the public-sector costs of unification were initially credit-financed, state deficits escalated from zero in 1989 to –3.5 percent of GDP in 1994. At that point, the Bundesbank, whose objections to the conversion rate had been overruled by Kohl (Streit 1998), demonstrated once more the power that it would soon lose: it raised the discount rate from 4 percent in 1989 to 8.75 percent in 1992 (Bundesbank Zinsstatistik), producing a deep post-unification recession in 1993 and a decline in inflation rates from 5.1 percent in 1992 to 1.8 percent by 1995. That the Bank’s “last hurrah” also destroyed the EMS could be ignored as collateral damage in view of the fact that by signing the Maastricht Treaty, governments had already initiated the transition to the Monetary Union.

For the political economy of German capitalism and its welfare state, the rest of the 1990s was a dismal period. Kohl’s initial plan to deficit-finance the costs of unification (which he expected to be soon made up by catch-up growth) had been frustrated by the intervention of the Bundesbank. With recession in the west of Germany and the collapse of industry in the east, unemployment and early retirement soared. And since the main costs were borne by the unemployment and pension insurance systems, non-wage labor costs in western Germany rose once again from 15 percent of GDP in 1990 to 18.2 percent in 1997 (IW 2013, Table 7.1). At the same time, the political commitment to east–west economic and social equality was pursued through massive subsidies to private investors, huge investments in public infrastructure, and large fiscal transfers supporting governing functions in the east. These were, and still are, paid for by a surcharge on income and corporate taxes and by a fundamental west–east shift of both public investment programs and the fiscal equalization system of German federalism – contributing to the erosion of public infrastructure and public services in the less prosperous west German regions and cities. Altogether, the volume of west–east transfers is estimated to have amounted to 3–4 percent of GDP annually over the past quarter century (Streeck and Elsässer 2016, Table 4); nevertheless (and in spite of massive out-migration), GDP per capita in the east has barely exceeded two-thirds of the West German level (Table 2).

Table 2 GDP per capita in West and East Germany

		1991	2015
GDP per capita	East (in euros)	7,342	26,453
	West (in euros)	22,687	39,270
Share	GDP p.c. East in % West	32,36	67,36

Sources: Bundesministerium für Wirtschaft und Energie; own calculations.

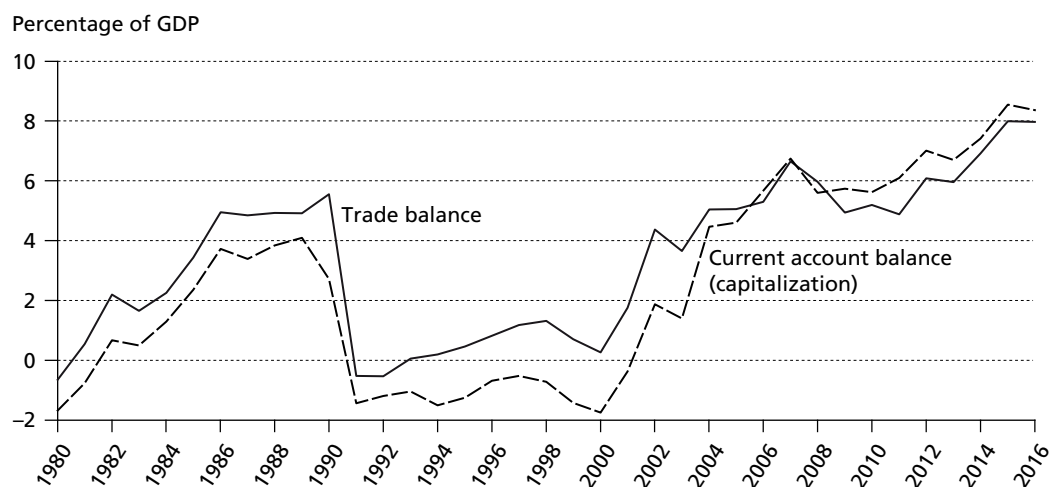
Altogether, unification combined with the effect of an aging population imposed a heavy burden on the economic viability of a Bismarckian welfare state with a structural dependence on shrinking industrial employment. But even though these deficits were widely recognized and debated, the characteristic immobilism of a semi-sovereign state (Katzenstein 1997) and a multiple-veto political system (Scharpf 1988; M. Schmidt 2003) prevented any serious attempt at structural reforms in the remaining years of the Kohl government – which then was defeated by Schröder’s red–green coalition in the election of 1998. But if unification had greatly increased the financial burdens on West German tax payers and wage earners, the fall of the Iron Curtain also expanded the external opportunities of German industry and weakened the trade union position in the internal power balance of German industrial relations.

The fall of the Iron Curtain: A major boost for German export industries

As a consequence of unification and the additional consumer demand from eastern Germany, external balances, which had been positive for West Germany until 1989, turned negative in the early 1990s.

Similarly, statistics on the export share of GDP recorded a dramatic decline (Figure 12), which is explained not only by the greater GDP numerator but also by the larger domestic demand for industrial products. After the mid-1990s, however, the export share increased again. It rose on a much steeper trajectory to a much higher level than had been achieved before 1989, and it now also exceeded the export shares achieved by France and Italy (see Figure 8). At the same time, however, employment in industry declined again.

Figure 12 German trade balance and current account balance as a percentage of GDP, 1980–2016



Sources: OECD Annual National Accounts and Main Economic Indicator; own calculations. Data through 1990 refer to West Germany.

The steep rise of German exports after the mid-1990s was due largely to the opening up of Central and Eastern Europe, Russia, and China to capitalist investment and consumption after the fall of the Iron Curtain. It boosted worldwide demand for exactly those investment goods and upmarket consumer durables on which German exports had come to specialize in previous decades. And though it also empowered new competitors, what mattered even more was the expectation that former COMECON states such as Poland, the Czech Republic, Slovakia, and Hungary would before long be candidates for EU membership – with positive effects on infrastructure, “good governance,” and investment security. These were regions in Germany’s neighborhood with industrial traditions, historically linked to Germany and Austria, and with a skilled industrial labor force whose wages (in contrast to those in East Germany) were extremely low as a consequence of realistically defined exchange rates. On a much broader scale than had been possible in the Basque and Catalan industrial districts after Spain joined the European Community, therefore, high-wage German industry was able to benefit from outsourcing parts of high-quality production to low-wage locations close to home (Egger and Egger 2003; Marin 2006; Geishecker 2006). Though it was an exaggeration to ascribe German export success to the emergence of a “Bazaar economy” (Sinn 2005; 2006; Dustmann et al. 2014), it was indeed true that the import content in German manufacturing exports increased steeply, from 17.5 percent in 1995 to 29.5 percent before the onset of the “Great Recession” in 2008 (OECD-WTO 2015). And much of this increase was due to the steep rise – from 4 percent of GDP in 1990 to 11.7 percent in 2000 (IW 2011, Table 4.2) – of imports from Central and Eastern European countries, where the hourly wages of skilled industrial workers were a fraction of German union wages.²² In effect, this meant that by outsourcing to nearby industrial locations, firms that had only been able to compete on quality when they were limited to producing in high-wage Germany, were now able to compete on price as well. As a consequence, the share of exports in GDP began to soar higher than in other large European economies after 1993 – and it has in the meantime risen to a level that had previously been attained only by “small open economies.”

Industrial relations under stress

Just as exports began to soar, however, the employment rate in industry, which had leveled out in the 1980s, began to decline again after a brief post-unification spike before East German industry was dismantled (see Figure 13). This seeming paradox is closely related to fundamental changes in the power balance of German industrial relations.

22 Even in 2000, average hourly labor costs amounted to 24.6 euros in Germany, but only 4.2 euros in Poland, 3.7 euros in the Czech Republic, 3.6 euros in Hungary, and 2.8 euros in Slovakia (Myant 2016, Table 3).

Figure 13 Exports and employment in German industry as a percentage of GDP, 1980–2015

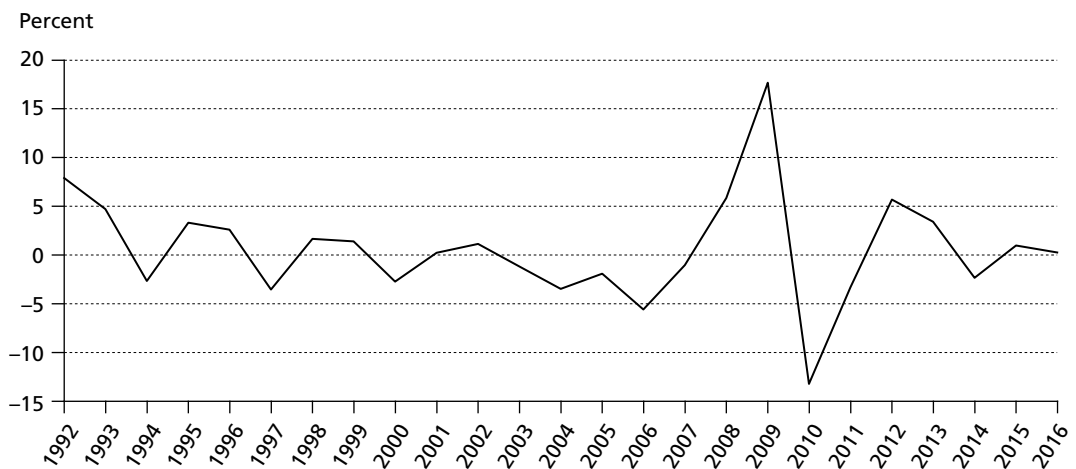


Sources: OECD Annual Labor Force Statistics for Employment data [ISIC Rev. 3, C-F]; OECD Annual National Accounts for Export data; own calculations. Data through 1990 refer to West Germany.

The patterns of “antagonistic cooperation” that had characterized post-war German capitalism and its “social partnership” (Streeck 1984; 1997) had arisen under conditions in which German firms had to produce in Germany in order to make a profit. Its basis had been a shared awareness, despite continuing distributional conflicts, of the common interest of capital, labor, and the state in the viability of industrial production in Germany. For industrial workers and their unions, however, the 1990s were marked by a massive loss of bargaining power in capital–labor relations in general and in wage-setting processes in particular (Baccaro and Howell 2017).

Traditional patterns of cooperative corporate governance were being transformed by the shift from “patient” local bank credit to internationally mobile equity in corporate finance, and by the concomitant rise of the shareholder value orientation in management practice (Höpner 2003), which was intensified by EU case law and legislation maximizing capital mobility and shareholder control (Werner 2013). In effect, therefore, increasing “financialization” loosened the commitment to local production on the capital side of industry. At the same time, the coverage of collective-bargaining agreements was eroding as hard-pressed smaller enterprises left employers’ associations, which, in their view, were dominated by large firms that accepted higher wage settlements to ensure uninterrupted export production (Hassel and Rehder 2001). In order to stem the organizational erosion, therefore, employers’ associations demanded, and unions accepted, opening clauses in collective-bargaining contracts which, building upon the 1984 decentralization of working-time regimes, as mentioned above, allowed plant-level agreements between management and works councils that departed from general collectively defined rules (Hassel 1999).

Figure 14 Annual changes in unit labor costs in the German manufacturing sector, 1992–2016



Source: OECD Productivity Statistics, own calculations; manufacturing data according to ISIC Rev. 4, C.

To appreciate their full importance, however, these institutional changes must be seen in the context of the anticipated Eastern enlargement of the EU, which made the relocation of production a much more practicable management option than it had been before the mid-1990s. Once a company had set up a joint venture or a subsidiary in Eastern Europe, shifting future investment and production became routine practices. In fact, some multinational auto-makers came to allocate new investments on the basis of formal competition among the managers and works councils of their multiple European subsidiaries, which also took the subsidies and concessions of national, regional, and local governments into account. And whereas investments to improve market access in Asia and America might also help to protect jobs at home, cost-driven relocations within the European Union, which became practicable even for small and medium-sized enterprises, implied unmitigated job losses locally. In other words, the commitment to local production, which had been the basis of the “antagonistic cooperation” between capital, labor, and the state in the post-war German model, was loosened not only for financial capital, but also for real capital (Streeck 2016).

As jobs were moved into the near-abroad of traditional industrial regions, where skilled work was available at a fraction of (West) German wages, and as many more jobs were then credibly threatened by such relocation, industrial unions were no longer able to prevent concession bargaining by works councils trying to defend local employment (Hassel 1999; Rehder 2003). Whereas collective agreements did still achieve modest real-wage increases, these settlements were no longer able to control wage setting in the industry as a whole. And even in firms still covered by collective bargaining, plant-level “alliances for jobs” proliferated as works councils negotiated about productivity-increasing changes in work organization, working-time schemes, overtime rules, and increasingly also about wage concessions that might help to avoid or reduce relocation, outsourcing, and layoffs (Rehder 2003). As a consequence, unit labor costs in manufac-

turing, which in the post-unification boom had risen by 7.9 percent from 1991 to 1992, declined by 2.7 percent from 1993 to 1994, and again by 3.6 percent from 1996 to 1997, and hardly rose again until the end of the decade (Figure 14).

In the (Keynesian) macroeconomic literature, these data are presently taken as evidence of a strategic shift on the part of German industrial unions: instead of continuing to seek increases in incomes and domestic demand, they are seen to be employing wage restraint in the context of a “mercantilist” strategy intended to maximize export-led economic and employment growth at the expense of Germany’s European competitors (Flassbeck and Spiecker 2011; Flassbeck and Lapavistas 2013; Bofinger 2015; Baccaro and Benassi 2016). In light of these discussions, it should be pointed out, however, how little recent outcomes have in common with the role of union wage restraint in the context of Keynesian theories of macroeconomic coordination in the 1960s and 1970s (Scharpf 1991, chapter 9).

Wage restraint: An effect of union power or union weakness?

In Keynesian theories, voluntary union wage restraint was seen as the most effective instrument for preventing wage-push inflation in an expanding economy where (left-of-center) governments would prefer to achieve or maintain full employment. Because rising inflation could either force governments to abandon full-employment policies or provoke a German-type independent central bank to impose unemployment-generating monetary restraint, wage-push inflation would violate the collective self-interest of the labor movement. It was nevertheless to be expected as a consequence of union competition or of wage drift in firms competing for skilled workers. To avoid these collective-action problems, unions – and also employers’ associations – depended on powerful (hierarchical or coordinative) institutional capacities to control wage increases at the local level (Calmfors and Driffil 1988; Calmfors 1993; Scharpf 1991).

In Germany, after the end of the short post-unification boom, however, the problem was not wage-push inflation, but declining industrial employment. And its perceived cause was not a lack of aggregate domestic demand but rather rampant disinvestment in east Germany and job losses caused by outsourcing and the relocation of production to Central and Eastern Europe. In the institutional framework of codetermination at the company and plant levels, moreover, union leaders and works councilors were fully able to assess the credibility and severity of these threats. If industrial unions had nevertheless been able to adopt and enforce wage settlements that amounted to demand reflation, they would have accelerated the loss of jobs that were threatened by relocation.

In fact, industrial unions and employers’ associations were no longer in full control. The institutional changes introduced in 1984 (see Section 3 above) had extended the domain of firm-level bargaining over productivity-increasing working-time regimes

and working conditions. In the 1990s, however, decentralized bargaining also came to involve wage concessions in firms that had realistic options and plans to relocate production. As a consequence, wage rates defined by collective agreements for the industry as a whole were increasingly undercut by local agreements, which unions and employers' associations were willing to legalize through face-saving "opening clauses." In effect, therefore, negative wage drift – that is, de facto wages below the increases defined by collective agreements – prevailed throughout the 1990s (Bundesbank 1997, 21; IW 2016). In this multi-level constellation, it still mattered that default outcomes were defined by collective-bargaining contracts and that unions might veto local agreements to avoid a race to the bottom. But it was not within their power to enforce higher effective wages by preventing local concession bargaining to save jobs threatened by relocation.

The German model at the end of the 1990s

At the end of the decade, German export industries were internationally more successful than before. The fall of the Iron Curtain had increased global demand for the specialized production profile of German industry in the Eastern European and Asian economies that were now joining the capitalist world markets. At the same time, the removal of economic boundaries with Central and Eastern Europe provided German firms with new options to increase their price competitiveness by including low-wage producers in Central and Eastern Europe in their production chain. Conversely, labor's bargaining power in German industry was undermined by increasing competition among locations of production at the same time as it was reduced by increasing capital mobility and the rise of shareholder orientation in corporate governance (Streeck 1997a; 2009; Baccaro and Howell 2011; 2017). Worse yet, the unreformed welfare state was now in danger of collapsing under the impact of escalating expenditures on post-unification unemployment and early retirement, while high non-wage labor costs continued to impede the rise of private services (Scharpf 2000; Trampusch 2009). In other words, the German political economy was in very bad shape at the start of the European Monetary Union in 1999.

5 The German model: Challenged and then rewarded by monetary union

The Monetary Union eventually came to serve German export interests (Iversen, Soskice, and Hope 2016), but these interests had played hardly any role in its adoption. The Delors Commission had promoted it as the economically necessary complement of the Community's 1985 commitment to create a single market for goods, services, and capital by 1992, while the political impetus had come from the French government. On the German side, industry and industrial unions were generally in favor of exchange-rate stability but saw no urgent need to go beyond the EMS. Moreover, the move to monetary

union was resisted by the Bundesbank, which resented the loss of its hegemonic role in the EMS, and immensely unpopular in a country where “D-Mark [DM] nationalism” had been interpreted as the core of an otherwise deeply troubled sense of collective identity (Habermas 1990; Roth, Jonung, and Nowak-Lehmann 2016).

For Helmut Kohl, however, creating and joining the euro was an essential price to be paid for German unification in the context of European integration. And in order to persuade the Bundesbank and German voters that the future euro would not be infected by the soft-currency habits of Southern member states, the government insisted on rules in the Maastricht Treaty that would constitutionalize the political independence and stability orientation of the European Central Bank (ECB). Moreover, tough convergence criteria were designed to prevent the accession of doubtful candidates. And when it appeared that through heroic political efforts some unlikely states would nevertheless be able to meet these conditions, the Kohl government insisted on an additional “Stability Pact” to define permanent rules limiting public-sector deficits and public-sector debt. These were justified mainly with the argument that excessive national deficits would have external effects fueling inflation in the eurozone, which would either induce the ECB to weaken its commitment to price stability or force it to respond with massive monetary retrenchment that would also hurt other member economies (Tietmeyer 2005, 228–32; Heipertz and Verdun 2010, 71–73).²³

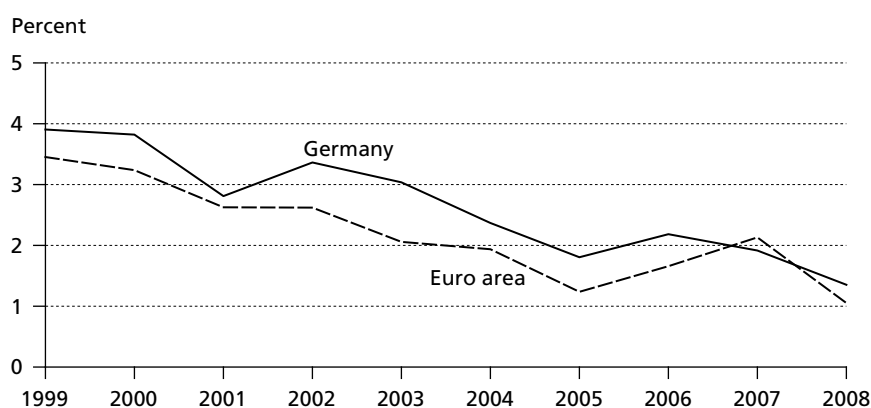
Germany’s euro crisis and welfare-state reforms, 1999–2008

When Germany entered the EMU, its economy had just begun to recover from the post-unification recession, and its DM/euro conversion rate of 2:1 was somewhat overvalued. And because its inflation rate was still the lowest, the uniform ECB monetary policy targeted to the eurozone average was overly restrictive. Moreover, as the single currency had eliminated exchange rate risks, nominal interest rates in the eurozone converged on previously lower German levels, whereas the German economy was now struggling with the highest real interest rates (Figure 15). These contributed to turning the weak recovery of the late 1990s into another recession – which then indeed justified labeling Germany the “sick man of the euro.”²⁴

23 Though this world view was not generally shared in Europe (Brunnermeier, James, and Landau 2016), the exceptional bargaining power of the Kohl government, representing a reluctant German public, had prevailed at the political level (McNamara 1998). Internationally, however, some monetary experts supporting the common currency were not convinced of the need to complement the centralization of monetary and exchange rate policy with additional central controls over national budgets. In their view, fiscal discipline would have been sufficiently ensured by the integrated capital market of a monetary union, where individual member states “would be treated according to their creditworthiness” (Padoa-Schioppa 2000, 103–4) – a view which was recently reasserted (Sandbu 2015).

24 <http://www.economist.com/node/209559>.

Figure 15 Annual average of real interest rates in the Euro area and Germany, 1999–2008



Sources: OECD Main Economic Indicators; own calculations.

As unemployment escalated to reach its post-war peak of 11.3 percent in 2005, social expenditures increased and revenues fell, also as a consequence of tax cuts. Hence, public-sector deficits rose to 3.65 percent of GDP in 2002 and to 4.03 percent in 2003. In other words, under the red–green Schröder government, Germany violated the Stability Pact’s deficit limit of 3 percent of GDP,²⁵ on which its conservative-liberal predecessor government had insisted. This might have been an opportunity to challenge the “stupidity” (Fuller and International Herald Tribune 2002) of rules which, in order to ensure price stability in the eurozone, would impose fiscal austerity on the country with the lowest inflation rate. But instead of fighting the Pact on grounds of common-sense economics, Schröder preferred to fudge the issue by using German and French bargaining power in the Council to stop enforcement by the Commission. However, he nevertheless committed the government to reducing the deficit as fast as possible (Heipertz and Verdun 2010).²⁶

In effect, therefore, Schröder agreed to work under the constraints of a monetary union that did not allow a demand-side response, either through monetary or through fiscal reflation, to the German recession of 2002–2005. Moreover, and in line with the perspectives expressed in the (in)famous “Schröder-Blair paper” (1999), the red–green

25 There was also an element of unintended deficit spending. In June 1999 and under the pressure of international tax competition, the incoming red–green government had introduced plans to reduce taxes on corporate profits while maintaining higher tax rates for personal incomes. Net revenue losses were estimated at about 3 billion euros. But the constitutionality of different tax rates for corporate and personal incomes was challenged in court, and in the Bundesrat, tax legislation depended on the agreement of governments controlled by the conservative–liberal opposition parties. Thus, when the tax reform was finally passed in July 2000, net revenue losses had risen to 32 billion euro annually by 2002 (Ganghof 2004, 98–122).

26 This episode, incidentally, allowed the Commission, the European Parliament, and the ECB to castigate Germany for bringing about the subsequent euro crisis by undermining the credibility of the Stability Pact; it was also used by the present German government to justify the Fiscal Pact and the hardening of “excessive deficit” rules.

government had already adopted supply-side policies in the financial sector by liberalizing banking rules, which then contributed to the banking crisis of 2008 (Zohlnhöfer 2004; Dyson and Padgett 2006). It also tried to stimulate profit-led economic growth through tax cuts on corporate profits and capital incomes and through the elimination of capital gains taxes for banks selling their industrial holdings, which then destroyed the inter-corporate networks that had been considered the source of strength of “Germany Inc.” (Meyer-Larsen 1999; Höpner and Krempel 2004; Krempel 2010).

The main thrust of red–green supply-side policies, however, was directed at the labor market and the long-overdue reform of the increasingly dysfunctional German welfare state. The focus of these reforms was not on the industrial sector where, under the pressure of rising unemployment and outsourcing, unit labor costs continued to stagnate or decline before and after 1999. Instead, Schröder’s “Agenda 2010” finally addressed the very high structural unemployment of unskilled workers, and the lack of employment opportunities in low-wage private services (discussed in Section 3 above).

Initially, the government had tried to deal with these problems in the “corporatist” framework of a tripartite “Alliance for Jobs” (Hassel 2001), and with a proposal that was aimed directly at the excessive burden of social insurance contributions on low-wage employment. The proposal had been promoted before the 1998 elections by the SPD’s *Zukunftskommission* (Friedrich-Ebert-Stiftung 1998). It was then worked out in detail by experts in the Alliance secretariat; and it was jointly supported by the heads of the union and employer think tanks. It would have used the revenue of a new green tax to correct the regressive impact of social insurance contributions by introducing a lower threshold in its schedule – which would have increased the take-home pay of workers in low-skill jobs and reduced the wage bill of employers by the same amount. The proposal failed, however, when industrial unions, whose members had no interest in low-wage and low-skill jobs, preferred to use the available funds for a minimal reduction of contributions at all pay levels (Heinze and Streeck 2003; Streeck 2003).

After the failure of the Alliance for Jobs, the government abandoned not only the corporatist approach to social policy reform but also the idea of stimulating low-skill employment through tax-financed positive incentives. Instead of reducing excessive non-wage labor costs, Schröder’s “Agenda” reforms promoted low-wage employment by relaxing the rules on non-standard employment and, above all, by reducing the reservation wages of the unemployed. Based on the supply-side recommendations of the “Hartz Commission,”²⁷ the Agenda was adopted in 2003 with the support of the conservative and liberal opposition parties and over the intense protests of the unions and the left wing of the Social Democratic Party (Dyson 2005; Dyson and Padgett 2006). In political terms, this departure from the practice of consensual decision-making in German

27 Fleckenstein (2008) points out that the reforms promoted by the government’s Hartz commission had drawn on prior analyses and proposals of the business-oriented think tank of the Bertelsmann foundation.

social policy (Egle and Zohlnhöfer 2007; Picot 2009) brought about the nationwide rise of a left-wing opposition party and the defeat of the red–green government in the 2005 national elections – from which the Social Democrats have not yet recovered a decade later. But it was also effective in achieving a turnaround of Germany’s dismal employment performance.

Structural reforms of Agenda 2010

The several packages of the Agenda reforms included a step-wise extension of the normal retirement age from 65 to 67 years; a demographic formula limiting the replacement rate of pensions; cutbacks and co-payments in health insurance; but also subsidies to local child care facilities and tax exemptions for household services. In addition to minimal changes in redundancy rules (that also affected skilled industrial workers), labor-law reforms liberalized the rules for temporary employment, part-time employment, agency work, and subcontracted work (Eichhorst and Marx 2011; Jackson and Sorge 2012). The most radical and controversial element of Agenda 2010, however, was the abolition of the Bismarckian model of status-conserving unemployment insurance through the “Hartz IV” part of the reform package (Carlin et al. 2015, 56–66).

Traditionally, the German welfare state had combined a two-tier system of wage-related unemployment benefits with a residual system of flat-rate, tax-financed, and means-tested social assistance. The first tier of the insurance system provided (contribution-financed) unemployment benefits at 67 percent (for single persons, 60 percent) of previous net wages for a limited period, which varied with the length of uninterrupted employment. Once these benefits ran out, the second tier of tax-financed and means-tested “unemployment assistance” reduced the wage-related replacement rate to 57 (53) percent of net wages. Job search was required, but there was no obligation to accept jobs at lower levels of qualification and pay. Thus, for qualified workers with a history of full-time employment, unemployment assistance would indefinitely remain above the level of flat-rate social assistance (Strengmann-Kuhn 2003). The Hartz IV reforms, however, not only reduced the replacement rate and shortened the duration of benefits provided by the first tier of unemployment insurance, but also eliminated the second tier of status-conserving unemployment assistance. It was merged with the somewhat improved system of social assistance designed to ensure household incomes (plus a housing allowance) slightly above the subsistence level.²⁸ At the same time, means test-

28 Considered by itself, the new second tier of unemployment assistance (*Arbeitslosengeld II*) does not appear unreasonably harsh: administered by the labor market agency, it provides placement and training services. Furthermore, the household-oriented cash benefits, including a housing allowance, did reach substantial amounts for families with several children. In fiscal terms, it did not reduce, but actually increased, the overall costs of social assistance, and it shifted a large part of the costs from the overburdened municipalities to the federal level (Hassel and Schiller 2010).

ing and job-search requirements were tightened, and job offers at lower levels of pay and qualifications could no longer be rejected.

In combination, these measures explain the massive political backlash against the Agenda: from the perspective of skilled workers and their unions, they were seen as revoking a legitimating social contract in German capitalism. It had implied that workers (or engineers, for that matter) who had trained for qualified work, worked steadily, and paid contributions regularly might well lose their job in a crisis, and might then not be able to find work at the same level. But they would never have to exhaust their savings and then depend on the subsistence level support the state provided to all indigent persons, regardless of whether they had ever had held a job in their lives. For the unions and the traditional political Left, therefore, Hartz IV was morally wrong and in the context of escalating job losses and disappearing job opportunities for older workers in the recession of the early 2000s, it also was a horrifying prospect for workers and their families. In the meantime, however, these reforms are credited with having achieved a dramatic turnaround of German employment performance.

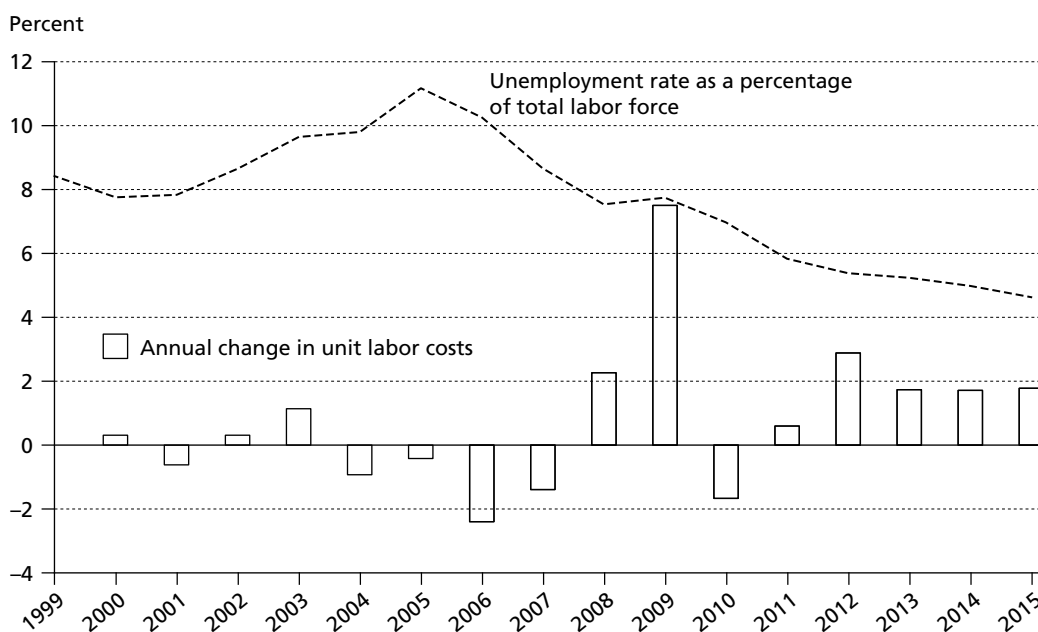
The turnaround of employment performance

In economic terms, Hartz IV was effective in lowering the reservation wages of unemployed workers (Burda 2016). To receive even the reduced benefits, claimants had to cooperate with the job-search requirements and recommendations of the (organizationally revamped and placement-oriented) labor market agency. This amounted to a “workfare” regime requiring the acceptance of available job offers, regardless of the worker’s professional qualifications, previous wages, or employment and insurance record (Streck and Trampusch 2006).

The Agenda reforms had started in 2004, and the labor market began to turn in 2005: unemployment declined from 11.3 percent in 2005 to 7.6 percent in 2008, and employment rates increased even more, from 65.5 percent in 2005 to 70.3 percent in 2009 (OECD 2017b; 2017c). Remarkably, moreover, employment also held up when the global financial crisis of 2008 caused exports to collapse and GDP to decline by 5.62 percent in 2009 (OECD 2017d). Disregarding all fiscal constraints, Angela Merkel’s black–red government had adopted one of the most reflationary fiscal responses in the Western world (Steinbrück 2010, 169–233). Public-sector deficits jumped from a small surplus of 0.2 percent in 2007 to –4.2 percent in 2010 (OECD 2017f), mostly for saving collapsing banks, scrapping old cars, and greatly extending subsidies for short-time work in industry.

In combination with the use of flexible working-time budgets in industry, the subsidies for short-time work stabilized workers’ net incomes and allowed firms to avoid layoffs and to increase the time spent retraining their skilled workforce (Brenke, Rinne, and

Figure 16 Unemployment rate and annual changes in unit labor costs in Germany, 1999–2015



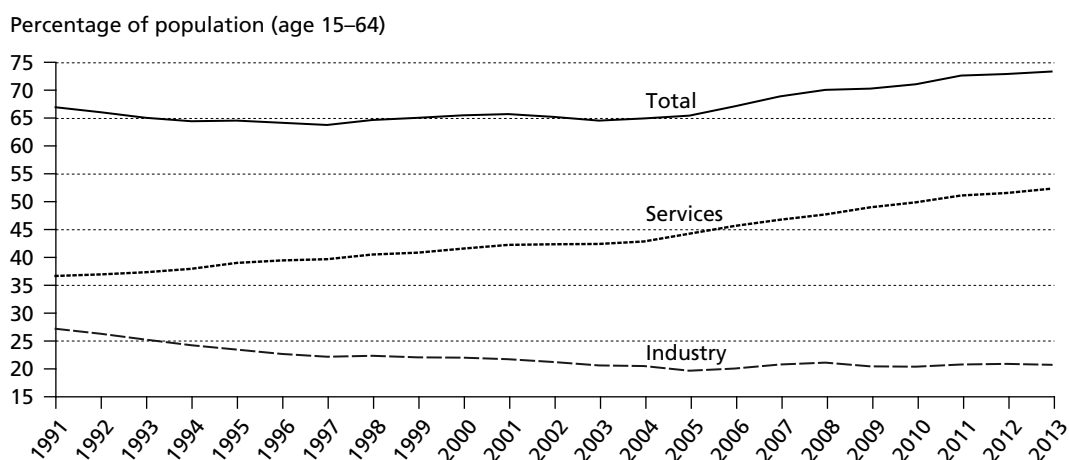
Sources: OECD Productivity Statistics and Annual Labour Force Statistics; own calculations.

Zimmermann 2011; Grabka 2015). As a consequence, unemployment was barely affected by the Great Recession and employment rates continued to rise steadily to 74 percent by 2015, a level slightly above or close to that of the Anglo-Saxon and Scandinavian employment champions that had been far ahead of Germany from the 1970s to 2005.²⁹ Hence, Germany seems to have finally followed the Netherlands in finding an escape from the trap of “welfare without work” which Bismarckian welfare states had been caught in for so long (Hemerijck, Manow, and van Kersbergen 2000).

And as the downturn of the unemployment rate from its peak in 2005 had started right after the Hartz reforms had come into force in 2004, it seems plausible to ascribe much of the effect to this cause. It is also interesting, however, to examine annual increases in unit labor costs after entry into the Monetary Union (Figure 16). They had been close to zero as unemployment was building up, but then declined as unemployment was coming down after 2005 – which suggests that the Hartz reforms did in fact have some negative effect on average wage costs. The spike of unit labor costs in 2009 is of course an effect of the deep but short Great Recession which reduced output in Germany, but had little effect on employment and no effect on hourly wages. When crisis responses were over by 2010, unit labor costs briefly returned to their low pre-crisis level, but then increased by about

²⁹ Employment rates 2015: Sweden 75.5 percent, Netherlands 74.2 percent, Denmark 73.5 percent, UK 72.2 percent, US 68.7 percent (OECD 2016).

Figure 17 Employment rates in services and industry in Germany as a percentage of population (age 15–64), 1991–2013



Sources: OECD; 1991–2008 ISIC Rev. 3, 2009–2013 ISIC Rev. 4; own calculations.

2 percent annually (see Figure 17) – which, however, was still below the “golden rule”³⁰ suggested in proposals for wage coordination among eurozone unions (Pusch 2011).

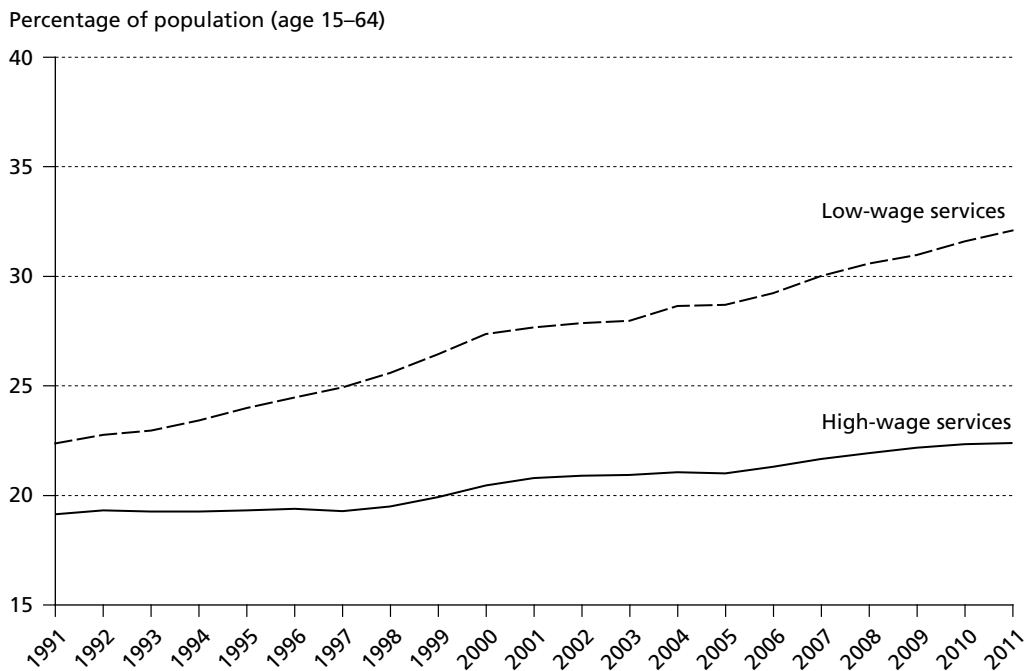
The rise in the total employment rate, as well as the decline in unemployment did in fact begin in 2005. But this overall success was not brought about in the industrial sector. Though the long decline of employment rates in industry did flatten out after 2005, it was not followed by an upturn. In the service sector, by contrast, the slow rise of the employment rate accelerated in the middle of the decade. Thus, the rise in services employment contributed most to the remarkable turnaround in German employment performance overall.

Altogether, employment in services did increase by about 10 percent between 2004 and 2013. And as had been intended, the main gains were achieved at the lower end of the wage scale (see Figure 18), even though employment in better-paid service jobs also increased (Myant and Piasna 2014).³¹ As had been the case in the Netherlands, the ex-

30 The golden rule is a prescriptive concept suggesting that wage competition among eurozone unions should be avoided by distribution-neutral wage increases that match the sum-total of (sectoral or national) productivity increases plus the anticipated eurozone inflation rate. Ideally, the reference is to the ECB’s official inflation target (below, but close to, 2 percent) – which has in fact not been reached in recent years. But even though IG Metall did orient its initial demands in recent wage rounds on the golden rule, actual settlements and effective wage increases were inevitably lower (Seeliger 2017, 198–220).

31 The distinction is based on OECD data on “average labor compensation” in the following ISIC subsectors: Low-wage services: G (wholesale and retail trade repair of motor vehicles and motorcycles), I (accommodation and food service activities), L (real estate activities), N (administrative and support service activities), Q (human health and social work activities), R (arts, entertainment and recreation), S (other service activities). High-wage service-sectors: H (transportation and storage), J (information and communication), K (financial and insurance activi-

Figure 18 Employment rates in low- and high-wage service sectors as a percentage of population (age 15–64), 1991–2011



Sources: OECD Structural Analysis and Annual Labor Force Statistics; subsectors according to ISIC Rev. 4; own calculations.

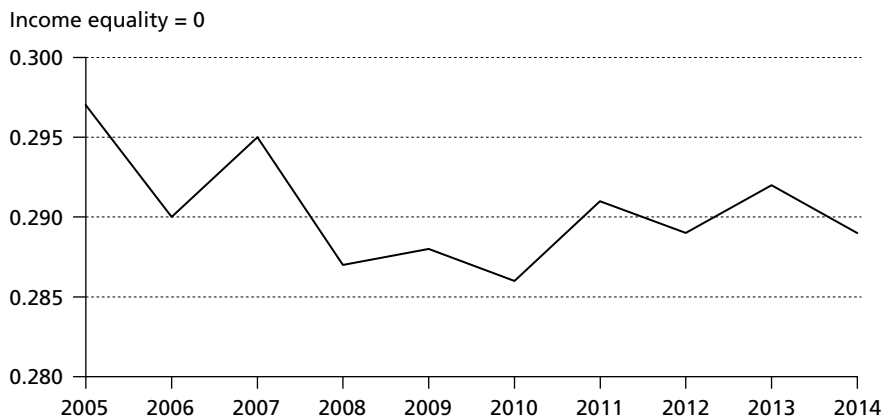
pansion of services was associated with a rise in part-time employment, by 25.9 percent overall between 2004 and 2014. During the same period, however, full-time employment also increased by 16.8 percent. Moreover, much of the new employment was in temporary jobs and in agency work (Eichhorst 2012).

Though the main impact of the Hartz reforms was on low-wage local services, they also had some effect on industry. As large manufacturing firms had come to concentrate in-house operations on their core functions, services were increasingly procured from external providers that were not bound by the wage contracts of industrial unions.³² At the same time, the liberalization of agency work allowed core firms to increase the flexibility of production by meeting peaks of demand without increasing their own labor force. In combination with the competitive outsourcing of components to smaller producers in Germany and in its near abroad, these strategies have also helped to reduce the production costs of German export industries – and they have, of course, contributed to the increasing “dualization” of the German labor market (Eichhorst and Marx 2011, 10–15; Knuth 2016).

ties), M (professional, scientific and technical activities), O (public administration and defense; compulsory social security), P (education).

32 In 2011, the services content of total German exports was 51.0 percent (OECD-WTO 2015, Figure 9).

Figure 19 Gini coefficient for Germany 2005–2014: Slight decline in income inequality after 2007



Source: OECD Income Distribution Database.

As a consequence, wage inequality has risen far above the comparatively low levels that had characterized German capitalism at the end of the 1980s (see Section 3 above). Nevertheless, the German welfare state is still comparatively effective in correcting the market distribution of incomes (Milanovic 2016, Figure 2.23), and the Gini coefficient of (post transfer) income inequality, which had risen in the first half of the 2000s, did decline a bit thereafter (see Figure 19). While the improvement is likely to reflect the overall rise in employment, the more extreme forms of low-paid work have also been corrected through a statutory minimum wage introduced in 2015.

In terms of their original intent, therefore, Gerhard Schröder’s Hartz reforms should be considered successful (Eurofound 2017). They helped to correct the endemic deficit of services employment in the German version of the Bismarckian welfare state, and they increased the employment opportunities of persons who had previously been trapped in structural unemployment. Nevertheless, the normative evaluation of the overall effects of the Agenda reforms remains controversial (Carlin et al. 2015). And indeed, if anyone might have hoped that structural reforms defined by a left-of-center red–green government might move Germany closer to the classical “social-democratic” model of the egalitarian Scandinavian welfare states,³³ whose “active labor market policy” relied primarily on retraining and upskilling, these hopes were disappointed. Instead, the reforms moved the German welfare state toward the Liberal model, in which high income inequality allows private households to purchase a high volume of consumer and care services from private providers.

33 But Scandinavian welfare states, too, have not been able to resist all pressures toward liberal transformation (Korpi and Tählin 2011; Mehrtens 2014).

As a consequence, German society is now also facing a growing segment of “working poor” – persons working in full-time or multiple-part time jobs with wages at or near the poverty level that need to be topped up by need-tested social assistance (Seils 2012; Bundesregierung 2017). To the extent that public debate is focusing on this segment, the conventional emphasis is on formal and vocational education – where expansion and qualitative improvements are indeed needed (OECD 2014). But by itself, that will do little to improve the life chances of all those who are already caught in low-pay, low-skill, and dead-end jobs in the e-economy, for example, delivering Amazon packages and pizzas, in outsourced cleaning and security work, and caring services, or in supermarkets and hotels. There is presently no discussion of policies providing opportunities for the upward mobility of low-wage workers. And though the minimum wage has finally defined a floor below which labor should not be for sale, the regressive mode of financing the welfare state continues to substantially reduce the take-home pay of low-wage workers, and to increase the price of low-wage job costs (see Section 3 above).

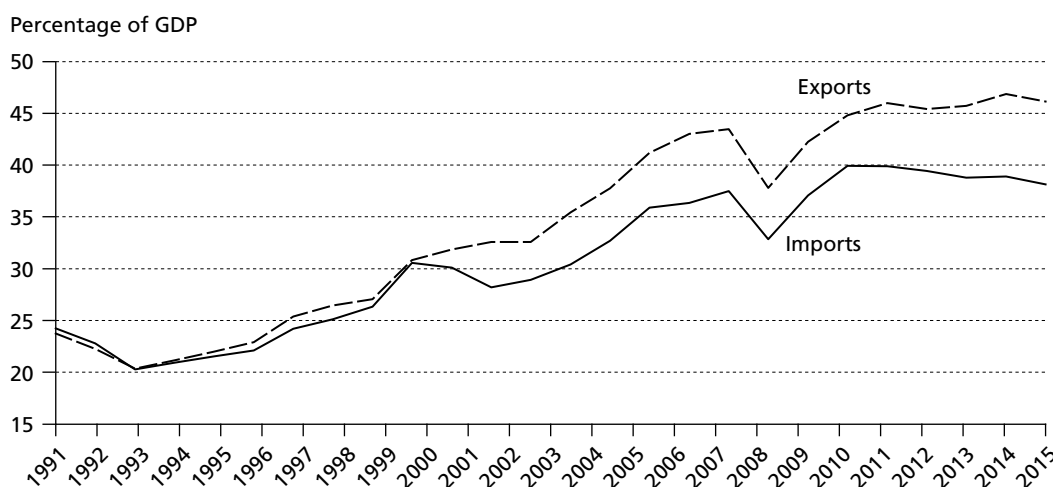
In short, if the Hartz reforms may be considered successful in terms of their original intent, they have not been followed by policy reforms dealing with their repercussions for the social cohesion of Germany’s political economy.

The German model in the eurozone

Eventually, the German economy, seen as the “sick man of the euro” in 1999, not only recovered in the Monetary Union, but actually exceeded its prior performance. This success story, however, is less the outcome of a brilliant or sinister choice of national strategy than of the path-dependent continuation of supply-side responses learned in previous decades: in recessions, demand reflation and wage increases had been punished by the Bundesbank, governments had to consolidate public-sector budgets, and unions had to defend existing jobs through wage restraint. And though in the early 2000s fiscal reflation had not been ruled out by the Bank, but by the legal and moral constraints of the Stability Pact, the overall effect had been the same: government and unions were left to cope with economic decline through the reflexes they had practiced all along – but with two differences.

The first is that Schröder’s Agenda 2010 did, for the first time, address the constraints the German welfare state had imposed on low-wage employment in private services. And the second difference is that, ever since the run-up to Monetary Union had begun in the mid-1990s, the hoped-for effects of supply-side fiscal retrenchment and wage restraint were not counteracted by the rise of DM exchange rates. Instead, they helped to end the long decline of employment rates, and also contributed to an export-led economic recovery. Under the conditions of the Monetary Union, however, the quasi-automatic supply-side responses characteristic of the German model also had the effect of contributing to a growing export–import gap in the German trade balance (see Figure 20).

Figure 20 Imports and exports as a percentage of GDP in Germany, 1991–2015



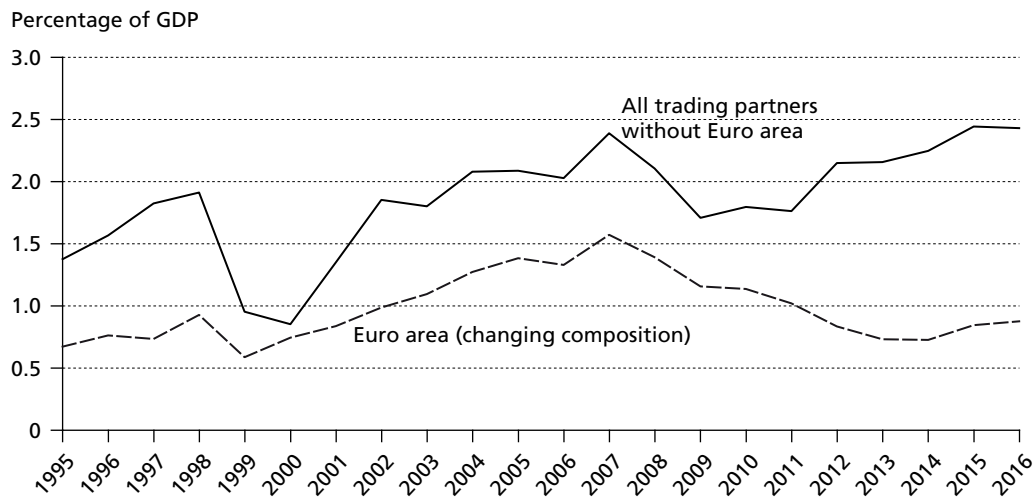
Sources: OECD Annual National Accounts; own calculations.

Figure 20 seems to suggest that the Monetary Union did not have a dramatic effect on German exports, whose upward trajectory seems to have continued nearly unchanged before and after 1999. That is perhaps misleading. Assuming that intra-eurozone and euro/USD exchange rates fixed in 1999 had roughly reflected the “underlying fundamentals,” the ensuing devaluation of the euro against the US dollar would of course have benefited exports from Germany and all other eurozone economies. And subsequently, when Germany entered a recession, while southern European economies were growing more rapidly, rising intra-eurozone demand would also contribute to the further rise in German exports. Both of these effects are reflected in the development of German trade balances – which began to rise steeply in dollar-denominated exchanges against the rest of the world after 2000, but also increased (though more slowly) in euro-denominated exchanges as economic growth in the rest of the eurozone continued until the international financial crisis of 2008 (Figure 21).

But even if the single currency must also have benefited German exports, Figure 20 suggests that it did have a much more dramatic impact on German imports. After unification and before entry into the Monetary Union, imports had kept up with the unusual rise in exports that had begun in the early 1990s. After 1999, however, the trajectories diverged and imports fell behind in the early 2000s. What seems to have happened is that domestic demand – and hence the demand for imports – declined as it would in the German recession beginning in 2000.³⁴ Under flexible exchange rates, this fall in import demand would have provoked an appreciation of the exchange rate which, by increasing export prices and reducing the price of imports, would soon have closed the gap. Since this corrective

34 Fiscal retrenchment and wage restraint had of course deepened the decline in domestic demand.

Figure 21 German trade balance as a percentage of GDP, 1995–2016



Sources: Bundesbank; own calculations, calculated as annual averages with data adjusted by season and according to the calendar.

mechanism was disabled by the Monetary Union,³⁵ and since the euro regime has not introduced any other mechanism that could correct the lag of import demand, the German import–export gap has not only persisted but even increased over time.

In short, as exports continued to rise while imports stayed behind, the Monetary Union has “rewarded” the German model with a persistent export surplus or, rather, a persistent import deficit – which in the present political context is seen as either a model for other eurozone economies, or as a major problem for them and for the EMU itself.

6 EMU divergence ignored and convergence enforced

In hindsight, EMU authorities should have considered the rise of a persistent German trade surplus (and the rise of persistent trade deficits in other member economies) as one symptom of a potentially fatal structural problem. In fact, however, the Commission had celebrated the euro on its tenth anniversary as a “resounding success” (Commission 2008). And in light of existing EMU rules, that assessment had indeed not appeared absurd.

35 In exchanges within the eurozone, revaluation was ruled out by the single currency. In exchanges with the rest of the world, the rise in the euro exchange rate in response to German surpluses was impeded by the simultaneous rise in Southern European deficits.

The institutional regime of the EMU – the political independence of the ECB and its mandate to ensure price stability over other concerns, the Maastricht rules prohibiting monetary state financing and the bailout of financially distressed member states, and the Stability Pact – had largely reflected the preoccupation of German publics, elites, monetary economists, and the Constitutional Court (*Bundesverfassungsgericht*, BVerfG 1994; Joerges 2015) with price stability and solid state finances. In any case, the German worry about inflation and potentially diverging fiscal policies was the only concern that had been directly addressed by the original euro regime.

This seems surprising since, even from an exclusive focus on price stability, it should have been obvious that the difference between hard- and soft-currency economies in the EMS could not be explained by fiscal policies alone. Other factors, such as private credit and, in particular, wage dynamics, could have similar or stronger impacts on inflation rates in individual economies. In this regard, moreover, Commission economists might have paid attention to available research in labor economics and comparative political economy showing that differences in national wage-setting and industrial-relations institutions could be expected to have a major impact on inflation and the competitiveness of national economies in a monetary union (Calmfors 1982; 1985; Calmfors and Driffil 1988; Scharpf 1991, chapter 12).³⁶ And if such institutional differences, or even asymmetric business cycles, persist while corrective interventions by national monetary policy are replaced by uniform ECB policies, the monetary union would provoke the “one-size-fits-none” or “Walters problem” where its average-oriented monetary impulses would destabilize economies with above- or below-average rates of inflation (Walters 1986; Enderlein 2004).

In effect, however, such concerns played no role in the arguments presented by both the committee of central bankers which recommended monetary union in the Delors Report (1989) and by Commission economists presenting their extremely positive evaluation of its potential benefits and costs (Commission 1990; Emerson et al. 1992). The Commission did pay some attention to the warnings of some (mainly American) economists who insisted that in view of the heterogeneity of European economies, a monetary union would lack the preconditions of an “optimal currency area” (OCA) – namely, high rates of labor mobility and the taxing and spending functions of a large central-government budget to dampen asymmetric shocks (Eichengreen 1990; Eichengreen and Frieden 1994; Mundell 1961; 1963). In its view, however, such warnings were derived from a “rather limited and outdated ... stabilization framework” that had not kept up with the progress of economic theory (Emerson et al. 1992, 45–46).³⁷

36 Two years earlier, the Padoa-Schioppa Report (1987, 83–84) had acknowledged the impact of national industrial relations systems on competitiveness, concluding that “this is, indeed, the main economic reason why we do not envisage an early move to fix exchange rate parities irrevocably.”

37 That was meant to say that OCA theory still assumed a need for counter-cyclical state interventions in the economy, whereas up-to-date “perfect markets” and “rational expectations” theory had come to believe that fiscal and monetary interventions were at best useless, but more likely

Instead, it was assumed that rising capital mobility, and increasing price competition in the internal market, would generate a degree of convergence among European economies that would allow a single monetary policy to work without generating massive imbalances. In other words, market forces would soon overcome the still existing divergence of hard- and soft-currency European economies (Issing 2002; McNamara 2002). But instead of bringing about economic convergence, market forces in fact generated a dynamic divergence of export competitiveness and external balances among European economies in the period between the start of the EMU and the onset of the global financial crisis in 2008.

What had in fact converged were nominal interest rates, which, as capital markets came to believe in the disappearance of exchange rate risks, had rapidly declined toward low German levels in the run-up to monetary union. In some of the former soft-currency economies, then, the rise of credit-financed domestic demand generated economic growth, rising employment, and wages in the non-traded sector, as well as rising imports and current account deficits (Gaulier and Vicard 2013), which were easily financed by capital inflows from former hard-currency countries such as Germany that were accumulating current account surpluses. But as some countries with large current account deficits, such as Spain and Ireland, were also doing extremely well under the Stability Pact's criteria for public sector debt and deficits, the Commission was not worried. Instead of being considered a problem for the eurozone, rising trade and current account imbalances were considered evidence of welcome catch-up processes (Blanchard and Giavazzi 2002; Commission 2008).

From the euro crisis to an asymmetric euro regime

As is now well understood, the global financial crisis of 2008 had the effect of a “sudden stop,” interrupting and reversing the capital inflows on which deficit economies had come to depend (Svrtinov, Georgieva-Trajkovska, and Temjanovski 2015). As their governments found themselves forced to save overextended banks, the sudden escalation of public sector deficits provoked a steep rise of the risk premia on government bonds and a threat of state insolvency first in Greece and then in other deficit economies. At this point, in the spring of 2010, European authorities and eurozone governments had essentially three options: (i) they could all have respected the no-bailout rules of the Maastricht Treaty; (ii) the ECB could have fudged the prohibition of monetary state finance (Article 123 TFEU); or (iii) the Commission or the member states could have found a way around Article 125 TFEU under which neither the Union nor member states could assume liability for the commitments of another member state.

to upset the market equilibrium (Fama 1970; Lucas 1972; Barro and Gordon 1983; McNamara 1998, 144–51; Braun 2014).

At the time, however, the ECB under Trichet was not yet ready, as Draghi would be on July 26, 2012, to announce its readiness to do “whatever it takes” to save the euro – by acting as a lender of last resort in the government bond markets (De Grauwe 2013b) or even financing state deficits directly (Turner 2016, 218–22). And as Treaty amendments authorizing EU action were considered unavailable, credits or guarantees by euro states were seen as the only option available – provided that Germany would go along with it.

In line with the mainstream of economic, legal, and political opinion in Germany, the Merkel government had initially wanted to stick to the no-bailout rules (Bulmer 2014).³⁸ In that case, however, Greece would have faced bankruptcy and exit from the eurozone; other deficit states might have followed; and Germany and France might have had to deal with severe repercussions for their “system relevant” creditor banks, and perhaps with the failure of the euro itself. Under these circumstances, Merkel was ultimately (and, in hindsight, belatedly) persuaded by the Commission, the ECB, the French President, and the Deutsche Bank to take the lead, insisting that “*scheitert der Euro, dann scheitert Europa*”³⁹ to ensure parliamentary and public acceptance of the first and all subsequent facilities providing tax-backed intergovernmental⁴⁰ support for financially challenged eurozone governments.

The decisions to “rescue” Greece on May 9, 2010, and then Ireland and Portugal and others, through a series of intergovernmental rescue credits and guarantees, also had the effect of establishing an asymmetric framing of problem perceptions and policy choices. In its sophisticated “Competitiveness and Imbalances” analyses published before the culmination of the crisis, the Commission (2010) had considered persistent current account deficits, as well as surpluses, as threats to the stability of the euro which were being caused by the excessive and inadequate rise of domestic demand in deficit and surplus economies, respectively. But once it was clear that the acute crisis was to be resolved at the risk of national taxpayers through a series of intergovernmental “facilities” and “mechanisms,”⁴¹ symmetry was lost. Now the issue was no longer the common obligation to correct a divergence of deficit and surplus economies that threatened the euro. Instead, the focus was now on debtor states that had lost the “confidence”

38 Outside Germany, the economic, political, and indeed constitutional justification for this position was recently acknowledged by Martin Sandbu (2015).

39 “If the euro fails, so will Europe.” Deutscher Bundestag, May 19, 2010. https://www.bundestag.de/dokumente/textarchiv/2010/29826227_kw20_de_stabilisierungsmechanismus/201760.

40 In functional terms, this was the end of a two-step transformation: from a private–private credit relation between Northern and Southern banks into a private–public credit relation as Southern banks were rescued by Southern states, and then to a state–state credit relation as the risks of Northern banks were secured (and subsequently replaced) by intergovernmental credits and guarantees.

41 See Commission (2010a; 2012a) for bailout packages for Greece; Council Regulation (EU) 407/2010 agreed on May 9–10, 2010 on the establishment of a European financial stabilization mechanism; the EFSF Framework agreement signed on June 7, 2010; the Treaty Establishing the European Stability Mechanism signed on February 2, 2012; see also Buti and Carnot (2012); Fabbri (2013); Gocaj and Meunier (2013); European Parliament (2017).

of international capital markets. Moreover, since the crisis was to be resolved through intergovernmental agreement, negotiations in the Eurogroup of the Council over the “conditionalities” of rescue credits were shaped by the extremely asymmetric bargaining powers and narrow interests of creditor states, and in particular Germany, trying to limit the extent and duration of their financial liability.

At the same time, the Commission obtained the power to negotiate (and in effect dictate) the “Memoranda of Understanding” that governments of “programme states” had to accept in order to receive the allotted funds. And since their compliance with these “conditionalities” was controlled on the ground by a “Troika” of inspectors from the Commission, the IMF, and the ECB, whereas the credits were parceled out in several smaller tranches, the Commission obtained almost total governing and enforcement powers. Unrestrained by the division of competences between the EU and the member states in the EU Treaties, it could and did require recipient governments to adopt and implement massive changes in labor market, employment, industrial relations, health care, and pensions policies, in the regulation of private services, and the privatization of public infrastructure facilities (Scharpf 2011). And as long as it was not satisfied with actual compliance, the Council would refuse to disburse the next installment of credit.

The “Memoranda” requirements, combining fiscal austerity in all cases with country-specific “structural reforms,” were ostensibly (though with limited success) serving the immediate interest of creditor states in avoiding the need for further rescue credits. At the same time, however, they empowered the Commission to enact requirements that served the purposes it had discussed in its “Competitiveness and Imbalances” analyses before the onset of the acute euro crisis (Commission 2010). Thus, fiscal austerity, by reducing domestic demand, would also reduce current account deficits and shrink the size of the sheltered sector of the economy at the same time; and structural reforms were designed primarily to weaken union power in order to constrain the wage dynamics that had reduced international competitiveness before 2007.

In this regard, significant changes were in fact achieved through Commission-defined conditionalities. But of course, compliance could be enforced only in the “programme countries” that had come to apply for intergovernmental financial support – which deterred deficit countries such as Spain, Italy, or Slovenia from applying for European Stability Mechanism (ESM) credits in order to avoid Troika control. Within these limits, a general stabilization of the EMU could not be achieved. And in fact, it was the ECB whose unconventional use of expansionary monetary policy instruments is credited with preventing another euro crisis in 2012 and with supporting a weak recovery of eurozone economies thereafter (Hodson 2013; De Grauwe 2013b; 2016).

At the same time, the Commission initiated European legislation establishing a revised and enlarged set of general EMU rules and enforcement procedures to ensure the stability of the euro and the sustainable growth of its member economies. Two of these initiatives, the still incomplete Banking and Capital Markets Unions, are meant to address

deficiencies of the European financial system, whereas new rules dealing with the divergences analyzed in the Competitiveness and Imbalances Report (Commission 2010b) are contained in the Euro-Plus Pact of March 11, 2011,⁴² the Six-Pack legislation of December 13, 2011 with the Excessive Deficit Procedure⁴³ and the Excessive Imbalances Procedure,⁴⁴ the Two-Pack enhancements of May 21, 2013,⁴⁵ and the intergovernmental Fiscal Compact signed on March 2, 2012.⁴⁶ Under these rules, and in the context of the “European Semester,” the Commission has become deeply involved in national budgeting and legislative processes. Governments are required to explain their responses to detailed country-specific recommendations which, in the context of the Excessive Deficit and Imbalances procedures, may ultimately become binding and be backed by severe financial sanctions – to be adopted on the basis of a “reverse qualified-majority vote” in the Council (Bauer and Becker 2014; De la Porte and Heins 2015; Seikel 2016).

In substantive terms, the standards to be met and the requirements that may be imposed under the Excessive Deficit Procedure are defined by law. Under the regulations on the “Prevention and Correction of Macroeconomic Imbalances”⁴⁷ and on “Enforcement Measures to Correct Excessive Macroeconomic Imbalances,”⁴⁸ by contrast, the definition of macroeconomic imbalances was left to a “Scoreboard” to be developed by the Commission. And neither the Scoreboard nor the authorizing legislation have in any way circumscribed the domain of national policy choices which the Commission may specify and potentially enforce through binding recommendations (Scharpf 2011; Bauer and Becker 2014; Seikel 2016).

In contrast to the immediate euro-rescuing measures adopted in 2010, the new regime applies not to a few “programme countries,” but to all eurozone states; and it is meant to ensure the sustained viability of the Monetary Union and its member economies. But just like the initial responses to the euro crisis, the new regime is asymmetrically targeted on (potential) deficit economies. Thus, the fiscal rules are exclusively designed to limit budget deficits and to reduce public-sector debt. There is indeed no legal basis, under the Excessive Deficit Procedure or the Fiscal Compact, that would allow the Commission or the Council to ask a surplus state to boost domestic demand by reducing its budget surplus, let alone by engaging in some deficit spending.

42 European Council 2011: Conclusions of the Heads of State or Government of the Euro Area of 11 March 2011, Annex I.

43 Regulation (EC) 1173/2011.

44 Regulation (EU) 1176/2011.

45 Regulation (EU) 472/2013 and 473/2013.

46 Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, Title III.

47 Regulation (EU) 1176/2011.

48 Regulation (EU) 1174/2011.

The asymmetry of fiscal rules may reflect the bargaining power of surplus states. But the pattern is repeated in the Commission-defined criteria included in the Scoreboard⁴⁹ of the Macroeconomic Imbalance Procedure. There, eight of the fourteen indicators are defined with a one-sided threshold to constrain the expansion of domestic demand and wages, and of the two with upper and lower thresholds, current account balance and changes of REER, the first allows more room for surpluses than for deficits⁵⁰ – and has never yet been invoked against German or Dutch surpluses that significantly exceed even the higher upper threshold.

In short, fiscal austerity and structural reforms are asymmetrically designed to constrain domestic demand and unit labor costs in order to correct and prevent the rise of current account deficits and the loss of export competitiveness in former soft-currency economies. By contrast, the causal contribution of persistent external surpluses in Germany and other hard-currency economies to macroeconomic imbalances in the eurozone, which the Commission had identified in its (2010b) analyses, was not treated as a significant concern either in the immediate responses to the euro crisis or in the new regime established after 2011.

The economic logic of enforced asymmetric convergence

The initial responses to the euro crisis and the subsequent euro regime had a clear priority: they were meant to prevent the immediate collapse of the common currency and to stabilize the Monetary Union against the future risks of state finance crises. And they were definitely not designed to bring about the rapid recovery of eurozone economies that had been hardest hit by the Great Recession following upon the international financial crisis of 2008–2009. Instead, as should have been and probably was obvious from the beginning, the immediate and inevitable effect of fiscal austerity and wage constraint would be deeper recession and a steep rise in unemployment in crisis economies. But that was considered a price that had to be paid for saving the euro.

That was of course not the perspective of the populations suffering under escalating unemployment and deep cutbacks to social transfers and services – whose protests would bring down their own governments but made no difference under Troika control. And it was not the perspective of (mostly Anglo-American, and mostly Keynesian) economists

49 Scoreboard for the Surveillance of Macroeconomic Imbalances. SEC(2011) 1361 final.

50 In response to the European Parliament, it is true, the Scoreboard now also includes four indicators (unemployment, long-term unemployment, youth unemployment, and the inactivity rate) with upper thresholds, whose violation might justify expansionary measures. But the Commission was at pains to explain that these are meant merely to provide contextual information on the social costs of reducing macroeconomic imbalances, but “will not have legal implications ... and will not trigger further steps in the MIP” – that is, they will not justify the initiation of “excessive imbalance procedures” that might lead to binding recommendations (Commission 2015b).

who were condemning the euro regime as a manifestation of dogmatic neoliberalism, if not sheer economic irrationality; or of the self-interested, brutal exercise of asymmetric bargaining powers by Germany and other creditor states (for example, Krugman 2012; Marsh 2013; Matthijs 2016; Stiglitz 2016). In a companion paper (Scharpf 2016), however, I have argued that much of this criticism ignores the structural justification of the present regime – and hence its normative and political resilience.

In a nutshell, the argument assumes that the original eurozone included two distinct ideal-types of political economies which, under the EMS, had differed in their inflation dynamics. Some of these economies had large export sectors where prices are defined by international competition, and where above-average wage increases would entail job losses. If wage-setting institutions and state policies had come to reflect these conditions, the typical hard-currency economy would be characterized by an export-led “growth model” and relatively low inflation rates (Calmfors and Driffil 1988; Scharpf 1991; Hancké 2013; Höpner and Lutter 2017). In economies with large domestic sectors, by contrast, rising wages would increase domestic demand and might (within certain limits) also increase economic growth. In response to these conditions, wage-setting and public policy in soft-currency economies did favor demand-led growth in the domestic sector and somewhat higher inflation rates (for example, Iversen, Soskice, and Hope 2016; Hall 2014; Johnston 2016; Baccaro and Pontusson 2016; Hope and Soskice 2016).

In the EMS, the impact of these structural differences on the external balances of economies with export-led and demand-led growth models had been dampened by periodic currency realignments. In the Monetary Union, however, the increasing current account deficits of soft-currency economies tended to be financed through corresponding surpluses in former hard-currency countries. When these capital inflows came to a “sudden stop” (Calvo 1998; Svrčinov, Georgieva-Trajkowska, and Temjanovski 2015) in the international financial crisis of 2008, deficit economies were hit by acute economic and banking crises, which, as governments came to the rescue of failing banks, generated state solvency risks that eventually culminated in the euro crisis of 2010.⁵¹ In light of this interpretation, persistent structural imbalances would plausibly appear to be threatening the stability of the common currency.

I cannot, of course, claim that policymakers during and after the crisis were in fact guided by this structuralist analysis. But if they had been,⁵² they would reasonably have concluded that the divergence of surplus and deficit economies was bound to reassert itself, and to endanger the stability of the Monetary Union time and again, unless the

51 This is not meant to deny that, with a better understanding of what was at risk, and with less respect for the Maastricht rules, the evolution of the crisis might have been managed better (De Grauwe and Ji 2015).

52 That is perhaps not as big an “if” as one might think, since memories of “Club Med” interpretations of exchange rate adjustments under the EMS are still alive, while present problems are stylized as conflicts between “Latin” and “Germanic” national characters, cultures, politics, and ways of doing business (Agamben 2013).

underlying structural diversity was corrected. And indeed, even before the culmination of the euro crisis, the Commission (2010b) had come to the conclusion that the stabilization of the Monetary Union did require a structural shift from the non-traded to the traded sector in deficit economies.

In 2015, moreover, the goal of structural convergence was emphatically asserted in the joint report of the “Five Presidents” (of the European Commission, the European Council, the European Central Bank, the Eurogroup, and the European Parliament): the “notion of convergence is at the heart of our Economic Union” (Five Presidents 2015, 7). It must ensure that “each economy has the structural features to prosper within the Monetary Union” – which presupposes that “economic structures converge towards the best standards in Europe” (ibid., 4). And even if “convergence, prosperity and social cohesion” might ultimately also require national and European fiscal capacities for macroeconomic stabilization, convergence must come first – and hence constraints on national policy choices must be reinforced, rather than relaxed.

The Five Presidents Report did not explicate how the present requirements of fiscal austerity and wage control would bring about structural convergence. But in light of the Commission’s (2010b) analyses, the logic is clear. If the divergence of export-led and demand-led growth models cannot be sustained in the EMU, then structural convergence “on the best standards in Europe” must imply convergence on the structure of export-led growth models – a goal which the present euro regime is well designed to pursue. By constraining domestic demand, fiscal austerity will not only reduce imports and current account deficits, but it will also destroy productive capacities and jobs in the overly large non-traded sectors of deficit economies. At the same time, “structural reforms” should eliminate wage-driven inflationary dynamics and thus increase the international competitiveness of the traded sector. If this regime is enforced hard enough and long enough, therefore, the non-traded sector will shrink and the relative size of the traded sector will increase. And as the underlying sectoral structure is changing, so will structure-based incentives. Eventually, unions and governments would learn that their self-interest is best served by wage-setting practices and public policies that respect the constraints and exploit the opportunities of international markets.

In other words, critics berating the economic irrationality of the current euro regime tend to underestimate its functionalist logic. It is based on the political premise that the Monetary Union should be defended, and on the economic assumption that the existing structural divergence of its member economies will continue to threaten its sustainability. This second assumption may be disputed, though I have yet to see an explicit confrontation in the literature.⁵³ If it is accepted, however, it makes sense to create a re-

53 Many critics of the present regime tend to ignore or downplay structural divergence in the euro zone (for example, De Grauwe 2011; 2013a; 2013b; Schelkle 2015; 2017; Stiglitz 2016). By contrast, Torben Iversen and co-authors acknowledge the relevance of structural divergence. Nevertheless, they interpret the first decade of the euro not as the prelude to a structure-induced

gime that will suppress divergence in the short run and promote structural convergence over the medium and longer term. Its ultimate goal is the structural transformation of the former soft-currency economies of southern Europe from their traditional dependence on demand-led economic growth to the northern model of export-led growth and employment.

The Five Presidents, however, would not spell out the inevitable economic and social costs of enforced structural transformation (which the Commission had identified on the eve of the euro crisis). Since the excess productive capacities of large non-traded sectors could not simply be redirected to serve existing export markets or absorbed by much smaller, though perhaps expanding traded sectors, deficit economies would have to face “a protracted period of underutilization of capital and labor resources” (Commission 2010b, 32–33). In other words, if structural convergence is to be brought about by fiscal austerity and supply-side reforms, it could only succeed by forcing the former soft-currency economies first into a deep recession and then at best into a period of slow growth and long-term underemployment.

The ultimate promise of the present regime is a “Deep, Genuine and Fair EMU,” which the Five Presidents have described as “a place of prosperity based on balanced economic growth and price stability, a competitive social market economy, aiming at full employment and social progress” (Five Presidents 2015, 4). Presumably, these goals would find broad support throughout the eurozone. If the regime is nevertheless highly controversial and widely rejected, the crucial problem is its fundamental asymmetry. As everybody may see, its rules are fully compatible with the economic structures, wage-setting practices, economic interests, and political preferences of export-oriented northern political economies. And all the economic and social burdens of adjustment – massive job losses, wage and welfare cutbacks, out-migration, and escalating youth unemployment – are imposed on the citizens of southern political economies.

From a southern perspective, the regime’s allocation of the costs and benefits of structural convergence must appear glaringly unjust (Tsoukalis 2016; Ferrera 2017). Its measures could not be and were not adopted in democratic political processes at the national level. And at the European level, the politicization of fundamental North–South conflicts was ruled out by a decision-making mode in which crucial policy choices were adopted by politically unaccountable supranational authorities and intergovernmental agreements – under conditions in which the relative bargaining powers of the govern-

disaster but as the success story of “dual growth model” in which “northern” and “southern” economies had equally succeeded by continuing with their path-dependent hard- and soft-currency routines and policy choices (Iversen, Soskice, and Hope 2016, 171–75). But the authors pay little attention to the accumulated risks of external imbalances and sudden stops in international financial markets; and though they explain the crisis as a failure of macroeconomic management, they have not explicitly analyzed the availability of stabilization policies and their capacity to ensure the long-term sustainability of divergent economies in a monetary union that is not a state.

ments involved were skewed in favor of creditor states ever since it had been decided that the euro crisis should be resolved by intergovernmental credits and guarantees (Tsebelis 2015; Zahariadis 2017). In other words, the present euro regime lacks democratic legitimacy, and there is no prospect that it could be democratized in the near future. Its rigorous implementation will thus continue to depend on technocratic authority and intergovernmental bargaining power (Scharpf 2016). By the same token, however, it will also remain politically vulnerable.

An obvious risk could arise from mass protests or adverse election outcomes that might force some southern governments to renounce their loyalty and to openly reject compliance with the requirements of the regime. Given the continuing support of southern publics for the EMU (Roth, Jonung, and Nowak-Lehmann 2016), however, that outcome may be less likely than an erosion of the belief in the regime's ultimate rightness and effectiveness among its political and economic promoters and supporters. Its rules could not have been imposed by technocratic authority and northern bargaining power alone. They had to be justified by arguments invoking not only an immediate common interest in stabilizing the Monetary Union, but also the expectation that eurozone economies will finally be able converge on a common model of competitiveness, growth, employment, and prosperity. And it seems that precisely these expectations are now losing their empirical plausibility.

7 Elusive convergence

What is presently eroding is not the commitment to the Monetary Union, but the belief in the ultimate effectiveness of the asymmetric regime in achieving a viable economic future for all its member economies. And these doubts are increasing at a time when the eurozone's growth performance is at last improving and it is becoming clear that the regime is in fact achieving its immediate objectives in southern European economies.

Adjustment, but not convergence

Eight years after the onset of the global financial crisis, inflation rates in the South are as low as, or lower than, in the North. The deficit economies of the EMU's first decade have drastically reduced their current account deficits, and most of them are now achieving small surpluses. At the same time, their unit labor costs, which had escalated in comparison to Germany after 1999, have also declined significantly after the crisis. In other words, the immediate purposes of the euro regime are being approximated, and all "programme states" – including Greece – have regained, or are about to regain access to regular capital market finance.

Table 3 Economic performance 2008–2016

	Current account as % GDP	Current account	Unit labor costs	Exports as % GDP	GDP	Employment rate	Public debt as % GDP
	2008	Cumulative changes 2008–2016					
Germany	5,83	2,51	17,08	5,87	22,34	6,56	4,87
The Netherlands	5,22	3,14	7,34*	12,79	9,93	-3,05	13,57
Austria	4,61	-2,89	16,32	-1,77	19,67	1,02	22,48
Finland	2,40	-3,47	20,21	-21,57	10,51	-2,78	94,64
France	-0,98	0,07	10,32	7,64	11,67	-1,12	41,95
Belgium	-1,01	0,62	10,71*	5,87	19,08	-0,16	14,54
Italy	-2,92	5,50	8,77	11,20	2,47	-2,39	29,40
Ireland	-7,65	12,36	-27,82	42,48	41,64	-3,75	78,13
Spain	-9,57	11,53	-4,70	30,61	-0,21	-7,64	151,76
Portugal	-12,36	13,20	-3,29	29,31	3,39	-4,08	81,89
Greece	-15,40	14,76	-3,10	29,07	-27,32	-15,30	63,78

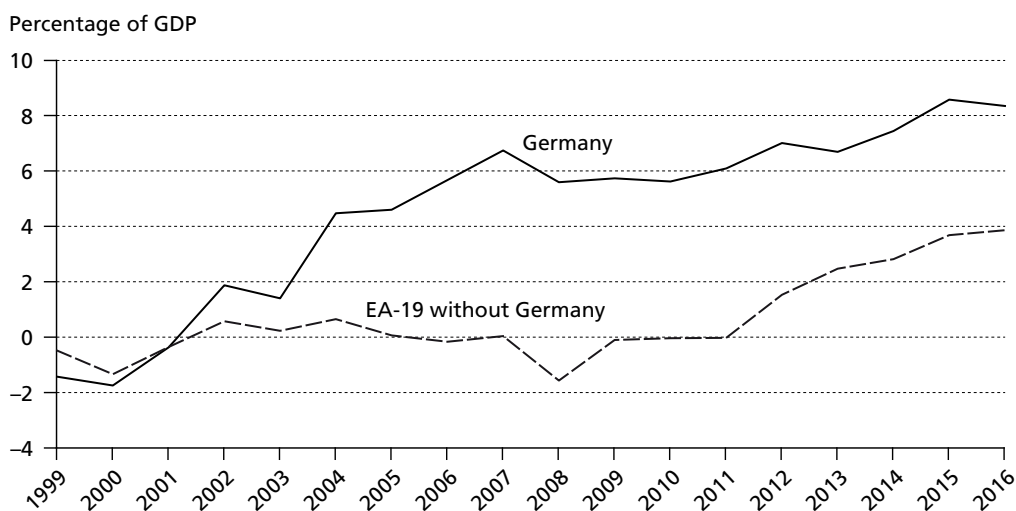
Sources: Eurostat; OECD; own calculations; * indicates values from 2008–2015.

These changes, which have been achieved under externally imposed constraints on domestic demand, cannot yet be taken as indicators of self-sustaining structural change. But even in structural terms, the changes are in the intended direction (Table 3). The extreme example is Greece, where GDP has shrunk by 27 percent since the start of the crisis, while the share of exports in GDP has risen by 29 percent. And in all former deficit economies, exports have risen faster than GDP (and faster than in former surplus countries). In other words, the relative size of the export sector is in fact increasing, whereas the non-traded sector is shrinking, as intended. At the same time, however, the significant decline in employment levels and the rise of public-sector indebtedness indicate that the structural transformation of demand-driven southern economies is far from complete. With the possible exception of Ireland, they still have a long way to go before they will be able to succeed on export-driven economic growth and employment.

The question is whether that goal can be achieved under the present rules of the euro regime. Even though the deficit states have corrected their external imbalances and reduced their unit labor costs, convergence has not yet been achieved, and the eurozone as a whole is still not in balance – except that now divergence must be attributed not to deficit but to surplus economies, and to Germany in particular (Figure 22).

One aspect of the problem is illustrated in Figure 22. As explained above, German current accounts moved from deficit into surplus with the start of the EMU, whereas the rest of the eurozone went into deficit in the early 2000s, but then recovered after the crisis. But though the extreme divergence narrowed thereafter, the change is due mainly to reduced deficits in the rest of the euro area, which may plausibly be attributed to the crisis and the constraints imposed by the euro regime after 2010. In any case, the rise of German surpluses was only briefly interrupted by the crisis. By now, both trajectories appear to be moving in parallel, and the gap between them remains very large.

Figure 22 Current account balances in Germany and the rest of the eurozone (EA-19 without Germany) as a percentage of GDP, 1999–2016

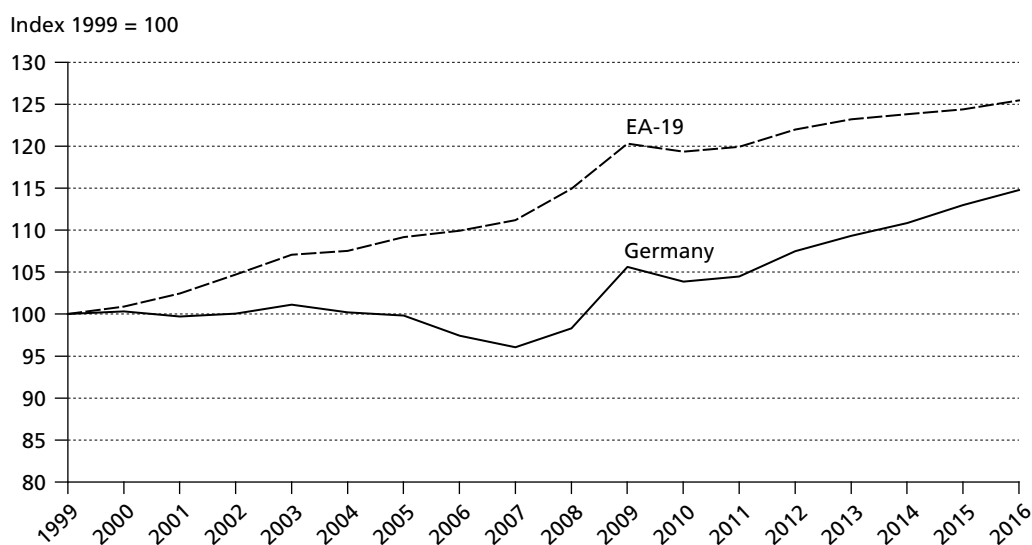


Source: OECD Main Economic Indicators.

In other words, external imbalances in the eurozone persist, but they are now no longer due to excessive southern deficits but rather to northern – and in particular German – surpluses. Unlike deficits and for the time being, they would not immediately challenge the stability of the common currency. But they might still be considered a structural vulnerability under conditions of future crises of the international financial system. In the meantime, however, the focus has shifted from concerns about external imbalances as such to discussions of the damaging impact of German surpluses on other eurozone economies (Lapavitsas et al. 2012; Krugman 2013).

Analytically, it is of course true that surpluses in one country must correspond to deficits in others; that capital account surpluses must correspond to capital exports; and that capital account deficits must be financed by capital inflows. But of course, these equations cannot settle questions of causation – whether the capital account is driving the current account or vice versa (Obstfeld 2012); or more specifically, whether during the early and mid-2000s eurozone imbalances were driven by the pull of irresponsible southern borrowers or by the push of greedy northern lenders (see, for example, Benigno, Converse, and Fornaro 2015; Kollmann et al. 2015; Perez 2017). But regardless of causal, or even moral, attribution, it is indeed the case that during the first decade of the EMU, German trade surpluses were in part achieved through exchanges within the eurozone (see Figure 21). To that extent, at any rate, the rise of the German surplus is plausibly associated with trade deficits in other eurozone economies. It is also the case, however, that as southern deficits declined in the crisis and under the euro regime, intra-eurozone trade surpluses declined, while the German surplus vis-à-vis the rest of the world continued to increase.

Figure 23 Average unit labor costs in Germany and the EA-19, 1999–2016

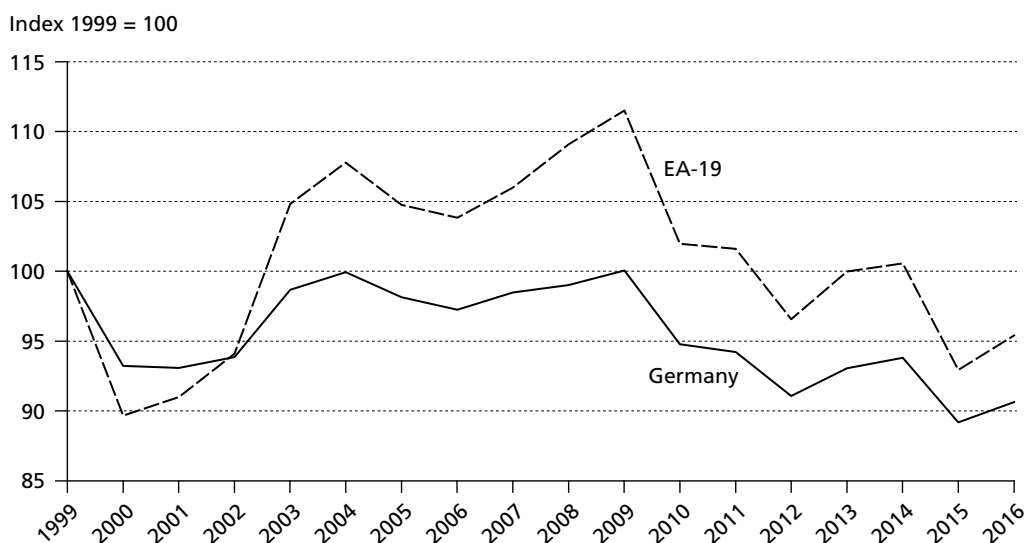


Sources: OECD Productivity Statistics (ISIC Rev. 4); own calculations.

In the present context of a discussion about structural convergence in the eurozone and the prospects of southern economies achieving prosperity through export-led growth and employment, however, the assertion that German surpluses have a negative impact on the rest of the eurozone cannot be rejected by reference to bilateral exchanges alone. Even though export profiles overlap only to a limited degree (Grabka 2015), the persistent gap in unit labor costs and real effective exchange rates implies that German export industries are maintaining a significant cost advantage over those French, Spanish, or Italian firms that are competing in the same markets. Moreover, German surpluses have an impact on the euro exchange rate that affects the external trade of all eurozone economies. Hence, even if all internal exchanges were in balance, persistent German surpluses would constrain the prospect of export-led growth strategies that southern eurozone economies are urged to pursue.

After the start of the EMU, the movement of nominal unit labor costs – which is closely associated with the rise of inflation (Höpner and Lutter 2017) – diverged strongly between Germany and the rest of the eurozone. And though the paths have been moving more or less in parallel since the crisis, the gap between Germany and the rest of the eurozone remains wide and does not seem to be narrowing (Figure 23). Causal and moral accounts of the initial divergence are still in dispute – have German unions practiced “mercantilistic” wage restraint, whereas southern wage increases were a secondary effect of credit-financed increases in domestic demand? But regardless of who is to blame, there is no question that the gap itself has a massive impact on international competitiveness.

Figure 24 Real effective exchange rates in Germany and the EA-19, 1999–2016



Sources: Eurostat; own calculations, with CPI deflated and 42 trading partners.

Because differences among EMU members can no longer affect nominal exchange rates, they are now reflected in diverging real effective exchange rates (REER). After a common decline until 2002, the trajectories of German and eurozone REER diverged dramatically (Figure 24). Whereas German competitiveness vis-à-vis its worldwide trading partners remained more or less constant until the global financial crisis, for the eurozone as a whole the steep rise in the REER amounted to a substantial loss of competitiveness. After 2009, both valuations have declined more or less in parallel, but in comparison with the eurozone average, German exports continue to benefit from a significant undervaluation of the real exchange rate.

In the context of a discussion of the effectiveness of the present euro regime, the implications of these persistent divergences are dramatic. If structural convergence is considered a necessary precondition of EMU stability, and if prosperity in the eurozone must be achieved through the structural approximation of the export-led growth model of northern economies, then it is not enough that southern economies have, for the time being, eliminated their former current account deficits and impeded the rise of unit labor costs. Even if their performance approximated the eurozone average (that includes Germany!), the outlier position of the German economy, combined with its exceptional size and its impact on the euro exchange rate, continues to impede their international competitiveness. In effect, German performance continues to raise the bar that competitors from other eurozone economies would have to surpass in order to succeed in world-wide export markets.

In other words, if the asymmetric euro regime is to achieve its purpose, the persistent performance gap would have to be closed by much greater efforts on the part of south-

ern economies to achieve convergence, not with the eurozone average, but with German standards. But quite apart from the political feasibility of the measures required, I have tried to show here that German performance is the result not of recent policy choices that could be imitated with similar effect in other eurozone political economies, but of the historically unique co-evolution of external opportunities and constraints, with domestic adjustment facilitated and constrained by specific economic and institutional constellations.

The German model – too deviant to be imitated

In effect, the German structural *Sonderweg* began with the change to flexible exchange rates in the early 1970s (see Section 3 above). In line with other medium-large economies, the German export sector was quite small at the time, amounting to about 20 percent of GDP. In theory, this would have favored demand-led growth of the domestic sector and the evolution into a soft-currency economy. Instead, the Bundesbank, which under Bretton Woods had been struggling with imported inflation, used the opportunity to finally enforce price stability against all inflationary impulses, regardless of their origin – oil price rises, government deficits, wage increases, or dollar revaluation. Hence, domestic demand was constrained and the Deutsche Mark became overvalued in the 1970s, whereas the currencies of Italy, France, and the United Kingdom, along with those of most other European economies, devalued against Germany (see Table 1 and Figure 4). Nevertheless, German exports continued to rise moderately until the mid-1980s as firms were able to specialize in less price-sensitive markets for investment goods and high-quality consumer durables.

The second phase in the evolution of the German model began with the fall of the Iron Curtain (see Section 4 above). As the former socialist world became “safe for capitalism,” global demand escalated for precisely those products in which German industry had specialized. At the same time, the opening up of industrial regions in Central and Eastern Europe allowed German firms to relocate parts of production to nearby locations with skilled workforces and wages far below German levels. Moreover, under the threat of outsourcing, the rise of industrial wages in Germany was externally constrained. After the mid-1990s, therefore, German exports were also able to compete on price in international markets.

The third and final stage has been shaped by German entry into the Monetary Union – which started with a recession and a steep rise in unemployment. Unlike in earlier decades, the decline in domestic demand and hence imports was no longer compensated for by a rise in the nominal exchange rate that also would have dampened the continuing rise in exports. As a consequence, the export–import gap of the early 2000s continued without correction and even increased subsequently (see Section 5 above). It is not the rise in exports as such, however, but the persistent and even increasing German

surplus that presently accounts for external imbalances in the eurozone. In future financial crises, these may again threaten the stability of the Monetary Union. What matters more at present, however, is the negative impact of this divergence on the international competitiveness of other eurozone economies and their ability to achieve prosperity through export-led economic growth.

One cannot expect that this performance gap could be closed by southern economies through either a more rigorous enforcement of fiscal austerity or the imitation of German rules and practices. The comparative advantages of the German economy are a product of economic and institutional evolution that cannot be repeated. And they were not brought about by recent policy choices that could now be imitated. In particular, Schröder's Agenda Reforms of 2003–2004 dealt with specific deficiencies of the German welfare state, and they had little relevance for international competitiveness (see Section 5 above). Hence, if structural convergence is seen as a precondition for the future viability of the Monetary Union, the present euro regime with its asymmetric insistence on the structural adjustment of southern economies seems to have reached the limits of its effectiveness.

Symmetric rules for Germany?

By the logic of the asymmetric euro regime, the remaining gap between the German performance and the eurozone average would have to be closed by imposing even tougher constraints on domestic demand and wages in former soft-currency economies. In light of the above, however, that prospect appears not only economically unpromising but also politically unfeasible. As “programme states” have regained access to capital markets, the bargaining power of creditor states in the Council is eroding. And as the threat of euro crises arising from southern current-account and public-sector deficits is receding, demands for more rapid economic and employment growth have become more urgent.

Though the Dutch and Finnish governments (and the Baltic states) are supporting German demands for tighter rules and tougher enforcement, Italy and France are now challenging the austerity rules, while the Commission and the ECB have come to favor some kind of growth-inducing fiscal stimulus (Commission 2016b; Draghi 2016). At the same time, the ECB's “quantitative easing” has in fact been counteracting the euro regime's effects on aggregate demand, and the Juncker Commission has been softening the enforcement of fiscal rules with considerable political discretion. There is no question, of course, that any relaxation of present constraints on domestic demand in southern economies – whether through monetary expansion or fiscal reflation – is bound to counteract the purpose of the present euro regime to enforce structural convergence in the eurozone. But the more the German government emphasizes these warnings, the more it will weaken its simultaneous defense of persistent German export surpluses.

The argument is economically and morally straightforward: if southern economies cannot be allowed to seek economic recovery through an expansion of domestic demand, then they cannot also be denied demand-side relief in their search for export-led economic growth – which could and should be achieved by reducing the German export–import gap through measures to increase demand for their exports. On the one hand, rising domestic demand in Germany would increase imports and thus have some direct effect on southern exports. On the other hand, it should increase prices and wages and decrease the price competitiveness of German exports. In effect, then, the relative disadvantage of southern exports in international markets would be reduced, and they might also benefit from a somewhat lower euro exchange rate.

In theory, therefore, the economic logic that justified the euro regime enforcing the structural transformation of deficit economies would have to be applied symmetrically to require a complementary structural transformation that would expand the domestic sector of surplus economies (Bénassy-Quéré 2017). Compared with its analyses in 2010, however, the Commission (2010b) was slow in coming to this conclusion. In its “First Alert Mechanism Report” under the Macroeconomic Imbalances Procedure, it had justified setting a lower alert threshold for current account deficits (4 percent of GDP) than for surpluses (6 percent), arguing that only deficits implied a threat to the stability of the euro (Commission 2012a; 2012b). But when the German surplus exceeded the higher standard as well, the 2014 Report suggested that it might indicate a misallocation of resources and welfare losses for Germany – which should be corrected not through reduced exports, but through higher investment, lower private-sector savings, and rising wages (Commission 2014). The report for 2016, however, noting that German surpluses had risen even more, repeated the previous recommendations but changed the argument: surpluses in Germany and the Netherlands should be reduced in order to increase aggregate demand in the euro area. This would help highly indebted member states that need to reduce domestic demand and boost export-led growth at the same time (Commission 2015a, 8). Thus, persistent surpluses are no longer seen merely as a problem for Germany; they are now declared to be a problem for the euro area as a whole.

But even though the IMF and others (including the Trump administration) have added to the Commission’s repeated admonitions, the German Ministry of Finance has continued to dispute the economic relevance of the trade surplus for other eurozone economies,⁵⁴ and hence any need for adjustments in Germany. In its view, “the only way to create jobs and fuel growth [in southern economies] is to focus on boosting economic dynamism” – in other words, through strict compliance with fiscal consolidation rules and structural reforms (Chief Economist 2017). Hence, though Germany had been classified as being in a situation of “macroeconomic imbalances” since 2014, in its September 2017 report the Commission found that hardly any progress had been achieved on the previous year’s country-specific recommendations (Commission 2017, annex 4).

54 In this regard, the government has the full support of German mainstream economists (Felbermayr, Fuest, and Wollmershäuser 2017).

One may well ask, therefore, why the Commission did not reclassify Germany as being in a state of “excessive macroeconomic imbalances” – which could, in principle, also allow the “corrective arm” of the Imbalance Procedure to be activated? One explanation may be German bargaining power. But one may also ask whether a more compliant German government would have the capacity to eliminate the trade surplus, or whether a more courageous European Commission could specify and enforce corrective measures that would achieve a symmetric convergence of the German economy toward the eurozone average.

In this regard, a look at the Commission’s 2017 recommendations is sobering: only one of them (“reduce the high tax wedge for low-wage earners”) is sufficiently specific and practicable enough to allow enforcement – but it would also have little impact on the external balance. If they were realized, three other recommendations might have a greater impact (“use fiscal and structural policies to support potential growth and domestic demand as well as ... investment,” “accelerate public investment at all levels of government,” and “create conditions to promote higher real wage growth, respecting the role of the social partners”). At this level of abstraction, however, practicability could not be assessed and direct enforcement would be out of the question. This may not be the Commission’s fault.

It is generally easier to define and implement state action that will effectively depress domestic demand, consumption, and investment, while it is much more difficult for governments or central banks to stimulate private-sector demand and economic growth. That also applies, more or less, to the recommendation of higher real-wage growth. In Germany, at any rate, the government would indeed have to respect the constitutional autonomy of the social partners to define wage increases in collective agreements. Given the shrinking coverage of such agreements, the government could help to make existing settlements generally binding; it could also raise the minimum wage. But for a rise in wages that could have a significant impact on aggregate demand, the government would have to defer to collective bargaining among sectoral employers and unions.

Because employers are likely to resist, wage settlements raising unit labor costs well above the eurozone average would depend on the relative bargaining power of industrial unions. At present, indeed, this is strengthened by perceived skill shortages. And if German unions could be accused of practicing “mercantilist” wage restraint (for example, Flassbeck and Lapavitsas 2013; Baccaro and Pontusson 2016), why shouldn’t they now be encouraged to adopt aggressive wage policies in the common interest of eurozone economies? But even if, in the absence of European wage coordination (Höpner and Seeliger 2017), industrial unions in Germany were sufficiently altruistic and powerful to raise German unit labor costs toward the eurozone average (see Figure 23), the potential impact on external balances remains uncertain.

During most of the 1990s and 2000s, negotiated wage rises were significantly higher than effective wage increases (IW 2012). For the reasons discussed above (Section 4), therefore, over-expansionary settlements in export industries are likely to generate

Figure 25 Domestic demand (including stocks) in Germany, 1991–2016



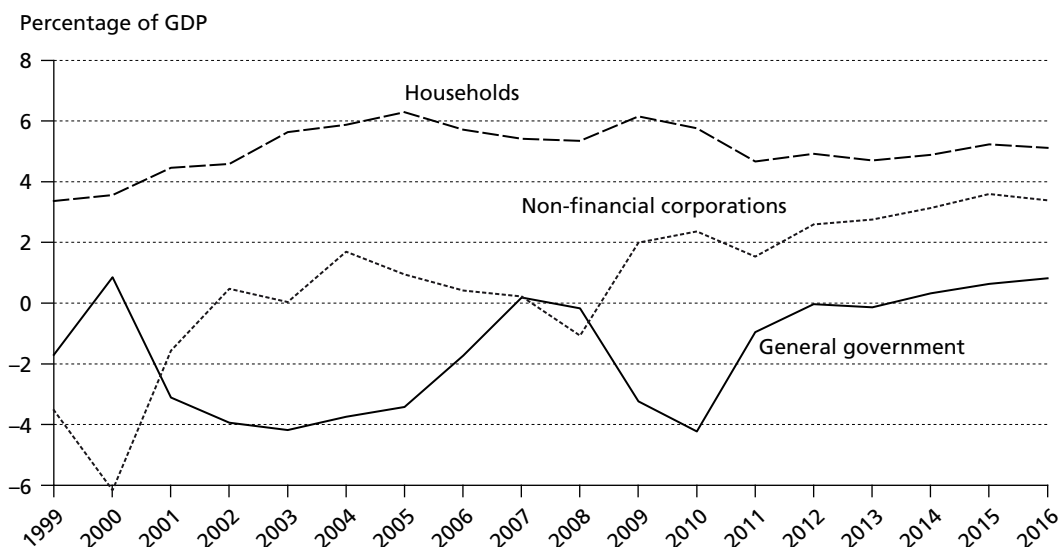
Sources: AMECO; own calculations.

“negative wage drift” to a much greater extent. At the same time, employers could be expected to respond by outsourcing even more of their production to low-cost locations, which would reduce the impact of German wages on export prices. On the demand side, moreover, the effect of higher wage incomes would need to be discounted by the income losses of rising unemployment and by an increase in precautionary savings in response to the fear of job losses. Nevertheless, real wages and unit labor costs are presently rising, but they are not increasing at anywhere the rate that would be needed to significantly reduce the German export–import gap (Horn and Watt 2017) or the gap in real exchange rates between Germany and the eurozone average (Figure 25).

But even if the export–import gap is unlikely to be closed through a dramatic rise in unit labor costs, through either government action or union strategies, something might be done about the continuing decline of domestic demand (f) – indirectly through policies affecting private sector investments and consumption or directly through public-sector investments, employment, and transfers. At present, savings are in fact exceeding expenditures in all three sectors – business, households, and government – at the same time (Figure 26). But how likely is it that these trends could be effectively reversed through measures that the Commission could require the German government to adopt?

In the business sector, net savings in Germany do not necessarily imply a decline in investment. With the lengthening of global value chains, German exports no longer depend on productive investments at home. Even after almost two decades of relative wage restraint, nominal gross wages in industry are still the highest in the eurozone, except for Belgium. Moreover, as late as 2015 nominal wages in Hungary, the Czech Republic,

Figure 26 Net lending and net borrowing by the government, households, and non-financial corporations in Germany, 1999–2016



Sources: OECD Annual National Accounts; own calculations.

and Poland were at 21 to 29 percent of the German level (IW 2015, Table 12.13; Myant 2017). For capacity-expanding industrial investments, therefore, high-wage Germany has not been a promising location since firms have been able to produce abroad at the same quality and much lower cost. By and large, R&D, design, management, marketing, and important control and service functions are still kept close to home (Herrigel, Voskamp, and Witte 2017; Voskamp 2017). But beyond these “competence centers” and facilities needed for the production of prototypes and for the continuing optimization of production processes, large-scale investments expanding industrial production tend to be moved to low-cost locations – unless processes are so highly automated that relative labor costs cease to matter. From a business perspective, it is hard to see how that should change in the near future – or what government could do about it. Further tax cuts, at any rate, would hardly make a difference at a time when (in contrast to the post-war decades) post-tax profits no longer need to be reinvested at home.

Household savings are traditionally high in Germany, but they have recently declined somewhat, and consumer spending is currently seen as the main factor driving a modest rate of economic growth. In spite of extremely low interest rates and rising house prices in many cities, however, there is no sign of a credit-financed housing and spending boom. One factor is a rapidly aging population and the fact that the pension cuts imposed by the Agenda reforms have contributed to a rise in retirement savings (Kollmann et al. 2014). Beyond that, however, the pattern is better accounted for by sociological explanations. In a wide-ranging historical and institutional study, whose findings are appropriately summarized by its title (“Saving before Buying”), Daniel Mertens (2015) has identified institutional conditions and policy legacies resonating with the culturally ingrained aversion of German households to indebtedness and the cautious

approach of German banks to extending consumer and housing credit. Hence, Germany is the only European country where the share of household debt in GDP was considerably lower in 2014 than it had been in 2000 (Commission 2016, 13, Graph 6a).

That is not meant to suggest that government could not influence consumer demand. Like the OECD, the Commission has repeatedly suggested that the excessive tax wedge at the lower end of labor market should be reduced. If it were corrected through a tax-financed basic exemption on social security contributions (see Section 3 above), employment, incomes, and consumer spending should indeed increase. But as yet, the issue is not on the German political agenda. Beyond that, present academic discussion has turned to the possibility of reducing VAT rates (von Weizsäcker 2017). That would surely stimulate domestic demand, but critics note that the loss of revenue would be large relative to the effect on imports. Hence, one might consider reducing only VAT rates on (European) imports – although this might conflict with EU internal-market rules (Scharpf 2016). In any case, however, revenues from VAT have just become even more central in the extremely complex regime of German fiscal federalism. They are now fully shared between the European Union, the federal state, the *Länder*, and local government, and after years of controversial intergovernmental negotiations, the relative claims of individual *Länder* were recently written into constitutional law. To reduce VAT rates, therefore, would require extremely complex and conflict-ridden multi-level renegotiations about raising revenues from other sources and new types of intergovernmental transfers.

The European Commission, perhaps aware of the limits of state action that would increase private-sector wages, industrial investment, and household spending, has mainly emphasized the German potential for expanding public-sector spending and investments. And, indeed, from a policy perspective there are many good reasons for the German government to moderate its commitment to the “*schwarze Null*” of a balanced budget and even a slight surplus (Fratzscher 2014; 2016): In particular in western Germany, the maintenance of railroads, highways, bridges, and school buildings has suffered badly since unification; police forces, social services, child care facilities, schools, and retirement homes are seriously understaffed and additionally stressed by migration; and of course, military spending and foreign aid should be increased.

So far, however, the government has not responded to external or domestic political demands. An obvious reason is consistency: having urged the adoption of a Fiscal Compact in EU member states and imposed a constitutional “debt brake” on the German *Länder*, the government would have to pay a high political price if it publicly reversed its position. In contrast to the 1990s, its campaign for fiscal consolidation was and is not justified by the fear of inflation or by neoliberal demands to reduce the size of the state. What matters instead is the conviction, hardened in the euro crisis, that states should avoid becoming vulnerable to the vagaries of international capital markets⁵⁵ –

55 Another reservation on the political Left emphasizes the negative redistributive effects of credit financing – which amounts to using taxes on labor and consumption to pay for capital incomes.

which fits well with Angela Merkel's appeal to the virtues of the *schwäbische Hausfrau*. In economic terms, moreover, Keynesian stabilization-theoretic justifications of deficit spending do not seem to apply in a national economy that is operating near full capacity and approaching full employment. So the argument would have to be presented in the frame of the 1978 "locomotive theory" – as a political or moral obligation to go into debt in the interest of the eurozone as a whole.⁵⁶

Yet even if all these normative and cognitive objections were disregarded, the main reason for fiscal inaction is the expectation that the government could in fact not do very much. Under the German Constitution, most public-sector investments and practically all employment in public and social services – teachers, social workers, care givers, police officers, and tax collectors – are financed by the *Länder* and by local government. These, however, have practically no control over their revenues: income, corporation, and consumption (value added) taxes are shared between the different levels of government, and even the schedules of exclusive *Länder* taxes are defined by uniform federal legislation. Moreover, some *Länder* and many municipalities are presently over-indebted, and all must comply with the balanced-budget rules of the "debt brake," coming into force in 2020. Acting on their own, therefore, local and regional governments in Germany would not be able to significantly raise the level of public-sector employment and investment through fiscal expansion.

The federal government, however, which still has some limited autonomy in taxation and a bit more room of maneuver under the debt brake, is directly responsible for only a small segment of public administration and public services and for a somewhat larger share of investments in highways, railroads, and telecommunications. Beyond that, recent constitutional reforms have actually reduced or even eliminated the possibility of using federal grants to facilitate the expansion of public and social services in education, child care, or public security at the *Land* and local levels (Scharpf 2005; Benz 2016). In theory, of course, further changes in the fiscal constitution might again extend the boundaries of joint financing, or they might generally shift revenues from the center to the periphery. But such changes are not presently on the agenda of German federalism, and they could at best be achieved through determined political efforts over years of conflict-ridden multi-party bargaining – in other words, in processes that would be totally unsuitable as a response to current European demands for a sustained, but presumably temporary, fiscal reflation in Germany.

56 Such obligations are emphatically rejected by mainstream economists defining the principles of German ordoliberalism and applying them to competition among national economies: "It is part of these rules that companies *and, by implication, entire economies* should compete for markets and customers. There are no rules saying that, above a certain competitive advantage companies should adjust by increasing their costs or by reducing their productivity" (Felbermayr, Fuest, and Wollmershäuser 2017, 196, emphasis added). This dogmatic position ignores, of course, rules of "unfair competition" and their potential applicability to competition among the member states of a monetary union in which beggar-my-neighbor practices are no longer neutralized by the adjustment of exchange rates.

Paradoxically, therefore, it would be technically and politically less difficult for the federal government to spend more abroad – for military hardware, foreign aid, contributions to the EU budget, or even transnational transfers in the eurozone – than to increase domestic demand by investing and spending more at home. And this may well be the most likely outcome of Germany's resistance to change under the present euro regime.

8 The German model at an impasse

The German government has so far resisted all demands for a substantial reduction in excessive export surpluses – and the Commission has not yet chosen to initiate the corrective measures that are available under the present Imbalances Procedure. Moreover, there are no proposals on the present European agenda for a symmetric euro regime that would bring about convergence in the eurozone by requiring corresponding structural adjustments in northern political economies. The Commission's reluctance to challenge the German position is widely attributed to considerations of political feasibility, and the government's obstinacy is thought to be fully explained by economic self-interest, combined with its asymmetrical bargaining power in European interactions (Iversen, Soskice, and Hope 2016).

Economic persistence and political immobilism

In general, of course, neither the definition of national interests nor the balance of power in European bargaining are written in stone, and they might well be modified by changes in national or European political coalitions. What is unlikely to change, however, is the economic resilience and political clout of export-oriented manufacturing, and the weakness of political governing capacity in the German political economy.

With exports amounting to almost half of GDP, industry is of course treated as “too big to fail” in German politics. Moreover, governments and unions are fully aware of the fact that Germany is primarily holding its own as the engineering home-base of firms which are operating globally and which are generally quite ready to relocate more of their productive capacities to more profitable locations in Europe or in other parts of the world. Hence, measures designed to reduce the international competitiveness of export industries, or the profitability of industrial production, by raising unit labor costs or increasing regulatory and tax burdens would be unviable in German politics and industrial relations – and unlike some academic economists, the Commission has never included such proposals in its country-specific recommendations.

These objections would probably not stand in the way of proposals to expand domestic demand to an extent that would reduce export surpluses by increasing imports significantly. Since German industry has largely abandoned the market for consumer goods, it would not benefit much from such measures, but neither would it be greatly affected by rising imports. In theory, moreover, the government could directly increase private demand by reducing consumption taxes (or, more directly, VAT on imports), and by increasing expenditures on public-sector employment and infrastructure investments. But, as I pointed out above, all these measures appear quite impracticable under the institutional and political constraints of German fiscal federalism. Given the centrality of this factor for any understanding of the German position in European interactions, it will be useful to elaborate on it some more.

The basic facts have already been mentioned. All major taxes are shared between the federal and the *Land* level, and even taxes accruing to the *Länder* or the municipalities are regulated by uniform federal legislation. Hence, regional and local governments do not have autonomous control over their tax revenues, and the balanced-budget rules that were recently constitutionalized have removed the option of deficit finance as well. At the same time, most legislative competences are located at the federal level, but with few exceptions, uniform federal laws must be implemented by regional and local governments with their own resources – which also requires roughly equal fiscal capacities on the part of the *Länder*, and hence complex arrangements of vertical and horizontal transfers. In compensation, moreover, all legislation affecting *Länder* interests can be adopted only with a concurrent absolute majority of votes in the Bundesrat (where the *Länder* are represented by their governments, rather than by elected “senators”). In other words, the German constitution has created a perfect “joint-decision system” in which practically all fiscal, economic, and social policy choices depend on very broad agreement among federal and *Land* governments (Scharpf 1988; 2005; 2009; Benz 2016; Benz, Detemple, and Heinz 2016).

In recent years, moreover, the difficulty of reaching intergovernmental agreement has greatly increased. Before unification, interregional inequalities were comparatively low in West Germany. Social insurance was centralized, national legislation and fiscal equalization ensured a rough equality in the performance of public-sector functions, and economic disparities were kept in check by a wide range of national or joint programs subsidizing regional industrial development and public infrastructure. Though some of these programs were curtailed when European state-aid controls became effective in the 1980s, the main changes came after unification. Because the East German economy had collapsed after joining the German currency union at an absurdly high exchange rate, the constitutional commitment to roughly equal living standards required massive west–east transfers not only to finance new governing institutions, state functions, welfare benefits, and public infrastructure, but also to subsidize the reconstruction of a private economy – whose per capita output, after a quarter century, is not yet approaching three-quarters of the western level.

As a consequence, the contributions of western *Länder* to fiscal equalization escalated, and federal expenditures on public infrastructure and regional subsidies were radically re-directed toward the east. At the same time, economic inequality increased in the west because export-oriented growth after the mid-1990s favored industrial regions in southern and south-western Germany, but did little for regions in the west and north struggling with the secular decline of old industries. In effect, therefore, rising inter-regional inequalities, not only east–west but also within western Germany, have greatly increased the intensity of distributive conflict and hence the difficulty of reaching agreement in the joint-decision system of German fiscal federalism (Benz 2017).

These difficulties of effective policymaking are aggravated by structural changes in German party politics. Originally, federal-state intergovernmental bargaining in the Bundesrat had been largely independent from the politics of parliamentary confrontation between government and opposition. That changed at the end of the 1960s, when the social-liberal government had squeezed into office by a narrow margin, while conservative *Land* governments maintained a majority in the Bundesrat. Because they could change party-political majorities in the Bundesrat, *Land* elections came to be treated as “second-order” national elections in which voters could express their dissatisfaction with the current performance of the federal government – suggesting a model in which any new governing coalition would before long face opposition majorities in the Bundesrat (Burkhart 2008). Hence, party-political competition and parliamentary confrontation would further complicate, and sometimes frustrate, the intergovernmental search for pragmatic compromises (Lehmbruch 1998).

Moreover, parliamentary politics itself has also become more complicated as the “two-and-a-half parties” system, lasting from the 1960s to the 1980s, has now expanded into a seven-party constellation. The large conservative and social democratic parties, that had once been able to form stable right-of-center or left-of-center governing coalitions, have shrunk from a combined vote of 88 percent in the 1960s to 53 percent in 2017. At the same time, two of the five smaller parties – the left-wing “Linke” and the right-wing AfD (“Alternative for Germany”) – have gained their present electoral strength primarily in eastern Germany and in those regions in western Germany that have been left behind by the success of the export-oriented German growth model. As both of these extreme parties are presently not considered for coalitions at the national level, their combined electoral strength has now eliminated the option of forming cohesive left-of-center or right-of-center majoritarian coalitions in the federal parliament.

At the time of writing (January 10, 2018) it is still unclear whether and when Germany will again have a government supported by a majority in parliament. But regardless of whether the outcome will be a minority government, a multi-party coalition, or a greatly reduced conservative-social “grand coalition,” it is clear that the parliamentary politics of the coming years will be more conflict-ridden and unstable than before. In combination with the continuing intergovernmental constraints of fiscal federalism, this constellation seems to rule out the possibility of a strong political leadership that could

bring about structural changes in the German political economy that would increase its compatibility with the eurozone average. In other words, regardless of Commission recommendations and political pressures from southern governments, there will not be a German government with the political capacity, or the willingness, to interfere with the institutions and policies supporting the German growth model. Politically unimpeded, the export-oriented economy will continue on its evolutionary path – which in the future, just as was true in the past, will be shaped primarily by changes in the international economic and monetary environment.

European options

For the Monetary Union, there is now even less reason than before the recent elections to hope for major changes in the German political economy that would facilitate structural convergence toward the eurozone average. If that option must be ruled out, therefore, and if there are nevertheless good reasons to treat the structural divergence of member economies as a potential risk to the stability of the Monetary Union and a major impediment to the economic development of many of its members, there are in principle three further options to be considered.

The first – continuing and reinforcing the present asymmetric euro regime – has become, for the reasons discussed at the end of the previous section, economically and politically unpersuasive. Its persistence as the official doctrine of the EMU has been sustained until now not only by German veto power but also by credible ordoliberal convictions (Beck and Kotz 2017) and the personal authority of the incumbent finance minister Wolfgang Schäuble – qualities which are unlikely to be inherited by his successor. Hence, the next German government is unlikely to generate sufficient support for the further tightening of rules enforcing fiscal austerity and structural reforms in southern European member states. And though Germany and its northern allies may resist formal changes, they will not be able to defend present rules against erosion by “stealth” and “subterfuge” (Héritier 1999), just as even Schäuble was not able to protect fiscal austerity against the countervailing effects of the ECB’s “monetary easing” or against the Commission’s “political” practices of less restrictive implementation (V.A. Schmidt 2016).

Unfortunately, however, Schäuble’s departure has also eliminated the chance that a much more radical second option could be placed on the European agenda. It might have been compatible with German interests while allowing southern European member states to succeed through strategies implied by their demand-led model of economic growth. This chance appeared to be available for a brief moment in July 2015 when, at the height of the last Greek crisis, Schäuble had placed a “non-paper” on the table of the Eurogroup that promised significant support for a (supposedly temporary) exit from the EMU:

The time-out solution should be accompanied by supporting Greece as an EU member and the Greek people with growth enhancing, humanitarian and technical assistance over the coming years.⁵⁷

Schäuble's idea of a Greek exit from the euro, combined with continuing EU membership and substantial financial and institutional support for the transition was immediately rejected by the Greek government, and it also seemed to lack the support of the German Chancellor (Varoufakis 2017). Apparently, the geopolitics of Greek isolation was considered too dangerous in Athens and Berlin.

As I have tried to show elsewhere, however, the idea could have been expanded to become part of the comprehensive concept of a flexible two-level European Monetary Community (Scharpf 2016; 2017). It could combine a core of EMU member states with a periphery of European economies that are linked to the core through pegged exchange rates. The link could be provided by membership of the "Exchange Rate Mechanism II" (ERM II), the remaining part of the former European Monetary System (EMS). In principle, membership in ERM II could be attractive for southern, as well as northern European countries preferring to pursue nationally autonomous monetary policies. By linking their currencies to the euro with adjustable exchange rates reflecting economic fundamentals, they would ensure their competitiveness in the wider European market. Vis-à-vis the rest of the world, however, these exchange rates would be protected against speculative attacks by the ECB's superior fire-power in global currency markets.

After Schäuble's departure, there is little chance that the concept of a flexible and two-level monetary system that recognizes and accommodates the structural diversity of European political economies could be developed and put on the European agenda. In his absence, however, it also seems most unlikely that EMU reforms could follow the call for an extremely restrictive "Stability Union" that he presented in the form of a "legacy" non-paper on his farewell visit to the Eurogroup.⁵⁸ Instead, the overall thrust of present debates points toward exactly those proposals for more redistribution and more *gouvernement économique* that Germany had resisted even before the launch of the Monetary Union in the late 1980s.

Some of these proposals – such as the Banking Union and the Capital Markets Union – have already made considerable progress on the European agenda, whereas others (for example, risk sharing in a fiscal union, European support for national unemployment insurance, a European capacity for counter-cyclical fiscal interventions, a eurozone budget, eurozone or EU taxes, a eurozone parliament or a eurozone or EU finance minister) are still in the early stages of controversial discussion. All these diverse proposals have one aspect in common: they avoid addressing the issue of structural heterogeneity

57 http://www.sven-giegold.de/wp-content/uploads/2015/07/grexit_bundesregierung_non_paper_10_juli_2015.pdf.

58 <http://www.keeptalkinggreece.com/2017/10/11/schaeuble-non-paper-eurozone/>.

in the eurozone in general and the structural exceptionalism of Germany in particular. But even if these imbalances are ignored, their manifest effects will need to be dealt with when they arise in practice. And in the absence of either national macroeconomic autonomy or structural convergence, all measures trying to deal with these effects at the European level will necessarily imply fiscal relief and hence burden sharing among eurozone economies. In other words, they will be steps on the slippery slope toward a transfer union that Germany has always resisted.

On the slope to a transfer union?

In current debates, demands for solidaristic burden-sharing are sometimes introduced as the self-evident implication of European political integration in a democratic federal state (for example, Guérot 2017; Collignon 2017). But given the lack of public support for European state-building, proposals that are presently on the agenda for eurozone reform do not address redistribution so directly. Instead, the main emphasis of official initiatives seems to tackle quasi-technical issues involved in the further integration of eurozone capital markets and financial systems. These already played a significant but secondary role in the Five Presidents' Report of 2015, and they have moved into the foreground of the Commission's (2017) *Reflection Paper on the Deepening of the Economic and Monetary Union*. The primary objectives of structural convergence seem to have ceased to be a concern – current account balances are not even mentioned any more, and the continuing gap among nominal unit labor costs is not commented upon. Instead, the focus is on differences in economic performance – rates of economic growth, unemployment, and public sector debt. And the headline objectives of the Reflection Paper are now “jobs, growth, social fairness, economic convergence and financial stability” (Commission 2017, 18). These goals are to be realized through further progress toward “a genuine financial union” and a “more integrated fiscal union.”

Under the first heading, the emphasis is on risk-sharing through the Banking Union (complete with a common fiscal backstop for the Single Resolution Fund and a European Deposit Insurance Scheme) and the Capital Markets Union (increasing risk-sharing in the private sector, thereby contributing to the stability of the economy in case of economic shocks). Beyond that, the diversification of bank balance sheets could be improved by the private packaging of diverse state bonds into “sovereign bond-backed securities” and by the creation of a “European safe asset” based on the common issuance of debt by EMU states. Under the second heading, the move toward a “fiscal union” would go beyond the present functions of ESM credits in response to challenges to state solvency. A eurozone fiscal capacity would assist national capacities for anti-cyclical fiscal stabilization. It might protect public investment against economic downturns, and it could assist automatic stabilizers by subsidizing national unemployment insurance systems.

In political terms, this dual approach may appear expedient in a constellation in which the Commission must accommodate Italian, French, and Spanish demands for growth policies without seeming to violate the German insistence on fiscal consolidation. In economic terms, however, it also resonates with an academic literature that has theoretically downplayed or ignored structural imbalances among eurozone economies (for example, De Grauwe 2011; 2013a; 2013b; Schelkle 2013; 2015; 2017; Jones 2015). Instead, it is claimed that actual policies intended to deal with structural imbalances had the effect of pushing some eurozone economies into “bad equilibria,” characterized by high interest rates, budgetary austerity, and economic recession (De Grauwe and Ji 2013). What would be needed to avoid such “traps” involves a wide range of financial and fiscal reforms, not all of which would be approved by all authors. Some authors would side with Schäuble’s farewell message by proposing rules for debt restructuring and state insolvency (Sandbu 2015), whereas others would require the ECB to act as lender of last resort not only for banks but also for eurozone governments (De Grauwe 2013b; 2016; 2017, chapter 11). Apart from these extremes, however, proposals are largely convergent.

On all sides, there is no question that the Banking Union needs to be completed. Centralized supervision should reduce the risk of irresponsible lending and borrowing; and in the case of banking failures, bail-in rules should require private investors and creditors to assume some of the costs of bank rescues, whereas deposit insurance and a common resolution fund of sufficient capacity should spread the costs throughout the eurozone. At the same time, the Commission and the ECB have been promoting proposals for the completion of a Capital Markets Union with increasing urgency (Braun and Hübner 2017). The expectation is that, on one hand, the diversification of financial instruments, including the securitization of “simple, transparent and standardized” assets, will improve the financing opportunities of small and medium-sized enterprises and thus stimulate economic growth; on the other hand, the wider dispersal of investment opportunities is expected to smooth out and redistribute the geographic impact of investment failures.

What these proposals – at various stages between work in progress, political initiatives, and theory-based recommendations – have in common is a focus on the reform of financial and fiscal systems, rather than on the structural divergence of real economies. The question is, therefore, whether the “financial turn” of eurozone reforms should be seen as an effective substitute for enforced convergence, and if not, whether it could succeed on its own terms in the absence of effective structural convergence. Obviously, these questions cannot at present be answered on the basis of empirical evidence. My theoretical hunch is, however, that the answer to both will be negative – with the implication that the financial turn is likely to pave the way for a European transfer union.

The claim to be examined is developed most thoroughly in the political-economic work of Waltraud Schelkle (2013; 2015; 2017). In her view, structural-divergence arguments ignore the theoretical insights of insurance economics: monetary integration has indeed increased the vulnerability of nationally fragmented financial systems. From

an insurance perspective, however, risk-sharing institutions will not only redistribute gains and losses, but their effectiveness will actually increase with the diversity of cross-border investment and credit risks. It is fundamentally wrong, therefore, to think “that a monetary union must be forged through convergence” (Schelkle 2015, 137). Instead, if the EMU were to fail, “it may not be because of diversity and inequality of its members ... but because of the limited capacity to share and diversify risks” (Schelkle 2017, 1). What the EMU needs, therefore, is effective risk-sharing institutions, rather than either structural convergence or an “ever closer union,” culminating in a European federal state (Schelkle 2017, 153–57).

In support of the insurance perspective, Schelkle refers to analyses in international economics which demonstrate that groups of states facing asymmetric shocks may increase their aggregate economic performance by forming an insurance pool in which winners will compensate losers through redistributive transfers (Obstfeld 1984; Brennan and Solnik 1989; Cole and Obstfeld 1991; Van Wincoop 1999; Obstfeld 2012; Callen, Imbs, and Mauro 2015).

Obviously, that argument cannot be invoked in support of plans for a Capital Markets Union. There, the interregional diversification of investments may indeed spread the losses induced by asymmetric shocks among lenders and investors throughout the eurozone. But there is no suggestion that the winners will compensate the losers. And in any case, risk-spreading among investors will not prevent the regional concentration of losses suffered by borrowers, bankrupt businesses, dispossessed home owners, or laid-off workers. In the presence of structural imbalances, moreover, interregional risk differences will be anticipated and priced-in – and they may well be exacerbated by speculative capital markets (De Grauwe and Ji 2013). Hence, households and businesses in vulnerable economies would be systematically disadvantaged by the spread of credit ratings, bond yields, and interest rates. Instead of mitigating interregional disadvantages, therefore, a fully integrated Capital Markets Union would reproduce, and might even deepen, the divergence of real economies.

Apart from the Capital Markets Union, however, the EMU reforms that are currently under way are indeed concerned with risk-sharing among member states. In this context, the insurance argument is invoked in support of Schelkle’s claim that “monetary solidarity” in the EMU does not depend on the political integration of a European federal state, but may be brought about through interactions of self-interested member states that can be explained and justified as the cooperative resolution of collective action problems (Schelkle 2017, chapters 2 and 3). In the later chapters of her book, she illustrates this interpretation with empirical and historical accounts of the evolution of monetary institutions in the United States and in the EMU which I have no reason to dispute. But the theoretical argument deserves closer examination.

Collective action problems are defined as dilemmatic constellations in which interdependent actors, pursuing self-interested goals individually, will arrive at outcomes that

are inferior to another outcome that could be achieved through collective action – which, however, is undermined by self-interested defection. In other words, rational individuals have a common interest in “beneficial constraints” (Streeck 1997b) that will prevent them from following their immediate self-interests. The conventional solution would invoke external (“state”) authority. Waltraud Schelkle, however, relies on the work of Elinor Ostrom (1990) who received the Nobel prize in economics for showing that under specific conditions the “tragedy of the commons” could also be avoided through the voluntary cooperation of (presumably rational and self-interested) individuals.

The question is, however, whether “monetary solidarity” in the EMU does indeed correspond to this model. The economic literature on transnational risk-sharing did indeed demonstrate that (relatively small) gains in collective welfare could be realized through mutual insurance – but empirical examples are in fact quite rare (Callen, Imbs, and Mauro 2015). One possible reason is, of course, that the theoretical preconditions for risk-sharing schemes based on voluntary cooperation are rarely fulfilled in international economic interactions.

Among these preconditions is the assumption that risk-sharing will not only increase the aggregate welfare of the group, but also serve the longer-term individual interest of all members. Among rational, self-interested actors, in other words, voluntary insurance presupposes that all members may expect to be, at times, among the winners and among the losers. Since the future cannot be predicted, that need not imply expectations of equality; but it does imply expectations of a random incidence of loss-inducing economic shocks among group members. If that can be assumed, monetary solidarity could indeed arise from the “generalized and reciprocal self-interest” of EMU member states (Schelkle 2017, 314, citing Baldwin 1990, 229). If risks were systematically skewed, however, so that some member economies are significantly more likely than others to be afflicted with loss-inducing shocks, reciprocal self-interest could no longer explain the emergence of a risk-sharing scheme based on voluntary cooperation.

With regard to risk-sharing proposals in the Monetary Union – common deposit insurance and a common resolution fund in the Banking Union, for instance, a common unemployment insurance, a fiscal capacity to stabilize public investments, and so on – this implies that the persuasiveness of arguments invoking the insurance analogy depends crucially on beliefs regarding the non-existence and irrelevance of structural divergence among eurozone political economies. If differences are as unsystematic and rapidly changing as Schelkle (2017, 305–11) suggests, one may indeed conclude that “there is no diversity that cannot, in principle, provide an opportunity for mutually beneficial risk sharing” (Schelkle 2017, 309). In that case, “monetary solidarity” may be plausibly justified by appeals to enlightened and reciprocal self-interest – with the implication that the viability of the Monetary Union and of its member economies may be ensured by risk-sharing solutions that could and should be realized, even in the absence of further progress toward European political integration.

If, however, the existence of structural divergence is acknowledged, and if it is believed that it will have a significant impact on the incidence and distribution of future asymmetric shocks in the eurozone, then the redistributive effects of risk-sharing institutions will not even out over time. They will instead contribute to the establishment of a “transfer union” – which is very different from the solutions studied and explained by Elinor Ostrom. In that case, obviously, “monetary solidarity” could not be justified by appeals to the “generalized reciprocal self-interest” of all member states. In normative terms, they would have to invoke a type of solidarity that is based either on altruism or on the collective identity of a eurozone political community that is strong enough to override considerations of financial self-interest in the “donor” polities.

Turning from analytical and normative theory to eurozone politics, it seems obvious that at least the governments and publics in all member states have come to believe in the existence of highly salient and seemingly persistent economic differences and conflicting interests between a northern “core” and a southern “periphery,” or simply between Germany and its allies and much of the rest of the EMU. At the same time, they are unlikely to be deceived by a rhetoric that is trying to camouflage the demand for redistributive transfers as self-interested risk-sharing. Nor are they likely to presume a pre-existent obligation and commitment to either altruistic or “communitarian” solidarity. Instead, present plans and initiatives for risk-sharing institutions and policies will be perceived and fought over as demands for burden sharing and redistribution.

That is not meant to suggest that they will not succeed. As I argued above, the economic plausibility of present convergence rules is eroding, and the Commission’s most recent “Roadmap” towards the completion of EMU⁵⁹ in fact proposes financial transfers (!) in order to shore up national compliance with balanced-budget rules⁶⁰ and structural reforms.⁶¹ And though Germany will still have a veto, ordoliberal orthodoxy will not be defended with the same authority and moral conviction in the Eurogroup after Schäuble’s departure (and the replacement of Dijsselbloem by Centeno). Regardless of who the next finance minister is, therefore, the German position in intergovernmental bargaining is likely to be more interest-based, rather than dogmatic; and actual strategies are bound to be shaped by multiple concerns and tactical considerations that may leave considerable room for compromises and concessions in the face of external pressures.

It is unlikely, therefore, that the next German government will continue to ignore the political costs of its role as the self-serving task-master of the eurozone. And depending on how the next government is formed, it may also include, or depend upon, left-of-center or green political parties which, at least in their rhetoric, have styled themselves as promoters of a United States of Europe. In order to avoid cognitive dissonance and

59 COM(2017) 821 final, 6.12.2017.

60 COM(2017) 822 final, 6.12.2017: New Budgetary Instruments for a Stable Euro Area.

61 COM(2017) 825 final, 6.12.2017: Regulation to increase the Financial Envelope of the Structural Reform Support Programme.

conflicts with the pro-European activists among their supporters, these parties may well frame German support for redistributive burden-sharing in the eurozone as virtuous down-payments toward political union, rather than as inevitable concessions extorted by external political pressures. In other words, past German resistance against the gradual transformation of the Monetary Union into a transfer union may well be eroding.

It is unlikely, however, that the move toward a transfer union would have a happy outcome (Scharpf 2016). Regardless of whether such transfers came directly from national budgets, or from an enlarged EU budget, their moral justification could be challenged by Central and Eastern European member states, where average incomes are considerably lower than in present crisis economies. And economic effectiveness will appear questionable in light of the long history of Italian transfers to the Mezzogiorno and the more recent record of west–east transfers in Germany (Sinn and Sinn 2015; Streeck and Elsässer 2016). And as the relative size of transfers presently on the European agenda would be far below the volume reached in Germany,⁶² they would be even less likely to generate self-sustaining economic growth in economies with a limited base of competitive export production. But they would begin to institutionalize dependency relations and controls, and the unending conflict between dissatisfied recipients and unwilling donors that we have come to take for granted in German federalism.

For all that we can presently know, the incoming German government may not be able or willing to resist the scenario of a gradual move toward a eurozone transfer regime. In any case, however, we can be reasonably certain that it will have neither the capacity nor the vision to assume a leading role in the search for mutually acceptable policies and institutions that will support eurozone states in choosing their own best paths into the future of their diverse political economies.

62 In the absence of anticipated German resistance, they would surely expand: Thus, President Macron has called for a eurozone budget amounting to several percentage points of the members' GDP; see <https://euobserver.com/economic/138841>.

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References

- Abelshausen, Werner. 1983. *Wirtschaftsgeschichte der Bundesrepublik Deutschland (1945–1980)*. Frankfurt a.M.: Suhrkamp.
- . 2011. *Deutsche Wirtschaftsgeschichte: Von 1945 bis zur Gegenwart*. 2nd ed. Munich: Beck.
- Agamben, Giorgio. 2013. “The Latin Empire Should Strike Back.” *VoxEurop.eu*, March 26. <http://www.voxeurop.eu/en/content/article/3593961-latin-empire-should-strike-back>.
- Agartz, Viktor. 1953. “Expansive Lohnpolitik.” *WWI-Mitteilungen* 6 (10): 245–47.
- Alber, Jens. 1986. “Germany.” In *Growth to Limits: The Western European Welfare States since World War II*, vol. 2: *Germany, United Kingdom, Ireland, Italy*, edited by Peter Flora, 1–154. Berlin: De Gruyter.
- . 1989. *Der Sozialstaat in der Bundesrepublik 1950–1983*. Frankfurt a.M.: Campus.
- Alber, Jens, and Neil Gilbert, eds. 2010. *United in Diversity? Comparing Social Models in Europe and America*. Oxford: Oxford University Press.
- Allen, Christopher S. 1989a. “Corporatism and Regional Economic Policies in the Federal Republic of Germany: The ‘Meso’ Politics of Industrial Adjustment.” *Publius* 19 (4): 147–64.
- . 1989b. “The Underdevelopment of Keynesianism in the Federal Republic of Germany.” In *The Political Power of Economic Ideas: Keynesianism across Nations*, edited by Peter A. Hall, 263–89. Princeton: Princeton University Press.
- . 1990. “From Social Market to Meso-Corporatism: The Politics of West German Economic Policy.” *German Studies Review* 13, 13–25.
- Artis, Michael J., and Mark P. Taylor. 1993. “The Stabilizing Effect of the ERM on Exchange Rates and Interest Rates: An Empirical Investigation.” *IMF Working Paper 94/29*, International Monetary Fund, Washington, DC.
- Baccaro, Lucio, and Chiara Benassi. 2016. “Throwing out the Ballast: Growth Models and the Liberalization of German Industrial Relations.” *Socio-Economic Review* 15 (1): 85–115.
- Baccaro, Lucio, and Chris Howell. 2011. “A Common Neoliberal Trajectory: The Transformation of Industrial Relations in Advanced Capitalism.” *Politics and Society* 39 (4): 521–63.
- Baccaro, Lucio, and Chris Howell, co-authored with Chiara Benassi. 2017. “Softening Institutions: The Liberalization of German Industrial Relations.” In *Trajectories of Neoliberal Transformation: European Industrial Relations since the 1970s*, by Lucio Baccaro and Chris Howell, 97–120. Cambridge: Cambridge University Press.
- Baccaro, Lucio, and Jonas Pontusson. 2016. “Rethinking Comparative Political Economy: The Growth Model Perspective.” *Politics and Society* 44 (2): 175–207.
- Bagnasco, Arnaldo, and Charles Sabel, eds. 1995. *Small and Medium-Size Enterprises*. London: Pinter, Cassell Academic.
- Baltensperger, Ernst. 1989. “Geldpolitik bei wachsender Integration (1979–1996).” In *Fünfzig Jahre Deutsche Mark: Notenbank und Währung in Deutschland seit 1948*, edited by Deutsche Bundesbank, 475–559. Munich: Beck.
- Barro, Robert J., and David B. Gordon. 1983. “A Positive Theory of Monetary Policy in a Natural-Rate Model.” *Journal of Political Economy* 91 (4): 589–610.
- Bauer, Michael W., and Stefan Becker. 2014. “The Unexpected Winner of the Crisis: The European Commission’s Strengthened Role in Economic Governance.” *Journal of European Integration* 36 (3): 213–29.
- Beck, Thorsten, and Hans-Helmut Kotz, eds. 2017. *Ordoliberalism: A German Oddity?* A VoxEU.org Book. London: CEPR Press.
- Bell, Daniel. 1973. *The Coming of Post-Industrial Society: A Venture in Forecasting*. New York: Basic Books.
- Bénassy-Quéré, Agnès. 2017. “Unequal Imbalances.” In *Ordoliberalism: A German Oddity?*, edited by Thorsten Beck and Hans-Helmut Kotz, 201–14. A VoxEU.org Book. London: CEPR Press.
- Benigno, Gianluca, Nathan Converse, and Luca Fornaro. 2015. “Large Capital Inflows, Sectoral Allocation, and Economic Performance.” *International Finance Discussion Paper 1132*, Board of Governors of the Federal Reserve System, Washington, DC. <https://www.federalreserve.gov/econresdata/ifdp/2015/files/ifdp1132.pdf>.

- Benz, Arthur. 2016. *Constitutional Policy in Multilevel Government: The Art of Keeping the Balance*. Oxford: Oxford University Press.
- Benz, Arthur, and Jared Sonnicksen. 2017. "Advancing Backwards: Why Institutional Reform of German Federalism Reinforced Joint Decision-Making." *Publius: The Journal of Federalism*, September 26.
<https://academic.oup.com/publius/article/4222817>.
- Benz, Arthur, Jessica Detemple, and Dominic Heinz. 2016. *Varianten und Dynamiken der Politikverflechtung im deutschen Bundesstaat*. Baden-Baden: Nomos.
- Bergsten, C. Fred, and Russell A. Green, eds. 2016. *International Monetary Cooperation: Lessons from the Plaza Accord after Thirty Years*. New York: Columbia University Press.
- Blanchard, Olivier, and Francesco Giavazzi. 2002. "Current Account Deficits in the Euro Area: The End of the Feldstein-Horioka Puzzle?" *Brookings Papers on Economic Activity* 2, 147–86.
- Bofinger, Peter. 2015. "German Wage Moderation and the EZ Crisis." *VOX, CEPR's Policy Portal*, November 30.
<http://www.voxeu.org/article/german-wage-moderation-and-ez-crisis>.
- Bordo, Michael D. 1993. "The Bretton Woods International Monetary System: A Historical Overview." In *A Retrospective on the Bretton Woods System*, edited by Michael D. Bordo and Barry Eichengreen, 3–108. Chicago: The University of Chicago Press.
- Bordo, Michael D., Ronald MacDonald, and Michael J. Oliver. 2009. "Sterling in Crisis: 1964–1967." *European Review of Economic History* 13 (3): 437–59.
- Braun, Benjamin. 2014. "Why Models Matter: The Making and Unmaking of Governability in Macroeconomic Discourse." *Journal of Critical Globalization Studies* 7, 48–79.
- . "Governing the Future: The European Central Bank's Expectation Management during the Great Moderation." *Economy and Society* 44 (3): 367–91.
- Brenke, Karl, Ulf Rinne, and Klaus F. Zimmermann. 2011. "Short-Time Work: The German Answer to the Great Recession." *IZA Discussion Paper No. 5780*, Institute for the Study of Labor, Bonn.
- Brennan, Michael J., and Bruno Solnik. 1989. "International Risk Sharing and Capital Mobility." *Journal of International Money and Finance* 8, 359–73.
- Brunnermeier, Markus K., Harold James, and Jean-Pierre Landau. 2016. *The Euro and the Battle of Ideas*. Princeton: Princeton University Press.
- Buchheim, Christoph. 1998. "Die Errichtung der Bank deutscher Länder und die Währungsreform in Westdeutschland." In *Fünfzig Jahre Deutsche Mark: Notenbank und Währung in Deutschland seit 1948*, edited by Deutsche Bundesbank, 91–138. Munich: Beck.
- Bulmer, Simon. 2014. "Germany and the Eurozone Crisis: Between Hegemony and Domestic Politics." *West European Politics* 37 (6): 1244–63.
- Bundesanstalt für Arbeit. 1976. *Amtliche Nachrichten der Bundesanstalt für Arbeit: Arbeitsstatistik 1975 – Jahreszahlen*. Nürnberg: Bundesanstalt für Arbeit.
- . 1990. *Amtliche Nachrichten der Bundesanstalt für Arbeit: Arbeitsstatistik 1989 – Jahreszahlen*. Nürnberg: Bundesanstalt für Arbeit.
- Bundesbank. 1960. *Geschäftsbericht der Deutschen Bundesbank für 1959*. Frankfurt a.M.: Deutsche Bundesbank.
- . 1997. "Zur Entwicklung der Arbeitseinkommen seit Anfang der neunziger Jahre." *Monatsbericht Oktober 1997*, 19–32.
- Bundesregierung. 2017. *Lebenslagen in Deutschland: Der Fünfte Armuts- und Reichtumsbericht der Bundesregierung*. Berlin: Bundesministerium für Arbeit und Soziales.
http://www.armuts-und-reichtumsbericht.de/SharedDocs/Downloads/Berichte/5-arb-langfassung.pdf?__blob=publicationFile&v=6.
- Bundesverfassungsgericht. 1994. "Decision on the Maastricht Treaty, BVerfGE 89, 155." English translation: *Manfred Brunner and Others v. The European Union Treaty*, 1 *Common Market Law Reports* 57, paras 90, 93.
- Burda, Michael. 2016. "The German Labor Market Miracle, 2003–2015: An Assessment." *SFB 649 Discussion Paper 2016-005*, Humboldt University, Berlin.

- Burkhart, Simone. 2008. *Blockierte Politik: Ursachen und Folgen von "Divided Government" in Deutschland*. Frankfurt a.M.: Campus.
- Buti, Marco, and Nicolas Carnot. 2012. "The EMU Debt Crisis: Early Lessons and Reforms." *Journal of Common Market Studies* 50 (6): 899–911.
- Callen, Michael, Jean Imbs, and Paolo Mauro. 2015. "Pooling Risks among Countries." *Journal of International Economics* 96 (1): 88–99.
- Calmfors, Lars. 1982. "Employment Policies, Wage Formation and Trade Union Behavior in a Small Open Economy." *Scandinavian Journal of Economics* 84 (2): 345–73.
- . 1985. "The Roles of Stabilization Policies and Wage Setting for Macroeconomic Stability – The Experiences of Countries with Centralized Bargaining." *Kyklos* 38, 329–47.
- . 1993. "Centralization of Wage Bargaining and Macroeconomic Performance – a Survey." *OECD Economic Studies* 21, OECD, Paris.
- Calmfors, Lars, and John Driffil. 1988. "Centralization of Wage Bargaining." *Economic Policy* 3 (6): 13–61.
- Calvo, Guillermo A. 1998. "Capital Flows and Capital Market Crises: The Simple Economics of Sudden Stops." *Journal of Applied Economics* 1 (1): 35–54.
- Carlin, Wendy. 1994. "West German Growth and Institutions, 1945–1990." *CEPR Discussion Paper* No. 896, Centre for Economic Policy Research, London.
- Carlin, Wendy, and David Soskice. 1990. *Macroeconomics and the Wage Bargain: A Modern Approach to Employment, Inflation, and the Exchange Rate*. Oxford: Oxford University Press.
- . 2015. *Macroeconomics: Institutions, Instability, and the Financial System*. Oxford: Oxford University Press.
- Carlin, Wendy, Anke Hassel, Andrew Martin, and David Soskice. 2015. "The Transformation of the German Social Model." In *European Social Models from Crisis to Crisis: Employment and Inequality in the Era of Monetary Integration*, edited by Jon-Erik Dolvik and Andrew Martin, 49–104. Oxford: Oxford University Press.
- Chief Economist. 2017. "Don't Slam Germany's Trade Surplus." *Letter from the Chief Economist*, Federal Ministry of Finance, Berlin, February 24.
<http://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Featured/letter-from-the-chief-economist/2017-02-24-dont-slam-germanys-trade-surplus.html?nn=92202&view=pdf>.
- Cole, Harold L., and Maurice Obstfeld. 1991. "Commodity Trade and International Risk Sharing: How Much Do Financial Markets Matter?" *Journal of Monetary Economics* 28 (1), 3–24.
- Commission, European. 1990. *One Market – One Money: An Evaluation of the Potential Benefits and Costs of Forming an Economic and Monetary Union*. Brussels: Directorate General for Economic and Financial Affairs.
- . 2008. *EMU@10: Successes and Challenges after 10 Years of Economic and Monetary Union*. Brussels: Directorate-General for Economic and Financial Affairs.
- . 2010a. "The Economic Adjustment Programme for Greece." *Occasional Papers* 61, Directorate General for Economic and Financial Affairs, Brussels.
- . 2010b. "Surveillance of Intra-Euro-Area Competitiveness and Imbalances." *European Economy* 1/2010, Directorate-General for Economic and Financial Affairs, Brussels.
- . 2012a. "First Alert Mechanism Report on Macroeconomic Imbalances in Member States." February 14.
http://europa.eu/rapid/press-release_MEMO-12-104_en.htm.
- . 2012b. "Current Account Surpluses in the EU." *European Economy* 9/2012, Directorate-General for Economic and Financial Affairs, Brussels.
- . 2014. "Macroeconomic Imbalances – Germany 2014." *European Economy, Occasional Papers* 174, Directorate-General for Economic and Financial Affairs, Brussels.
- . 2015a. *Alert Mechanism Report 2016*. COM(2015) 691 final. Brussels, November 26.
- . 2015b. *Adding Employment Indicators to the Scoreboard of the Macroeconomic Imbalance Procedure to Better Capture Employment and Social Developments*. Ref. Ares (2015)5426195 – 27/11/2015. Brussels, September 4.

- . 2016a. *Country Report Germany 2016: Including an In-Depth Review on the Prevention and Correction of Macroeconomic Imbalances*. SWD(2016) 75 final. Brussels, February 26.
- . 2016b. *Toward a Positive Fiscal Stance for the Euro Area*. COM(2016) 727 final. Brussels, November 16.
- . 2017. *Implementation of the Macroeconomic Imbalance Procedure: State-of-play – September 2017*. PE 497.739. Brussels: Directorate-General for Internal Policies.
[http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/497739/IPOL_IDA\(2016\)497739_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/497739/IPOL_IDA(2016)497739_EN.pdf).
- Darvas, Zsolt. 2012. “Real Effective Exchange Rates for 178 Countries: A New Database.” *Bruegel Working Paper* 2012/06, Bruegel, Brussels.
- De Grauwe, Paul. 2013a. “The Political Economy of the Euro.” *Annual Review of Political Science* 16 (1): 153–70.
- . 2013b. “The European Central Bank as Lender of Last Resort in the Government Bond Markets.” *CESifo Economic Studies* 59 (3): 520–35.
- . 2016. “The Legacy of the Eurozone Crisis and how to Overcome It.” *Journal of Empirical Finance* 39 (B): 147–55.
- . 2017. *The Limits of the Market: The Pendulum between Government and the Market*. Oxford: Oxford University Press.
- De Grauwe, Paul, and Yuemei Ji. 2013. “Self-fulfilling Crises in the Eurozone: An Empirical Test.” *Journal of International Money and Finance* 34 (1): 15–36.
- . 2015. “Correcting for the Eurozone Design Failures: The Role of the ECB.” *Journal of European Integration* 37 (7): 739–54.
- . 2016. “Inflation Targets and the Zero Lower Bound in a Behavioral Macroeconomic Model.” *CEPR Discussion Paper* No. 11320, Centre for Economic Policy Research, London.
- De la Porte, Caroline, and Elke Heins. 2015. “A New Era of European Integration? Governance of Labor Market and Social Policy since the Sovereign Debt Crisis.” *Comparative European Politics* 13 (1): 8–28.
- Delors Commission (Committee for the Study of Economic and Monetary Union). 1989. *Report on Economic and Monetary Union in the European Community*. Luxembourg: Office for Official Publications of the European Community.
- Deutscher Bundestag. 1976. *Unterrichtung durch die Bundesregierung. Jahresgutachten 1976/77 des Sachverständigenrates zur Begutachtung der gesamtwirtschaftlichen Entwicklung*. BT-Drucksache 7/5902. Bonn, November 25.
- Draghi, Mario. 2016. “On the Importance of Policy Alignment to Fulfill Our Economic Potential.” 5th Annual Tommaso Padoa-Schioppa Lecture by Mario Draghi, President of the ECB, at the Brussels Economic Forum 2016, Brussels, June 9.
<https://www.ecb.europa.eu/press/key/date/2016/html/sp160609.en.html>.
- Dustmann, Christian, Bernd Fitzenberger, Uta Schönberg, and Andrea Spitz-Oener. 2014. “From Sick Man of Europe to Economic Superstar: Germany’s Resurgent Economy.” *Journal of Economic Perspectives* 28 (1): 167–88.
- Dyson, Kenneth. 2005. “Binding Hands as a Strategy for Economic Reform: Government by Commission.” *German Politics* 14 (2): 224–47.
- Dyson, Kenneth, and Stephen Padgett, eds. 2006. *The Politics of Economic Reform in Germany: Global, Rhineland or Hybrid Capitalism*. Oxon: Routledge.
- Egger, Hartmut, and Peter Egger. 2003. “Outsourcing and Skill Specific Employment in a Small Economy: Austria after the Fall of the Iron Curtain.” *Oxford Economic Papers* 55 (4): 625–43.
- Egle, Christoph, and Reimut Zohlhöfer, eds. 2007. *Ende des rot-grünen Projekts: Eine Bilanz der Regierung Schröder 2002–2005*. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Eichengreen, Barry. 1990. “Is Europe an Optimal Currency Area?” *CEPR Discussion Paper* No. 478, Center for Economic Policy Research, London.
- Eichengreen, Barry, and Jeffrey Frieden, eds. 1994. *The Political Economy of European Monetary Unification*. Boulder: Westview.

- Eichhorst, Werner. 2012. "The Unexpected Appearance of a New German Model." *IZA Discussion Paper* No. 6625, Institute for the Study of Labor, Bonn.
- Eichhorst, Werner, and Paul Marx. 2011. "Reforming German Labour Market Institutions: A Dual Path to Flexibility." *Journal of European Social Policy* 21 (1): 73–87.
- Emerson, Michael, Daniel Gros, Alexander Italianer, Jean Pisani-Ferry, and Horst Reichenbach. 1992. *One Market, One Money: An Evaluation of the Potential Benefits and Costs of Forming an Economic and Monetary Union*. Oxford: Oxford University Press.
- Enderlein, Henrik. 2004. *Nationale Wirtschaftspolitik in der europäischen Währungsunion*. Frankfurt a.M.: Campus.
- Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Cambridge: Polity.
- Emufofound (European Foundation for the Improvement of Living and Working Conditions). 2017. *Occupational Change and Wage Inequality: European Jobs Monitor 2017*. Luxembourg: Publications Office of the European Union.
- European Parliament. 2017. *The Instruments Providing Macro-financial Support to EU Member States: In-depth Analysis for the BUDG Committee*. Brussels: Directorate General for Internal Policies.
- Fabbrini, Sergio. 2013. "Intergovernmentalism and Its Limits: Assessing the European Union's Answer to the Euro Crisis." *Comparative Political Studies* 46 (9): 1003–29.
- Fama, Eugene. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work." *Journal of Finance* 25 (2): 383–417.
- Felbermayr, Gabriel, Clemens Fuest, and Timo Wollmershäuser. 2017. "The German Current-Account Surplus: Causes and Consequences." In *Ordoliberalism: A German Oddity?*, edited by Thorsten Beck and Hans-Helmut Kotz, 187–99. A VoxEU.org Book. London: CEPR Press.
- Ferrera, Maurizio. 2017. "Mission Impossible? Reconciling Economic and Social Europe after the Euro Crisis and Brexit." *European Journal of Political Research* 56 (1): 3–22.
- Ferrera, Maurizio, and Elisabetta Gualmini. 2000. "Italy: Rescue from Without?" In *Welfare and Work in the Open Economy*, vol. 2: *Diverse Responses to Common Challenges*, edited by Fritz W. Scharpf and Vivien A. Schmidt, 351–98. Oxford: Oxford University Press.
- Five Presidents. 2015. *Completing Europe's Economic and Monetary Union*. Report by Jean-Claude Juncker, Donald Tusk, Jeroen Dijsselbloem, Mario Draghi and Martin Schulz. Brussels: European Commission.
- Flassbeck, Heiner, and Costas Lapavistas. 2013. *The Systemic Crisis of the Euro: True Causes and Effective Therapies*. Berlin: Rosa-Luxemburg-Stiftung.
- Flassbeck, Heiner, and Friederike Spiecker. 2011. "The Euro: A Story of Misunderstanding." *Intereconomics* 46(4): 180–87.
- Fleckenstein, Timo. 2008. "Restructuring Welfare for the Unemployed: The Hartz Legislation in Germany." *Journal of European Social Policy* 18 (2): 177–88.
- Fleming, J. Marcus. 1962. "Domestic Financial Policies under Fixed and Floating Exchange Rates." *International Monetary Fund Staff Papers* 9, 369–79.
- Flora, Peter, ed. 1986. *Growth to Limits: The Western European Welfare States since World War II*. 4 vols. Berlin: De Gruyter.
- Fourastié, Jean. 1950. *Le Grand Espoir du XXe Siècle: Progrès technique, Progress économique, Progress social*. Paris: Presses Universitaires de France.
- Fratzcher, Marcel. 2014. *Die Deutschland-Illusion: Warum wir unsere Wirtschaft überschätzen und Europa brauchen*. Munich: Hanser.
- . 2016. *Verteilungskampf: Warum Deutschland immer ungleicher wird*. Munich: Hanser.
- Friedman, Milton. 1953. "The Case for Flexible Exchange Rates." In *Essays in Positive Economics*, 157–203. Chicago: University of Chicago Press.
- Friedrich-Ebert-Stiftung. 1998. *Wirtschaftliche Leistungsfähigkeit, sozialer Zusammenhalt, ökologische Nachhaltigkeit: Drei Ziele – ein Weg*. Zukunftskommission der Friedrich-Ebert-Stiftung. Bonn: Dietz.
- Fuller, Thomas, and International Herald Tribune. 2002. "Euro sags as Prodi laments lack of flexibility in rules: EU leader says pact on budgets is 'stupid.'" *New York Times*, October 18. http://www.nytimes.com/2002/10/18/news/18iht-deficit_ed30.html.

- Ganghof, Steffen. 2004. *Wer regiert in der Steuerpolitik? Einkommensteuerreform zwischen internationalem Wettbewerb und nationalen Verteilungskonflikten*. Frankfurt a.M.: Campus.
- Gaulier, Guillaume, and Vincent Vicard. 2013. "The Signatures of the Euro-Area Imbalances: Export Performance and the Composition of ULC Growth." *ECB Compnet Policy Brief* 02/2013, European Central Bank, Frankfurt a.M.
- Geishecker, Ingo. 2006. "Does Outsourcing to Central and Eastern Europe Really Threaten Manual Workers' Jobs in Germany?" *World Economy* 29 (5): 559–83.
- Gerschenkron, Alexander. 1943. *Bread and Democracy in Germany*. Berkeley: University of California Press.
- Giersch, Herbert. 1967. *Lohnpolitik und Geldwertstabilität*. Kieler Vorträge, N. F. 50. Tübingen: Mohr.
- . "Arbeit, Lohn und Produktivität." *Weltwirtschaftliches Archiv* 119 (1): 1–18.
- Göbel, Heike. 1988. "Lohnzurückhaltung und gewerkschaftliche Vernunft: Die politische Ökonomie des Arbeitsmarktes in der Bundesrepublik Deutschland in den 60er Jahren." *Arbeitspapier* Nr. 333, Institut für Weltwirtschaft, Kiel.
- Gocaj, Ledina, and Sophie Meunier. 2013. "Time Will Tell: The EFSF, the ESM, and the Euro Crisis." *Journal of European Integration* 35 (3): 239–53.
- Gourevitch, Peter. 1986. *Politics in Hard Times: Comparative Responses to International Economic Crisis*. Ithaca: Cornell University Press.
- Grabka, Mark. 2015. "Income and Wealth Inequality after the Financial Crisis: The Case of Germany." *Empirica* 42 (2): 371–90.
- Habermas, Jürgen. 1990. "Der DM-Nationalismus." *ZEIT online*, March 30.
<http://www.zeit.de/1990/14/der-dm-nationalismus>.
- Hall, Peter A. 2014. "Varieties of Capitalism and the Euro Crisis." *West-European Politics* 37 (6): 1223–43.
- Hancké, Bob. 2013. *Unions, Central Banks and EMU: Labor Market Institutions and Monetary Integration in Europe*. Oxford: Oxford University Press.
- Hassel, Anke. 1999. "The Erosion of the German System of Industrial Relations." *British Journal of Industrial Relations* 37, 483–505.
- . 2001. "The Problem of Political Exchange in Complex Governance Systems: The Case of Germany's Alliance for Jobs." *European Journal of Industrial Relations* 7 (3): 305–23.
- Hassel, Anke, and Britta Rehder. 2001. "Institutional Change in the German Wage Bargaining System – The Role of Big Companies." *MPIfG Working Paper* 01/9, Max Planck Institute for the Study of Societies, Cologne.
- Hassel, Anke, and Christof Schiller. 2010. *Der Fall Hartz IV: Wie es zur Agenda 2010 kam und wie es weitergehen wird*. Frankfurt a.M.: Campus.
- Hauff, Volker, and Fritz W. Scharpf. 1975. *Modernisierung der Volkswirtschaft: Technologiepolitik als Strukturpolitik*. Frankfurt a.M.: Europäische Verlagsanstalt.
- Heinze, Rolf G., and Wolfgang Streeck. 2003. "Optionen für den Einstieg in den Arbeitsmarkt oder: Ein Lehrstück für einen gescheiterten Politikwechsel." *Vierteljahreshefte zur Wirtschaftsforschung* 72, 25–35.
- Heipertz, Martin, and Amy Verdun. 2010. *Ruling Europe: The Politics of the Stability and Growth Pact*. Cambridge: Cambridge University Press.
- Hemerijck, Anton, and Martin Schludi. 2000. "Sequences of Policy Failures and Effective Policy Responses." In *Welfare and Work in the Open Economy*, vol. 2: *Diverse Responses to Common Challenges*, edited by Fritz W. Scharpf and Vivien A. Schmidt, 125–228. Oxford: Oxford University Press.
- Hemerijck, Anton, Philip Manow, and Kees van Kersbergen. 2000. "Welfare without Work? Divergent Experiences of Reform in Germany and the Netherlands." In *Survival of the European Welfare State*, edited by Stein Kuhnle, 106–27. London: Routledge.
- Héritier, Adrienne. 1999. *Policy-Making and Diversity in Europe: Escaping Deadlock*. Cambridge: Cambridge University Press.
- Herrigel, Gary. 1993. "Power and the Redefinition of Industrial Districts: The Case of Baden-Württemberg." In *The Embedded Firm: On the Socioeconomics of Industrial Networks*, edited by Gernot Grabher, 227–52. London: Routledge.

- . 2000. *Industrial Constructions: The Sources of German Industrial Power*. Cambridge: Cambridge University Press.
- Herrigel, Gary, Ulrich Voskamp, and Volker Witte. 2017. *Globale Qualitätsproduktion – Transnationale Produktionssysteme in der Automobilindustrie und im Maschinenbau*. Frankfurt a.M.: Campus.
- Hetzl, Robert L. 2002. “German Monetary History in the Second Half of the Twentieth Century: From the Deutsche Mark to the Euro.” *FRB Richmond Economic Quarterly* 88 (2): 29–64.
- Hodson, Dermot. 2013. “The Eurozone in 2012: ‘Whatever It Takes to Preserve the Euro.’” *Journal of Common Market Studies* 51 (S1): 183–200.
- Holtferich, Carl-Ludwig. 1998. “Geldpolitik bei festen Wechselkursen (1948–1970).” In *Fünzig Jahre Deutsche Mark: Notenbank und Währung in Deutschland seit 1948*, edited by Deutsche Bundesbank, 347–438. Munich: Beck.
- Hope, David, and David Soskice. 2016. “Growth Models, Varieties of Capitalism and Macroeconomics.” *Politics and Society* 44 (2): 209–26.
- Höpner, Martin. 2003. *Wer beherrscht die Unternehmen? Shareholder Value, Managerherrschaft und Mitbestimmung in Deutschland*. Frankfurt a.M.: Campus.
- Höpner, Martin, and Lothar Krempel. 2004. “The Politics of the German Company Network.” *Competition and Change* 8 (4): 339–56.
- Höpner, Martin, and Mark Lutter. 2017. “The Diversity of Wage Regimes: Why the Eurozone Is Too Heterogeneous for the Euro.” *European Political Science Review*, published online March 7, 2017, doi: 10.1017/S1755773916000217.
- Höpner, Martin, and Martin Seeliger. 2017. “Transnationale Lohnkoordinierung zur Stabilisierung des Euro? Gab es nicht, gibt es nicht, wird es nicht geben.” *MPIfG Discussion Paper 17/13*, Max Planck Institute for the Study of Societies, Cologne.
- Höpner, Martin, and Alexander Spielau. 2015. “Diskretionäre Wechselkursregime: Erfahrungen aus dem Europäischen Währungssystem, 1979–1998.” *MPIfG Discussion Paper 15/11*, Max Planck Institute for the Study of Societies, Cologne.
- Horn, Gustav A., and Andrew Watt. 2017. “Wages and Nominal and Real Unit Labour Cost Differentials in EMU.” *European Economy Discussion Paper 059*, European Commission, Brussels.
- Hull, Chris, and Benny Hjern. 1982. “Helping Small Firms Grow: An Implementation Analysis of Small Firm Assistance Structures.” *European Journal of Political Research* 10 (2): 187–98.
- Ikenberry, G. John. 1993. “The Political Origins of Bretton Woods.” In *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform*, edited by Michael D. Bordo and Barry Eichengreen, 155–82. Chicago: The University of Chicago Press.
- Issing, Otmar. 2002. “On Macroeconomic Policy Co-ordination in EMU.” *Journal of Common Market Studies* 40 (2): 345–58.
- Iversen, Torben, and Anne Wren. 1998. “Equality, Employment, and Budgetary Restraint: The Trilemma of the Service Economy.” *World Politics* 50 (4): 507–46.
- Iversen, Torben, David Soskice, and David Hope. 2016. “The Eurozone and Political Economic Institutions.” *Annual Review of Political Science* 19, 163–85.
- IW (Institut der deutschen Wirtschaft Köln). 2011. “Tabelle 4.2: Außenhandel nach Ländern und Ländergruppen.” In *Deutschland in Zahlen 2011*, 40. Köln: Institut der deutschen Wirtschaft.
- . 2013. “Tabelle 7.1: Steuern und Abgaben.” In *Deutschland in Zahlen 2013*, 72. Köln: Institut der deutschen Wirtschaft.
- . 2016. “Tabelle 1.23: Tarif-, Effektivverdienste und Lohndrift.” In *Deutschland in Zahlen*, 20. Köln: Institut der deutschen Wirtschaft.
- Jackson, Gregory, and Arndt Sorge. 2012. “The Trajectory of Institutional Change in Germany, 1979–2009.” *Journal of European Public Policy* 19 (8): 1146–67.
- James, Harold. 1989. “What Is Keynesian about Deficit Financing? The Case of Interwar Germany.” In *The Political Power of Economic Ideas: Keynesianism across Nations*, edited by Peter A. Hall, 231–62. Princeton: Princeton University Press.
- Joerges, Christian. 2015. “Pereat iustitia, fiat mundus: What Is Left of the European Economic Constitution after the OMT-litigation?” Conference paper. The European Court of Justice, the European Central Bank, and the Supremacy of EU Law Conference in Copenhagen, September 17–18.

- Johnson, Peter A. 1998. *The Government of Money: Monetarism in Germany and the United States*. Ithaca: Cornell University Press.
- Johnston, Alison. 2016. *From Convergence to Crisis: Labor Markets and the Instability of the Euro*. Ithaca: Cornell University Press.
- Jones, Eric. 2015. "The Forgotten Financial Union: How You Can Have a Euro Crisis without a Euro." In *The Future of the Euro*, edited by Matthias Matthijs and Mark Blyth, 44–69. Oxford: Oxford University Press.
- Katzenstein, Peter. 1985. *Small States in World Markets: Industrial Policy in Europe*. Ithaca: Cornell University Press.
- . 1987. *Policy and Politics in West Germany: The Growth of a Semisovereign State*. Philadelphia: Temple University Press.
- . 1989. *Industry and Politics in West Germany: Toward the Third Republic*. Ithaca: Cornell University Press.
- . 1997. "United Germany in an Integrating Europe." In *Tamed Power: Germany in Europe*, edited by Peter J. Katzenstein, 1–48. Ithaca: Cornell University Press.
- Kenworthy, Lane. 2004. *Egalitarian Capitalism: Jobs, Incomes, and Growth in Affluent Countries*. New York: Russell Sage Foundation.
- Kloten, Norbert, Karl-Heinz Ketterer, and Rainer Vollmer. 1985. "West Germany's Stabilization Performance." In *The Politics of Inflation and Economic Stagflation*, edited by Leon N. Lindberg and Charles S. Maier, 353–402. Washington, DC: Brookings Institution.
- Knuth, Matthias. 2016. "Labor Market Reforms and Labor Market Performance in Germany." *International Labor Brief* 14 (1): 18–35.
- Kollmann, Robert, Marco Ratto, Jan in't Veld, and Lukas Vogel. 2015. "What Drives the German Current Account? And How Does It Affect other EU Member States?" *Economic Policy* 30 (82): 47–93.
- Korpi, Tomas, and Michael Tåhlin. 2011. "Changing Work-Life Inequality in Sweden: Globalization and Other Causes." In *Globalized Labour Markets and Social Inequality in Europe: A Comparative Analysis*, edited by Hans-Peter Blossfeld et al., 177–208. Basingstoke: Palgrave Macmillan.
- Krämer, Susanne. 1995. "Viktor Agartz: Vom Cheftheoretiker zur 'Persona non grata.'" *Gewerkschaftliche Monatshefte* 5/95, 310–16.
- Krempel, Lothar. 2010. "Die Transformation der Deutschland AG 1996–2006." In *Knoten und Kanten: Soziale Netzwerkanalyse in Wirtschafts- und Migrationsforschung*, edited by Marcus Gamper and Linda Reschke, 145–58. Bielefeld.
- Krugman, Paul. 2012. "Germans and Aliens." *New York Times*, January 9. <https://krugman.blogs.nytimes.com/2012/01/09/germans-and-aliens/>.
- . 2013. "The Harm Germany Does: The Conscience of a Liberal." *New York Times*, November 1. <https://krugman.blogs.nytimes.com/2013/11/01/the-harm-germany-does/>.
- Lapavistas, Costas, et al. 2012. *Crisis in the Eurozone*. London: Verso.
- Lavoie, Marc. 2015. "The Eurozone: Similarities to and Differences from Keynes's Plan." *International Journal of Political Economy* 44 (1): 3–17.
- Lehmbruch, Gerhard. 1998. *Parteienwettbewerb im Bundesstaat: Regelsysteme und Spannungslagen im Institutionengefüge der Bundesrepublik Deutschland*. 2nd, enl. ed. Opladen: Westdeutscher Verlag.
- Lehmbruch, Gerhard, Otto Singer, Edgar Grande, and Marian Döhler. 1988. "Institutionelle Bedingungen ordnungspolitischen Strategiewechsels im internationalen Vergleich." In *Staatstätigkeit: International und historisch vergleichende Analysen*, edited by Manfred G. Schmidt, vol. 19 of *Politische Vierteljahresschrift, Special Issues*, 251–83. Opladen: Westdeutscher Verlag.
- Lucas, Robert E. 1972. "Expectations and the Neutrality of Money." *Journal of Economic Theory* 4 (2): 103–24.
- Ludlow, Peter. 1982. *Making of the European Monetary System: A Case Study of the Politics of the European Community*. London: Butterworth-Heinemann.
- Manow, Philip, and Eric Seils. 2000. "Adjusting Badly: The German Welfare State, Structural Change, and the Open Economy." In *Welfare and Work in the Open Economy*, vol. 2: *Diverse Responses*

- to *Common Challenges*, edited by Fritz W. Scharpf and Vivien A. Schmidt, 264–307. Oxford: Oxford University Press.
- Marin, Dalia. 2006. “A New International Division of Labor in Europe: Outsourcing and Offshoring to Eastern Europe.” *Journal of the European Economic Association* 4 (2/3): 612–22.
- Marsh, David. 2009. *The Euro: The Battle for a New Global Currency*. New Haven: Yale University Press.
- . 2013. *Europe’s Deadlock: How the Euro Crisis Could Be Solved – and Why It Won’t Happen*. New Haven: Yale University Press.
- Matthijs, Matthias. 2016. “Powerful Rules Governing the Euro: The Perverse Logic of German Ideas.” *Journal of European Public Policy* 23 (3): 375–91.
- Matzner, Egon, and Wolfgang Streeck, eds. 1991. *Beyond Keynesianism: The Socio-Economics of Production and Full Employment*. Aldershot: Elgar.
- McCracken, Paul, Guido Carli, Herbert Giersch, et al. 1977. *Towards Full Employment and Price Stability: A Report to the OECD*. Paris: OECD.
- McNamara, Kathleen R. 1998. *The Currency of Ideas: Monetary Politics in the European Union*. Ithaca: Cornell University Press.
- . 2002. “Rational Fictions: Central Bank Independence and the Social Logic of Delegation.” *West European Politics* 25 (1): 47–76.
- Mehrtens, Philip. 2014. *Staatsschulden und Staatstätigkeit: Zur Transformation der politischen Ökonomie Schwedens*. Frankfurt a.M.: Campus.
- Mertens, Daniel. 2015. *Erst sparen, dann kaufen? Privatverschuldung in Deutschland*. Frankfurt a.M.: Campus.
- Meyer-Larsen, Werner. 1999. *Germany, Inc.: The New German Juggernaut and Its Challenge to World Business*. New York: Wiley.
- Milanovic, Branko. 2016. *Global Inequality: A New Approach for the Age of Globalization*. Cambridge, MA: Harvard University Press.
- Müller-Jentsch, Walther. 2011. *Gewerkschaften und Soziale Marktwirtschaft seit 1945*. Stuttgart: Reclam.
- Mundell, Robert A. 1960. “The Monetary Dynamics of International Adjustment under Fixed and Flexible Exchange Rates.” *Quarterly Journal of Economics* 74 (2): 227–57.
- . 1961. “A Theory of Optimum Currency Areas.” *American Economic Review* 51 (4): 657–65.
- . 1963. “Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates.” *Canadian Journal of Economic and Political Science* 29 (4): 475–85.
- Myant, Martin. 2016. “Unit Labor Costs: No Argument for Low Wages in Eastern and Central Europe.” *Working Paper* 2016.08, European Trade Union Institute, Brussels.
- . 2017. “Narrowing the Wages Gap in Europe.” *Social Europe*, February 28. <https://www.socialeurope.eu/upwards-convergence-wage-growth-priority-central-eastern-europe>.
- Myant, Martin, and Agnieszka Piasna. 2014. “Why Have Some Countries Become More Unemployed than Others? An Investigation of Changes in Unemployment in EU Member States since 2008.” *Working Paper* 2014.07, European Trade Union Institute, Brussels.
- Obstfeld, Maurice. 1993a. “The Bretton Woods International Monetary System: A Historical Overview.” In *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform*, edited by Michael D. Bordo and Barry Eichengreen, 3–108. Chicago: The University of Chicago Press.
- . 1993b. “The Adjustment Mechanism.” In *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform*, edited by Michael D. Bordo and Barry Eichengreen, 201–56. Chicago: The University of Chicago Press.
- . 1984. “Risk-Taking, Global Diversification, and Growth.” *American Economic Review* 84 (5): 1310–29.
- . 2012. “Financial Flows, Financial Crises, and Global Imbalances.” *Journal of International Money and Finance* 31 (3): 469–80.
- OECD (Organisation for Economic Co-operation and Development). 1985. *Historical Statistics 1960–1983*. Paris: OECD.
- . 1999. *Economic Outlook, Statistical Compendium*. Paris: OECD.
- . 2014. *Education Policy Outlook Germany*. Paris: OECD.

- . 2016. “Employment/Population Ratios by Selected Age Groups, Table B.” In *Employment Outlook 2016*: 215. Paris: OECD.
- . 2017a. “GDP per Capita.” In *OECD Productivity Statistics (Database), GDP per Capita and Productivity Growth*. Accessed September 7, 2017.
<http://dx.doi.org/10.1787/data-00685-en>.
- . 2017b. “Unemployment Rate.” In *OECD Employment and Labour Market Statistics (database), Labour Market Statistics: Labour Force Statistics by Sex and Age: Indicators*. Accessed September 7, 2017.
<http://dx.doi.org/10.1787/data-00310-en>.
- . 2017c. “Employment Rate, Aged 15–64, all Persons.” In *Main Economic Indicators (Database), Employment Rates by Age Group*. Accessed September 7, 2017.
<http://dx.doi.org/10.1787/data-00046-en>.
- . 2017d. “GDP, Volume – Annual Growth Rates in Percentage.” In *OECD National Accounts Statistics (Database), Aggregate National Accounts, SNA 2008 (or SNA 1993): Gross Domestic Product*. Accessed September 7, 2017.
<http://dx.doi.org/10.1787/data-00001-en>.
- . 2017e. Taxing Wages: Comparative Tables. In *OECD Tax Statistics (Database)*. Accessed September 7, 2017.
<http://dx.doi.org/10.1787/data-00265-en>.
- . 2017f. “Net Lending/Net Borrowing, General Government, Percentage of GDP.” In *OECD National Accounts Statistics (database), National Accounts at a Glance: General Government*. Accessed September 7, 2017.
<http://dx.doi.org/10.1787/data-00369-en>.
- OECD-WTO (Organisation for Economic Co-operation and Development – World Trade Organization). 2015. *Trade in Value Added: Germany*. Paris: OECD.
https://www.oecd.org/sti/ind/tiva/CN_2015_Germany.pdf.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Padoa-Schioppa Report. 1987. *Efficiency, Stability, and Equity: A Strategy for the Evolution of the Economic System of the European Community. A Report by Tommaso Padoa-Schioppa*. Oxford: Oxford University Press.
- Padoa-Schioppa, Tommaso. (1994) 2000. *The Road to Monetary Union in Europe: The Emperor, the Kings, and the Genies*. Oxford: Oxford University Press.
- Palier, Bruno, ed. 2010. *A Long Goodbye to Bismarck? The Politics of Welfare Reforms in Continental Europe*. Chicago: University of Chicago Press.
- Palier, Bruno, and Claude Martin, eds. 2008. *Reforming the Bismarckian Welfare Systems*. London: Blackwell.
- Perez, Sophia A. 2017. “Competitiveness, Demand-Shocks and Governance Structure: Competing Explanations of the Eurozone Debt Crisis.” Conference paper. 24th Annual Conference of the Council for European Studies, Glasgow, July 12–14.
- Picot, Georg. 2009. “Party Competition and Reforms of Unemployment Benefits in Germany: How a Small Change in Electoral Demand Can Make a Big Difference.” *German Politics* 18 (2): 155–79.
- Piore, Michael J., and Charles F. Sabel. 1984. *The Second Industrial Divide: Possibilities for Prosperity*. New York: Basic Books.
- Pusch, Toralf. 2011. “Wage Policy Coordination in the Eurozone: A Robust Concept for Greater Macroeconomic Stability?” *International Policy Analysis*, May 2011, Friedrich-Ebert-Stiftung, Berlin.
- Rehder, Britta. 2003. *Betriebliche Bündnisse für Arbeit in Deutschland: Mitbestimmung und Flächentarif im Wandel*. Frankfurt a.M.: Campus.
- Reissert, Bernd, Fritz W. Scharpf, and Ronald Schettkat. 1986. “Eine Strategie zur Beseitigung der Massenarbeitslosigkeit.” *Aus Politik und Zeitgeschichte* B23/86, 3–21.
- Roth, Felix, Lars Jonung, and Felicitas Nowak-Lehmann. 2016. “Crisis and Public Support for the Euro, 1990–2014.” *Journal of Common Market Studies* 54 (4): 944–60.

- Sandbu, Martin. 2015. *Europe's Orphan: The Future of the Euro and the Politics of Debt*. Princeton: Princeton University Press.
- Scharpf, Fritz W. 1986. "Strukturen der post-industriellen Gesellschaft, oder: Verschwindet die Massenarbeitslosigkeit in der Dienstleistungs- und Informations-Ökonomie?" *Soziale Welt* 37 (1): 5–24.
- . 1988. "The Joint Decision Trap: Lessons from German Federalism and European Integration." *Public Administration* 66 (3): 239–78.
- . 1991. *Crisis and Choice in European Social Democracy*. Ithaca: Cornell University Press.
- . 1997. "Employment and the Welfare State: A Continental Dilemma." *MPIfG Working Paper* 97/7, Max Planck Institute for the Study of Societies, Cologne.
- . 2000. "Economic Changes, Vulnerabilities, and Institutional Capabilities." In *Welfare and Work in the Open Economy*, vol. 1: *From Vulnerability to Competitiveness*, edited by Fritz W. Scharpf and Vivien A. Schmidt, 21–124. Oxford: Oxford University Press.
- . 2005. "No Exit from the Joint Decision Trap? Can German Federalism Reform Itself?" *MPIfG Working Paper* 05/6, Max Planck Institute for the Study of Societies, Cologne.
- . 2009. *Föderalismusreform: Kein Ausweg aus der Politikverflechtungsfalle?* Frankfurt a.M.: Campus.
- . 2011. "Monetary Union, Fiscal Crisis, and the Preemption of Democracy." *Journal for Comparative Government and European Policy* 9 (2): 163–98.
- . 2016. "Forced Structural Convergence in the Eurozone – Or a Differentiated European Monetary Community." *MPIfG Discussion Paper* 16/15, Max Planck Institute for the Study of Societies, Cologne.
- . 2017. "There Is an Alternative: The Flexible European Currency Community." In *Saving the Euro: Redesigning the Euro Area Economic Governance*, edited by Hansjörg Herr, Jan Priewe, and Andrew Watts, 155–74. London: SE Publishing.
<https://www.socialeurope.eu/wp-content/uploads/2017/06/EURO-web.pdf>
- Scharpf, Fritz W., and Vivien A. Schmidt, eds. 2000. *Welfare and Work in the Open Economy*, vol. 1: *From Vulnerability to Competitiveness*. Oxford: Oxford University Press.
- Schelkle, Waltraud. 2015. "The Insurance Potential of a Non-Optimal Currency Area." In *Democratic Politics in a European Union under Stress*, edited by Olaf Cramme and Sara B. Hobolt, 137–54. Oxford: Oxford University Press.
- . 2017. *The Political Economy of Monetary Solidarity: Understanding the Euro Experiment*. Oxford: Oxford University Press.
- Schettkat, Ronald, and Rongrong Sun. 2009. "Monetary Policy and European Unemployment." *Oxford Review of Economic Policy* 25 (1): 94–108.
- Schmidt, Manfred G. 2003. *Political Institutions in the Federal Republic of Germany*. Oxford: Oxford University Press.
- Schmidt, Vivien A. 2016. "Reinterpreting the Rules 'by Stealth' in Times of Crisis: A Discursive Institutional Analysis of the European Central Bank and the European Commission." *West European Politics* 39 (5): 1032–52.
- Schonhardt-Bailey, Cheryl. 1998. "Parties and Interests in the 'Marriage of Iron and Rye.'" *British Journal of Political Science* 28 (2): 291–330.
- Schröder-Blair paper. 1999. "Europe: The Third Way/Die Neue Mitte. Tony Blair and Gerhard Schroeder." <https://web.archive.org/web/19990819090124/http://www.labour.org.uk/views/items/00000053.html>
- Seifert, Hartmut. 1991. "Employment Effects of Working Time Reductions in the Former Republic of Germany." *International Labour Review* 130/4, 495–510.
- Seikel, Daniel. 2016. "Flexible Austerity and Supranational Autonomy: The Reformed Excessive Deficit Procedure and the Asymmetry between Liberalization and Social Regulation in the EU." *Journal of Common Market Studies* 54 (6): 1398–416.
- Seils, Eric. 2012. "Beschäftigungswunder und Armut." *WSI Report* 07, Wirtschafts- und Sozialwissenschaftliches Institut in der Hans-Böckler-Stiftung, Düsseldorf.
https://www.boeckler.de/pdf/p_wsi_report_07_2012.pdf
- Sinn, Gerlinde, and Hans-Werner Sinn. 1994. *Jumpstart: The Economic Unification of Germany*. Cambridge, MA: MIT Press.

- . 2015. “Die Deutsche Vereinigung als Vorbild für Europa?” *Frankfurter Allgemeine Zeitung*, October 2, 22.
- Sinn, Hans-Werner. 2005. *Die Basar-Ökonomie. Deutschland: Exportweltmeister oder Schlusslicht?* Munich: Econ.
- . 2006. “The Pathological Export Boom and the Bazaar Effect – How to Solve the German Puzzle.” *CESifo Working Paper* No. 1708, Center for Economic Studies, Munich.
- Skidelsky, Robert. 2005. “Keynes, Globalization and the Bretton Woods Institutions in the Light of Changing Ideas about Markets.” *World Economics* 6 (1): 15–30.
- Sohn-Rethel, Alfred. 1987. *The Economy and Class Structure of German Fascism*. Afterword by Jane Caplan. London: Free Association Books.
- Söllner, René. 2014. “The Economic Importance of Small and Medium-sized Enterprises in Germany.” In *Wirtschaft und Statistik* 1, 1–11. Wiesbaden: Statistisches Bundesamt.
https://www.destatis.de/EN/Publications/WirtschaftStatistik/TheEconomicImportance_Soellner_12014.pdf?__blob=publicationFile.
- Sorge, Arndt, and Wolfgang Streeck. 1988. “Industrial Relations and Technical Change: The Case for an Extended Perspective.” In *New Technology and Industrial Relations*, edited by Richard Hyman and Wolfgang Streeck, 19–44. Oxford: Blackwell.
- . 2016. “Differentiated Quality Production Revisited: The Transformation of Production Systems and Regulatory Regimes in Germany.” *MPIfG Discussion Paper* 16/13, Max Planck Institute for the Study of Societies, Cologne.
- Statistisches Bundesamt. 2011. *Fast zehn Jahre Euro – Preisentwicklung vor und nach der Bargeldumstellung*. Wiesbaden: Statistisches Bundesamt.
- Steinbrück, Peer. 2010. *Unterm Strich*. Hamburg: Hoffmann & Campe.
- Stiglitz, Joseph E. 2016. *The Euro and Its Threat to the Future of Europe*. London: Allen Lane.
- Stolper, Wolfgang F., and Karl W. Roskamp. 1979. “Planning a Free Economy: Germany 1945–1960.” *Journal of Institutional and Theoretical Economics* 135 (3): 374–404.
- Streeck, Wolfgang. 1984. *Industrial Relations in West Germany: A Case Study of the Car Industry*. London: Heinemann.
- . 1991. “On the Institutional Conditions of Diversified Quality Production.” In *Beyond Keynesianism: The Socio-Economics of Production and Employment*, edited by Egon Matzner and Wolfgang Streeck, 21–61. London: Edward Elgar.
- . 1997a. “German Capitalism: Does It Exist? Can It Survive?” *New Political Economy* 2 (2): 237–56.
- . 1997b. “Beneficial Constraints: On the Economic Limits of Rational Voluntarism.” In *Contemporary Capitalism: The Embeddedness of Institutions*, edited by Rogers Hollingsworth and Robert Boyer, 197–219. Cambridge: Cambridge University Press.
- . 2003. “No Longer the Century of Corporatism: Das Ende des Bündnisses für Arbeit.” *MPIfG Working Paper* 03/4, Max Planck Institute for the Study of Societies, Cologne.
- . 2009. *Re-Forming Capitalism: Institutional Change in the German Political Economy*. Oxford: Oxford University Press.
- . 2016. “Von Konflikt ohne Partnerschaft zu Partnerschaft ohne Konflikt: Industrielle Beziehungen in Deutschland.” *Industrielle Beziehungen* 23 (1): 47–60.
- Streeck, Wolfgang, and Lea Elsässer. 2016. “Monetary Disunion: The Domestic Politics of Euroland.” *Journal of European Public Policy* 23 (1): 1–24.
- Streeck, Wolfgang, and Christine Trampusch. 2006. “Economic Reform and the Political Economy of the German Welfare State.” In *The Politics of Economic Reform in Germany: Global, Rhineland or Hybrid Capitalism*, edited by Kenneth Dyson and Stephen Padgett, 60–81. Oxon: Routledge.
- Streit, Manfred E. 1998. “Die deutsche Währungsunion.” In *Fünfzig Jahre Deutsche Mark: Notenbank und Währung in Deutschland seit 1948*, edited by Deutsche Bundesbank, 675–719. Munich: Beck.
- Strengmann-Kuhn, Wolfgang. 2003. “Die geplante Zusammenlegung von Arbeitslosenhilfe und Sozialhilfe – finanzielle Auswirkungen für die Betroffenen und ein Gegenvorschlag.” *Sozialer Fortschritt* 52 (11/12): 291–96.

- Svrtinov, Vesna Georgieva, Olivera Georgieva-Trajkovska, and Rise Temjanovski. 2015. "Sudden Stops and Current Account Reversals: The Euro Area Experience." *SEEU Review* 11 (2): 25–34.
<https://www.degruyter.com/downloadpdf/j/seeur.2015.11.issue-2/seeur-2015-0026/seeur-2015-0026.pdf>.
- Tietmeyer, Hans. 2005. *Herausforderung Euro: Wie es zum Euro kam und was er für Deutschlands Zukunft bedeutet*. Hanser: Munich.
- Trampusch, Christine. 2009. *Der erschöpfte Sozialstaat: Transformation eines Politikfeldes*. Frankfurt a.M.: Campus.
- Trichet, Jean-Claude. 2009. "Ten Years of the Euro: Successes and Challenges." Speech by Jean-Claude Trichet, President of the European Central Bank, Osnabrück, 12 February.
https://www.ecb.europa.eu/press/key/date/2009/html/sp090212_1.en.html.
- Tsebelis, George. 2015. "Lessons from the Greek Crisis." *Journal of European Public Policy* 23 (1): 25–41.
- Tsoukalis, Loukas. 2016. *In Defence of Europe: Can the European Project be Saved?* Oxford: Oxford University Press.
- Turner, Adair. 2016. *Between Debt and the Devil: Money, Credit, and Fixing Global Finance*. Princeton: Princeton University Press.
- Vaaroufakis, Yanis. 2017. *Adults in the Room: My Battle with the European and American Deep Establishment*. New York: Farrar, Straus and Giroux.
- Van Wincoop, Eric. 1999. "How Big Are Potential Welfare Gains from International Risk Sharing?" *Journal of International Economics* 47 (1), 109–35.
- Vitols, Sigurt. 1997. "German Industrial Policy: An Overview." *Industry and Innovation* 4 (1): 15–36.
- von Weizsäcker, Carl Christian. 2017. "Wie Deutschland seine Importe rasch steigern kann." Interview. *Spiegel online*, January 28.
<http://www.spiegel.de/wirtschaft/unternehmen/handel-wie-deutschland-seine-importe-rasch-steigern-koennte-a-1131912.html>.
- Voskamp, Ulrich. 2017. "Deutsche Industriestandorte in den Netzwerken globaler Qualitätsproduktion." *Mitteilungen aus dem SOFI* 11 (28): 1–7.
- Walters, Alan A. 1986. *Britain's Economic Renaissance: Margaret Thatcher's Reforms 1979–1984*. Oxford: Oxford University Press.
- Werner, Benjamin. 2013. *Der Streit um das VW-Gesetz: Wie Europäische Kommission und Europäischer Gerichtshof die Unternehmenskontrolle liberalisieren*. Frankfurt a.M.: Campus.
- Wolter, Frank. 1984. "From Economic Miracle to Stagnation: On the German Disease." In *World Economic Growth*, edited by Arnold C. Harberger, 95–121. San Francisco: ICS Press.
- Zahariadis, Nikolaos. 2017. "Bargaining Power and Negotiation Strategy: Examining the Greek Bailouts, 2010–2015." *Journal of European Public Policy* 24 (5): 675–94.
- Zoche, Georg. 2015. *Welt, Macht, Geld*. 2nd ed. Munich: Selbstverlag.
- Zohlnhöfer, Reimut. 2001. *Die Wirtschaftspolitik der Ära Kohl: Eine Analyse der Schlüsseleentscheidungen in den Politikfeldern Finanzen, Arbeit und Entstaatlichung, 1982–1998*. Opladen: Leske + Budrich.
- . 2004. "Destination Anywhere? The German Red–Green Government's Inconclusive Search for a Third Way in Economic Policy." *German Politics* 13 (1): 106–31.

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