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**Working Paper**

## The Euro area imbalances narrative in a Franco-German perspective: The importance of the longer-run view

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# RUHR

ECONOMIC PAPERS

Ansgar Belke  
Daniel Gros

## **The Euro Area Imbalances Narrative in a Franco-German Perspective: the Importance of the Longer-Run View**

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Ansgar Belke, Daniel Gros<sup>1</sup>

# The Euro Area Imbalances Narrative in a Franco-German Perspective: the Importance of the Longer-Run View

## Abstract

*There is a symmetrical debate in two Euro area core countries: in France about the restrictive fiscal policy of Germany, leading to a huge external surplus, in Germany about the insufficient compliance with fiscal rules and the lack of structural reforms in France. What are the real causes of the divergence between the two economies? We show that different indicators of competitiveness yield very different results depending on the base period used, e.g. 1995 (peak of reunification boom), 1999 or 1990. A comparison with the pre-unification period shows little gain in competitiveness. We also find, somewhat surprisingly, that Germany's industry is not more integrated in international value chains than that of France or Italy. We then look at the link between export growth and export prices and argue that in the long run exports are not driven by competitiveness but by the increased supply of labor resulting from unification. In addition, we ask what drove 'wage moderation' in Germany: policy or the labor market. We finally analyse the longer-term trend in fiscal policy and the resulting distributional consequences in both countries. Our more general policy implication is that any analysis which compares today to the trough of German performance after unification risks over-estimating the potential of the country. Given that the 'internal unification' process is complete now, one should not expect the Germans to continue to outperform France as it has done over the last two decades.*

JEL-Code: E62, F16, F41, F45

Keywords: France, Germany, international competitiveness, current account imbalances, wage moderation

March 2020

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<sup>1</sup> Ansgar Belke, UDE, CEPS Brussels & King's College London; Daniel Gros, Director of CEPS. – We are grateful for valuable comments received from Patrick Artus, Gilbert Cette, Lionel Fontagné, Gerhard Illing and other participants at the French-German Economic Dialogue, Friedrich Ebert Stiftung and Cercle des économistes, Berlin, 14 October, 2019, and Gunther Schnabl.

## 1. Introduction

A recurrent theme in most commentary on the Euro area's 'imbalances' is that the central issue is Germany and its large current account surplus (for recent surveys see den Haan et al., 2016, and Cléaud et al., 2019). The common narrative starts with the premise that Germany engaged in competitive deflation during the boom of the early 2000s, allowing it to expand its exports at the expense of the rest of the area (Bofinger 2015, Micossi, 2018, Lallement, 2017, Praet, 2018).<sup>1</sup>

This narrative continues with the observation that this imbalance cannot simply be rolled back because in the current low inflation environment the other countries would have to go for outright cuts in nominal wages, which would imply unacceptable political costs. Conclusion: the future of the Euro hinges on German wages increasing strongly to allow the others to gain competitiveness without having to deflate (Belke and Dreger, 2013).

We investigate in particular whether a gain in competitiveness could explain the divergence in export performance and the current account between the two economies. A longer-term view suggests that this narrative can provide at most a partial explanation, one which is based on the special circumstances of the post-unification period, and that it is likely to be grossly insufficient as a guide for the future.

We argue that 'wage moderation' during the early years of the Euro was not due to government policy, but just a reflection of a very weak labor market, as one could predict from the German Phillips curve, which has been rather stable over time. Wage moderation ended when the labor market recovered in the wake of the Hartz reforms, whose main aim was to make low paid work more attractive relative to unemployment.

The main area where policy choices clearly diverged concerns fiscal policy. France and Germany made very different choices after both countries violated the Stability Pact in 2003. In France expenditure continued to increase whereas in Germany a substantial reduction in expenditure led to a balanced budget just before the financial crisis started in 2007. The divergence increased when the immediate impact of the financial crisis had been overcome. At that point, the German government returned to a balanced budget whereas France continued with large deficits. The result

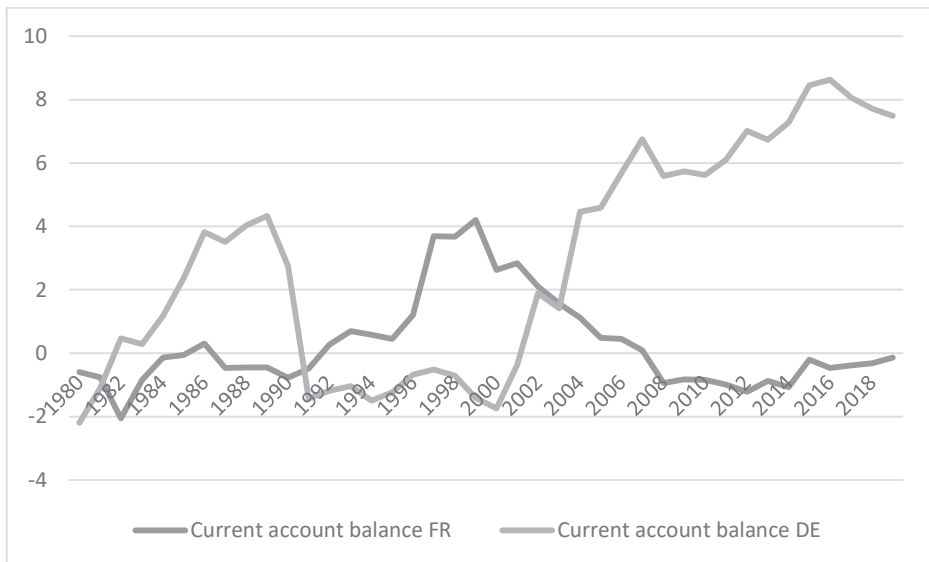
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<sup>1</sup> This dominating narrative is heavily based on competitive disinflation and, thus, a goods market approach to the subject of imbalances, as it excludes credit flows and monetary policy as determinants of current account positions. It does not focus upon international credit flows as determinants of current account balances. For a more balanced consensus crisis narrative to "reboot" the Euro area see CEPR (2015).

has been an unprecedented difference between France and Germany in the public debt-to-GDP ratio of about 30 percent of GDP.

All in all, it appears that the Germany of 2017 has returned to the position West Germany had reached just before unification (1989/90). Unemployment is at the same level, and the government runs a small surplus. Exports have increased massively, but relative export prices and competitiveness indicators have not changed much since before unification. The main reason for German export success was a factor that is usually neglected, namely the increase in Germany's economic potential through unification. The export-to-GDP ratio has increased for Germany in relative terms as much as in France (by about one half since 1990) and the ratio of exports to imports is about the same as in 1989. The main difference is that the current account surplus is larger today (8 percent of GDP, versus 4.5 percent then). Taking the start of EMU as the basis, and comparing with France, yields a different picture (see chart 1 below): At the start of EMU, Germany experienced a current account deficit of close to 2 % of GDP and France a surplus of about 3 % of GDP. Today Germany runs a surplus of over 7 % of GDP, whereas that of France is close to balance. The total turnaround between these two countries amounts thus to 12 % of GDP.

**Figure 1: Current account balances France versus Germany (in percent of GDP)**



Source: IMF, WEO data



Before the Corona Crisis, there was a symmetrical debate in both countries: in France about the restrictive fiscal policy of Germany, leading to a huge external surplus, and, in Germany, about the insufficient compliance with fiscal rules and the lack of structural reforms in France.

This paper deals with the underlying causes of the divergence between the two economies up to 2020. Our findings are of relevance even in the 'post-Corona' world. The most important is that the prudent fiscal policy of Germany adopted over the last decade put the government in a stronger position to support its economy.

Our main finding is that relative little has changed between France and Germany in terms of competitiveness if one compares 2019 to 1989, i.e. before unification. Most studies of Germany's relative position in the euro area use 1995 as the starting point, but, we argue that this year does not represent a benchmark.

In addition, we ask what drove 'wage moderation' in Germany: policy or the labor market. We finally analyze the longer term trend in fiscal policy and the resulting distributional consequences in both countries. Our more general policy implication is that any analysis which compares today to the trough of German performance after unification risks over-estimating the potential of the country. Given that the 'internal unification' process is complete now one should not expect the Germans to continue to outperform France as it has done over the last two decades.

The remainder of this paper is organized as follows. Section 2 analyses different indicators of competitiveness that yield very different results depending on the base period used if one concentrates on the post-unification period. But a comparison with the pre-unification period shows little gain in competitiveness. In section 3, we show that Germany's industry is not more integrated in international value chains than that of France or Italy. Section 4 then looks at the link between export growth and export prices and argues that in the long run exports are not driven by competitiveness. Section 5 then asks what drove 'wage moderation': policy or the labor market. Section 6 analyses the longer-term trend in fiscal policy and section 7 concludes.

## **2. German competitive disinflation: how to measure?**

The key point of the popular narrative is the assertion that 'Germany' engaged in competitive deflation during the first decade of the Euro (roughly from the irrevocable fixing of the intra-Euro area exchange rates in 1998 to 2008). However, there was (at least until the famous Hartz reform of 2003-5) no government policy on wages and the slower growth of wages in Germany during

that period was driven mostly by the country's very high unemployment rates. Dustmann et al. (2015) confirm that 'wage moderation' had started already before EMU, and was due mainly to the country's decentralized labor market.<sup>2</sup>

Moreover, by common consent (at least at the time) Germany had entered EMU with an overvalued exchange rate (Gros and Thygesen, 1998). It was thus only to be expected that wages in Germany should lag those of the rest of the Euro area. Sinn (1996) predicted that this would be economically and politically costly and Sinn (2007) argued that the Hartz reforms would not be sufficient 'to save Germany'.

The counterargument is that German wages fell by more than justified by the initial overvaluation. One thus needs to look at the size of the initial overvaluation, relative to the subsequent fall in relative costs, to recognize that the reference period thus becomes crucial, but this is rarely done.

Most commentators just start from the level at the start of EMU and implicitly assume it represented an equilibrium. But this is not as it was perceived then. The impression that Germany's labor costs were out of line at the start of EMU was based on solid facts: Germany had high unemployment, grown less than the others since 1995, and was running a current account deficit.

How large was the gain in terms of (cost) competitiveness? It might be best to compare Germany to France, which is of similar size, productivity level and did not experience, as much of the rest of the area, a financial market boom and bust cycle. There are many different indices used to compare competitive positions: changes in the CPI (consumer price index) and wage costs are the most often used ones. Given that 'wage moderation' is the central issue we concentrate here on unit labor costs. But even if one concentrates only on unit labor cost indicators the results depend very much on the exact indicator (real or nominal) and the comparison period.

Figure 2 below uses unit labor costs relative to 24 industrial countries<sup>3</sup> both in nominal and real terms, in each case as the simple ratio of the ratio Germany to France in order to eliminate the impact of general trends and fluctuations of the Euro exchange rate. The data can be used to arrive at very different conclusions.

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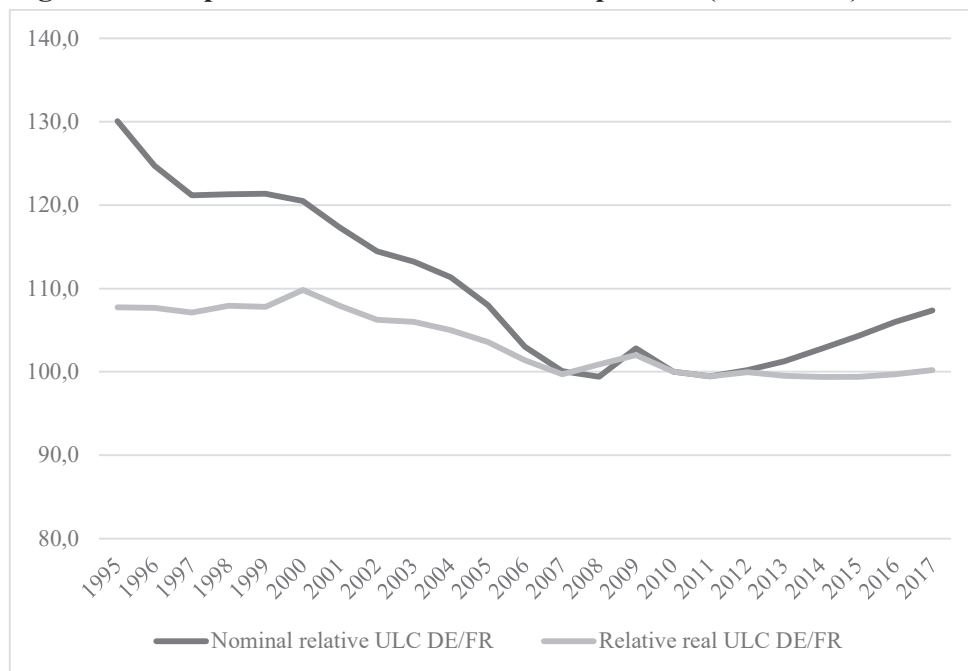
<sup>2</sup> Later, in the second half of the 1990s, wage austerity set in in the public sector as one of the measures to bring the public budgets under control.

<sup>3</sup> This indicator is available for a longer time period. Most other studies use unit labour costs against a larger set of industrial countries, but this indicator is available only since 1996, thus giving a mis-leading starting point.

Those who emphasize competitive disinflation use the year 1995 as the starting point, and then concentrate on the almost 30 percent fall in German (nominal) unit labor costs until 2008. By contrast, if one uses the start of EMU (1999) as the reference period one finds an improvement in the German costs of ‘only’ 20 percent up to 2008. And if one compares 1999 with today the gain for Germany falls to about 12 percent.

Relative real unit labor costs show in general much less movement (even within a monetary union). On this measure 1999 represents the peak and is thus often chosen as the reference period. But if one takes 1995 one finds an improvement of the German costs of only about 8 percent. It is thus apparent that the choice of the indicator, and the reference period, is key to any estimate of the competitive adjustments that might still be needed within the Euro area (in particular between France and Germany).

**Figure 2: Competitiveness indicators in competition (1995-2017)**

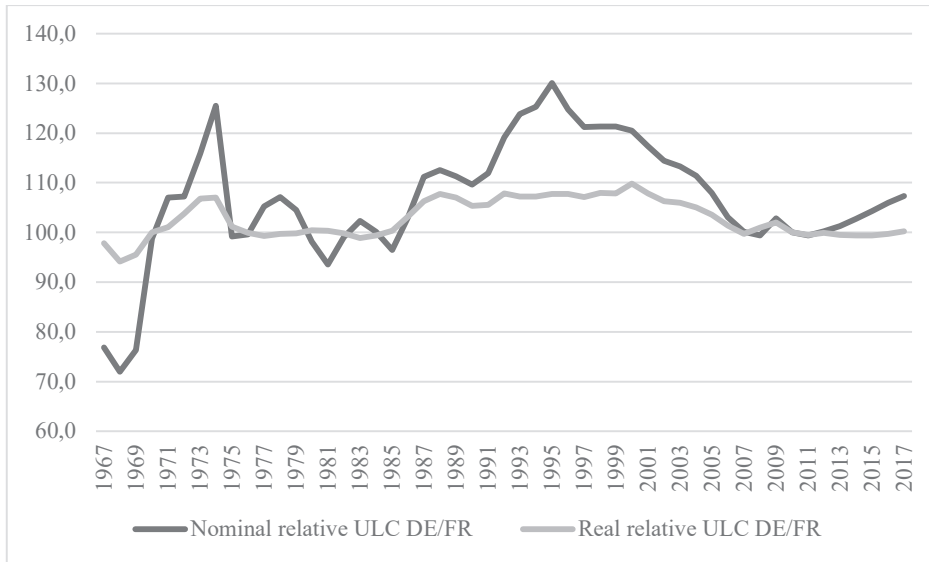


Source: European Commission. 2011 = 100.

A longer-term comparison shows that indeed 1995 represents an important turning point and that the entire 1990s were deeply affected by unification related special circumstances, and should thus not be taken as the reference point. Both nominal and real relative unit labor costs (ULC) appear to be today close to their very long run averages as Figure 3 below shows. The long run (1966-

2005, excluding thus the last ten years<sup>4</sup>) average for the relative real unit labor costs is only about 3 percentage points higher than the value reached in 2017.

**Figure 3: Competitiveness indicators in competition (1967-2017)**



Source: European Commission.

The available data thus suggests that German competitiveness sea-sawed in the wake of unification. An initial deterioration due to sharp increases in wages until about 1995 was then gradually undone.

Unfortunately, many indicators are available only from 1995, and many studies use that year as the starting point, possibly because it yields the largest changes. But that year should certainly not be taken as the reference period. Using the start of EMU as the reference period is always tempting, but given that Germany was considered by then the ‘sick man of Europe’ it does not seem appropriate to use any fall in German wages relative to the 1999/2000 level as evidence of competitive disinflation.<sup>5</sup>

Looking at a longer time span, including the pre-unification period one finds that the relative unit labor costs of France relative to Germany are rather close to their longer run averages. For

<sup>4</sup> Long-term average pre-crisis is a useful indicator for the pre-crisis equilibrium. If one wants to have an indicator where we are today the pre-crisis average might be a better guide than any average which includes the crisis period - which might be special.

<sup>5</sup> See IMF (2003), p. 5: “Germany suffers from a weak macroeconomic environment, a large and increasing output gap, high unemployment, and banking-sector strains, with limited policy options.”

Germany one finds that real unit labor costs (relative to 24 industrial countries) are 3 percentage points below the 1966-2005 average and those of France 2 percentage points above the same average. These changes seem insufficient to explain the extraordinary change in the German current account position, both in absolute terms and relative to France. During the first decade of the Euro the current account positions of the two countries reversed completely: in 1998 Germany had a small deficit (1.5 percent of GDP) whereas France had a substantial surplus (over 3 percent of GDP). Ten years later Germany had a surplus of over 7 percent of GDP and France a small deficit, the overall reversal was 11 percent of GDP between the two countries. It seems highly unlikely that one can impute most or even all of this startling change in relative external positions to a change in relative costs of the order of magnitude found here.

### **3. Germany benefitting from cheap labor inputs from Central and Eastern Europe**

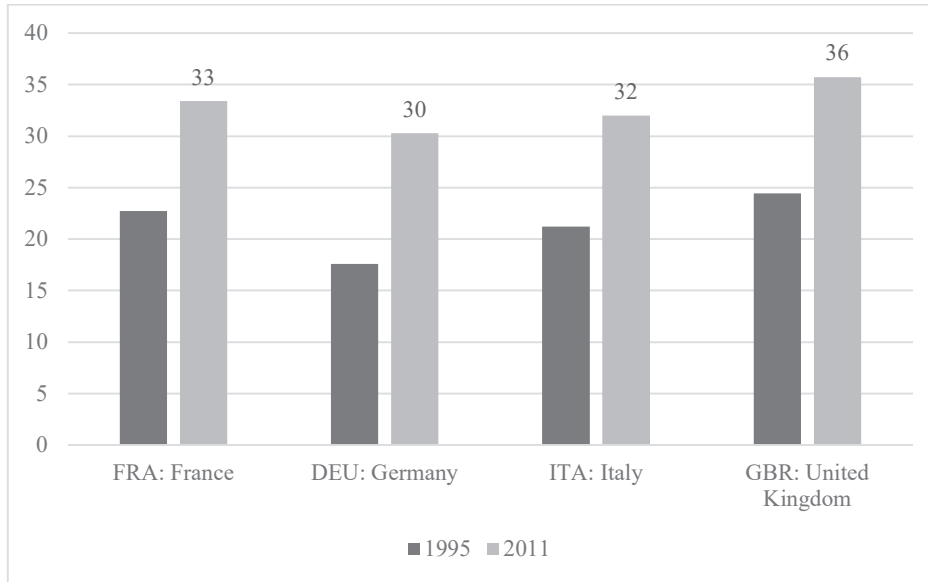
Another part of the conventional narrative is that Germany benefitted from an increasing integration of its industry with the new EU Member States from Central and Eastern Europe. But this is not supported by the available data on the foreign contributions to German exports. Figure 4 below shows that the share of foreign value added incorporated in German manufacturing exports was, and has remained, lower than those in French or Italian ones.

It is true that German industry became more integrated into a European value added chain since the foreign value added incorporated in German exports rose from about 18 to 30 percent between 1995 and 2011 (last year with data available from the TIVA (“Trade In Value Added”) database of the OECD/WTO). However, for France the foreign content of exports had already been higher in 1995 (above 22 percent) and remained higher in 2011 with 33 percent (against ‘only’ 30 percent for Germany). The only way one can detect an impact of the opening of the European economy to Central and Eastern Europe is that the change was stronger for Germany; but the result was only that the country caught up with the level of integration in global value chains of the other large continental Member States.

The manufacturing exports of both Italy and the UK also contain a higher proportion of foreign value added than those of Germany. If there is anything special about German manufacturing exports it is thus that they contain somewhat less foreign value added than those of the other large EU Member States. In reality, this is not surprising given that German industry is considerably

larger than French or Italian. It is thus more likely in Germany than in Italy or France that the supplier of intermediate goods can be found at home.

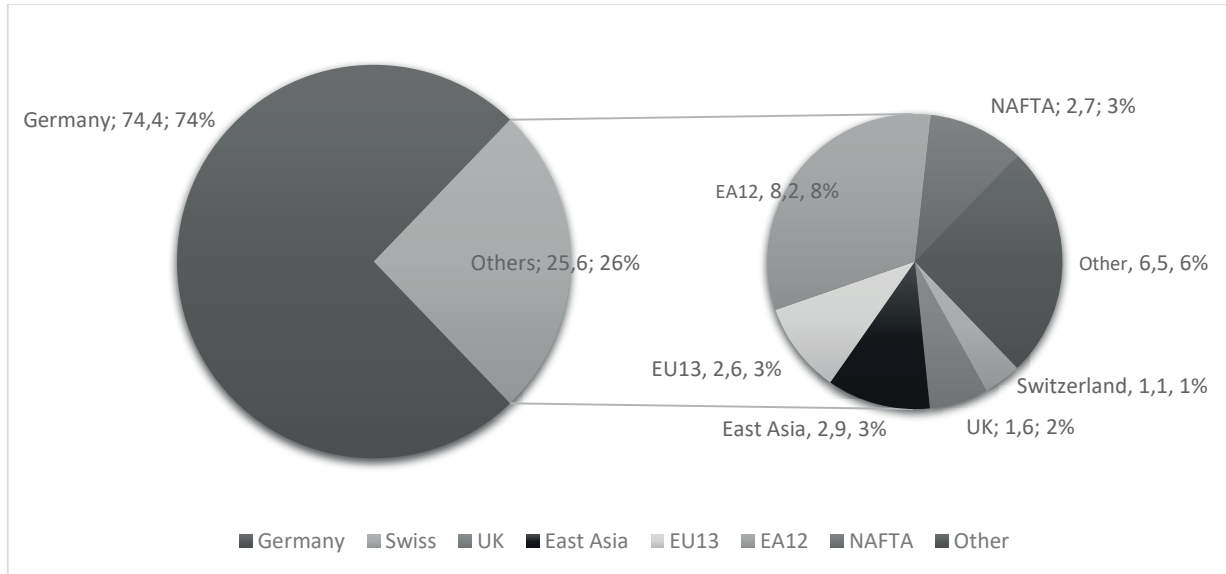
**Figure 4: Share of foreign value added in gross manufacturing exports**



Source: OECD, TIVA database.

Figure 5 below shows the origin of the value added contained in German exports, looking this time at total exports, i.e. exports of goods and services. On this account, the foreign value added content is only 25.6 percent. About one third of the foreign value added content of German exports, about 8.2 percent of the grand total, originates in the 12 early Euro area countries. The EU-13, i.e. the new member countries contribute only 2.6 percent of the total or about 10 percent of the foreign value added. The percentage of the EU-13 has almost doubled over the decade for which data is available. In this sense, Germany has benefitted from the expansion of the EU eastwards, but the importance of these countries remains limited for the overall German export sector.

**Figure 5: Origin of value added in German exports**

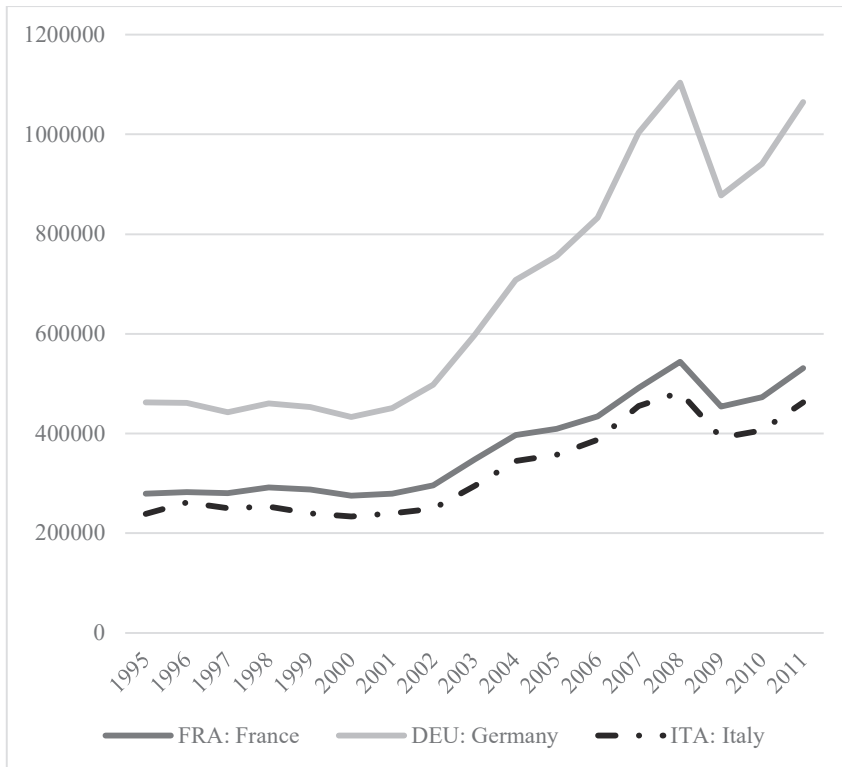


Source: OECD, TIVA database.

What remains unique is the evolution of German exports, even if one considers only the domestic value added. Figure 6 below shows the huge increase of German value added in exports, which seems to dwarf those of France or Italy. This data is available only in current US dollars, and is thus ‘inflated’ over time. But the comparison of the evolution among the three countries, which are otherwise of similar size is still telling. Unfortunately, this data is only available until 2011. It is thus impossible to analyze more recent developments. In 2011 the domestic value added content of gross exports represented about 30 percent of GDP for Germany, but only around 20 percent of GDP for France and Italy. In the late 1990s, these ratios were clearly lower, around 20 percent of GDP for Germany and 15 percent of GDP for France and Italy. It is thus correct that Germany is considerably more exposed to international trade than the other large Euro area countries, and that this exposure has increased considerably over the last 20 years. The figure also shows that rapid growth is really taking off only around 1999, i.e. the start of EMU. But given that the figure shows the domestic value added in total exports it is unlikely that the Euro was the main reason for this acceleration of ‘globalization’.

As an aside: French policy makers might reflect on the fact that French exports seem to follow almost exactly the same trajectory as those of Italy – a country which clearly has a growth and productivity problem.

**Figure 6: Domestic value added content of gross exports (millions of USD)**



Source: OECD, TIVA database.

The TIVA database with value added in trade is available only for 1995-2011. If one wants to make a longer-term comparison one needs to use traditional trade statistics. But, given that the domestic value content of German and French exports is so similar, as shown above in Figure 4, one can also compare just normal ‘gross’ exports.<sup>6</sup>

#### **4. Competitiveness and relative prices as determinants of trade**

There is a large literature on the effectiveness of changes in the exchange rate in affecting the current account which has generally concluded that competitiveness measures do not have a strong impact on trade flows, or at least not strong enough to become a major determinant of current accounts (Belke and Dreger, 2013, Belke, Schnabl and Zemanek, 2010). Most studies of the origins of the German current account surplus have likewise concluded that the gain in relative cost competitiveness was only one of the factors (Kollmann et al., 2014).

<sup>6</sup> However, the total exports (and their domestic value added) underwent a different growth path, in absolute terms (but the growth rates are not too different).



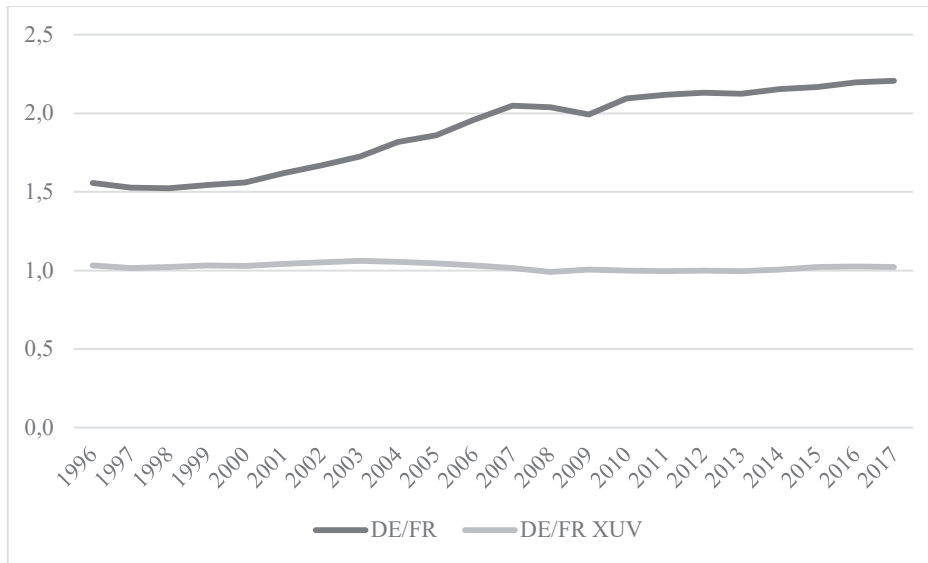
In principle, one should distinguish between the impact of exchange rates and competitiveness indicators for the current account and their impact on the demand for exports. The impact of any change in competitiveness indicators on the current account has many channels to consider: higher export sales, import substitution plus a number of income effects resulting from changes in wages and profit margins. Moreover, the current account can also be considered as the difference between national savings and investment rates, which means that it will also be affected by expectations about future developments. The impact of changes in relative prices on exports should be straightforward: higher prices should lead to lower exports, and higher exports should require lower prices. The only question in the empirical literature is how strongly negative export demand reacts (and whether the elasticity is in absolute value larger than one). Fontagné et al (2016) provide a recent overview and show how difficult it is to go from the elasticities at the micro to the macro level, as is well-known from the trade hysteresis literature.

The narrative that German exports were based on low costs is based on the assumption that German firms could have increased their sales so much more than their competitors only because they lowered their prices. But this is not what one sees in the data. Figure 7 below first adopts the usual time frame, starting with the 1990s. It shows the ratio of German exports of goods and services (in current euro) to those of France and the relative export prices (export unit values). Considering the ratio of the exports of the two countries has the advantage that it isolates the idiosyncratic components as the general globalization trend (apparent in Figure 6 above) should cancel out. (German and France are each other's main market, but the share of overall German exports going to France, and vice-versa for France, is not large enough to influence the ratio in a meaningful way.)

The line depicting the ratio of German to French exports clearly slopes upwards, indicating that German exports increased trend-wise much more than those of France.

According to the generally accepted narrative this larger export sales growth should have been based on lower prices. But the line depicting relative export prices is totally flat, indicating that German export prices did not move at all relative to those of France over this period. What happened in reality is that German exports increased trend-wise, from about 1.6 times French ones in the late 1990s, to about 2.2 times today, without any sign that German exporters were undercutting their competitors in terms of prices.

**Figure 7: German/French relative export performance and relative prices (1996-2017)**



Source: European Commission, AMECO.

This phenomenon “increasing export sales without any decline in prices” is difficult to reconcile with the widespread narrative concerning competitiveness. But modern models of trade are fully compatible with the lack of a link between export prices and export performance, at least if one distinguishes between the short and the long run. In the canonical model of trade in differentiated products (à la Krugman, 1980) each country produces a large number of varieties (of industrial products) which are slightly different from each other (and those of other countries). Each variety is produced under increasing economies of scale, but given a constant elasticity of demand (determined by preferences) the size of each firm is constant in the long run. The usual relationship between export prices and exports remains valid only for the short run, when the number of firms and varieties is fixed. In the short run, domestic firms can sell more abroad only if they lower their price. This is the traditional export demand as estimated usually (Imbs and Mejean, 2010). These equations cannot of course capture increases in supply resulting from new varieties. Increases in supply would typically show up in country fixed effects or some time trend.

This differentiated products model of trade also implies that if the effective labor force of a country increases, its exports can increase proportionally, without any need for lower prices since the additional exports can come from additional firms producing new varieties. The model thus predicts that countries whose productivity, or population, grows, can increase their exports without any need for export prices to fall. This implies also that there is no need to appeal to ‘non price’

competitiveness factors driving German exports. An increase in the overall effective labor force can explain most of the observed 'excess' export growth.

Before unification, a large part of the labor force in the Eastern part of Germany had not been integrated in the global and European markets, and much of the capital stock was worthless. It took some time and a huge investment by West-German firms to construct a new economic system for the former GDR. The increase in German exports can thus be viewed as the natural outcome of this gradual renewal of the human and physical capital, which increased the effective labor force by about 25 percent (the population of East Germany amounted to about 17 million, compared to 60 million for West Germany).

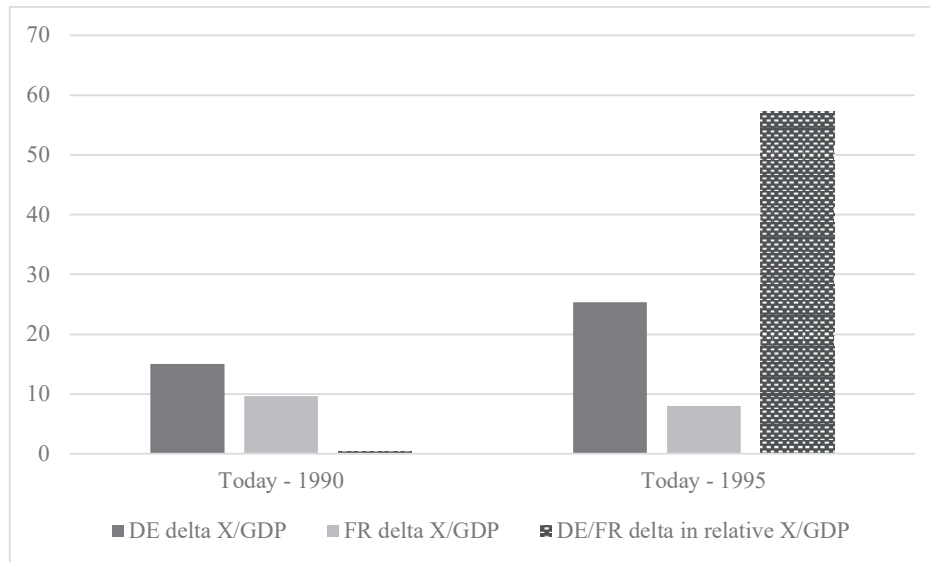
The increase in the productive potential of the country of about one fourth could alone account for an increase in the ratio of German to French exports from 1.6 to 2, i.e. most of the observed increase. An additional increase in the workforce came through the Hartz reforms, considered separately. Moreover, if one uses 1990 as the base year one finds that the increase in German exports relative to French ones was much smaller than one fourth (from 1.9 times to 2.2 times) because the unification boom had temporarily diverted sales to the domestic market.

Finally, the observation that there is no tight relationship between exports prices and trade is not new. It had already been made in the context of the European Monetary System which needed frequent revaluations of the DMark. But the sometimes large changes in exchange rates had in general little influence on export prices (Gros and Thygesen, 1998).

The impact of unification, which makes the base year 1995 so misleading can be summarized in Figure 8 below. Looking at the changes in the export/GDP ratio one finds the following picture: in 1995 exports amounted to around 22 percent of GDP in both France and Germany, but by now (2017) this ratio has increased to 47 percent for Germany, and to 'only' to 30 percent for France. This represents an increase of 27 percentage points for Germany and 10 percentage points for France. But if one compares 1990 to today one finds a different picture: the export/GDP ratio was already 32 percent for Germany then, it has since then increased by 15 percentage points. For France one finds a somewhat smaller increase in absolute terms, namely about 10 percentage points, i.e. from about 20 to 30 percent. But the relative increase in the trade/GDP ratio was the same for both countries, namely approximately one half. This means that between 1990 and today, both countries experienced globalization (measured as relative increase in the trade/GDP ratio) in similar ways, but since Germany had already been more open than France the absolute increase in

openness was larger. The result was a much larger increase in German exports in absolute terms, but very similar in relative terms if one takes into account its higher starting degree of openness and given its higher increase in GDP (due to unification).

**Figure 8: Different views of export performance**

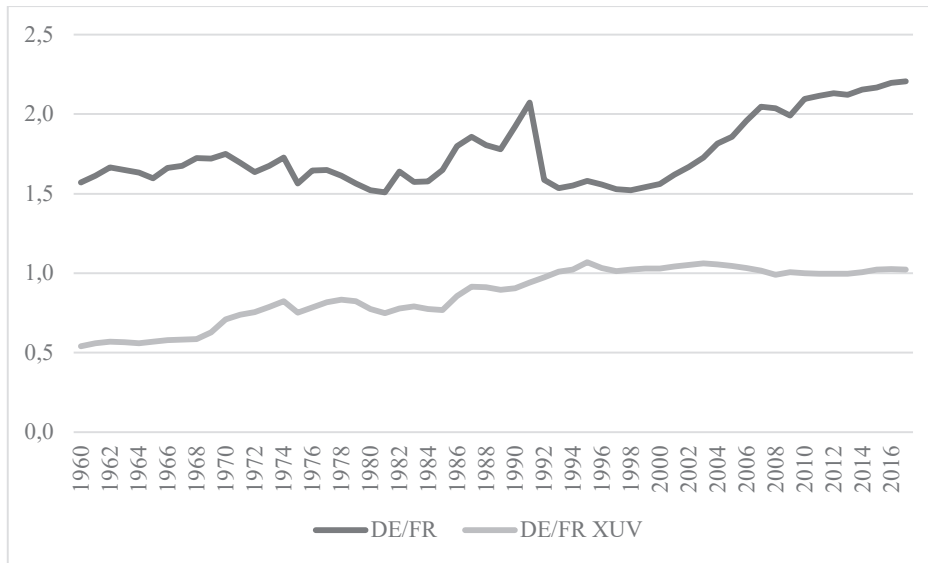


Source: European Commission. X/GDP (goods and services). Delta in percentage points.

A look at the longer-term evolution of exports and trade prices (“export unit values”, Peneder, 2009) confirms that the recent past represents more of a return to the ‘status quo ante’, rather than a new phenomenon.

But the longer-term evolution suggests an additional structural break associated with unification. Until the mid-1990s Germany’s export prices had increased trend-wise relative to those of France (the lower line in Figure 9 below). Measured in nominal values German exports had increased somewhat, relative to those of France from 1960 until 1990. But this year represented a temporary peak, partially because sales from West- to East Germany no longer counted as exports after that date, but also because German exports in general stagnated during the first years following unification as domestic demand was strong and wages had increased, partially spurred by the unification boom.

**Figure 9: Germany/France: long-run export performance and relative prices**



Source: European Commission. XUV = Export Unit Values.

The fact that German export prices had increased from 1960 until 1995 relative to those of France, while exports were in nominal terms at about the same level relative to those of France (i.e. about 50 percent higher) during the mid-1990s as in 1960, has one implication: French exports had, on average, grown faster in real terms than those of Germany. A similar trend can be seen more recently if one compares France to Italy: over the last 20 years French exports have increased relative to those of Italy, but its unit values have fallen.

## 5. The causes of ‘wage moderation’

Even if there is great uncertainty about the extent of the German competitive advantage (and its impact on exports), it remains true that German wages increased less during the first years of the Euro than in France (and the rest of the Euro area). The term ‘wage moderation’ suggests that this relative fall in German wages was induced by some policy of the government.

Afonso and Gomez (2008) find a significant impact of government wages on private sector wages, but it is very small. Their preferred estimate implies that a reduction in government wages of 1 % translates into lower private sector wages of one tenth of that amount (0.1 %).

However, during that period unemployment in Germany was also higher than elsewhere and one would thus expect that if the labor market works wages to increase less in Germany than elsewhere. One way to interpret ‘wage moderation’ as a policy, is then to look for a change in the relationship

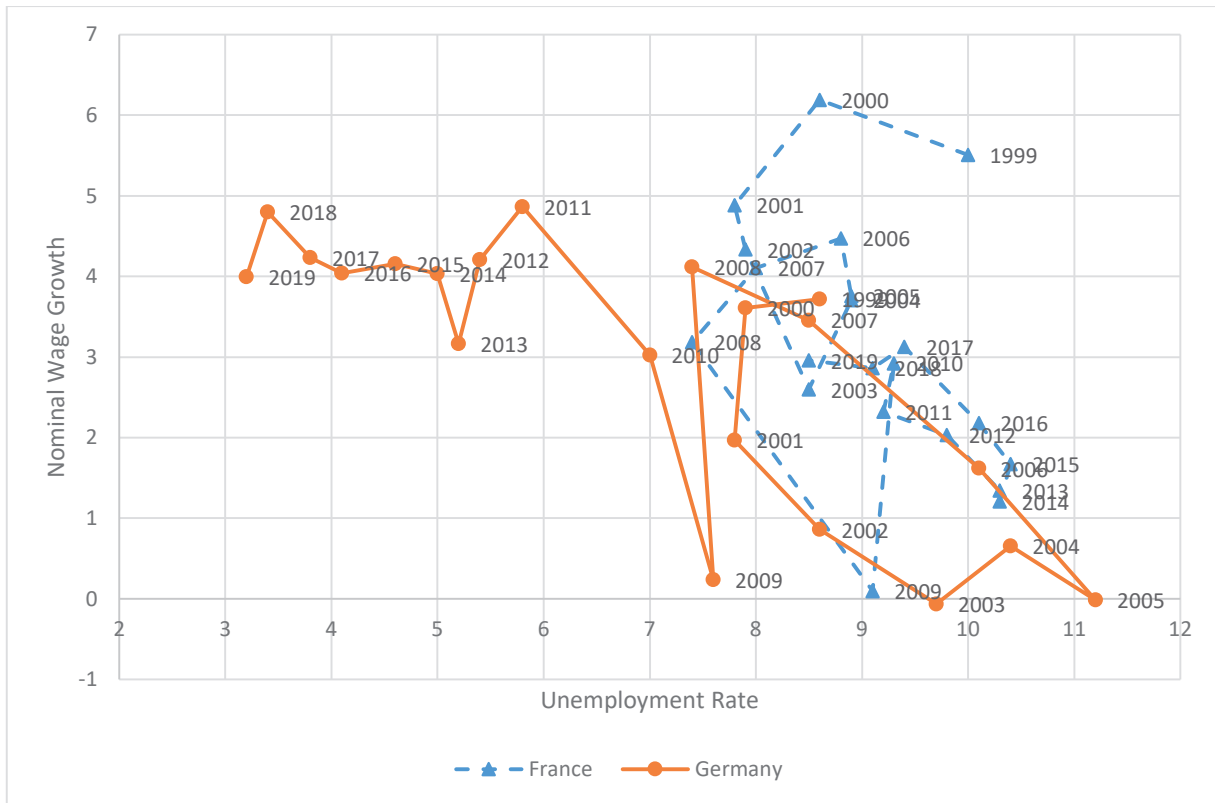
between unemployment and wages. However, a casual inspection of the German Phillips curve (the relationship between wages and unemployment) shows no irregularity or shift before 2007.<sup>7</sup> This can be seen in Figure 10 below. As unemployment increased to a peak of over 11 percent in 2005 wages fell, but they subsequently increased again when unemployment had been reduced. The year 2009 represents clearly an outlier in the sense that wages did not increase for one year as workers feared that the Global Financial Crisis and the implied Great Recession would lead to a permanent weakness in the German economy. In France, by contrast, wages continued to increase during the recession by 2 percent. This one year thus accounted already for one third of the difference in the observed gain in German unit labor costs.

The French Phillips curve seems much less well defined, partially because unemployment varied much less. However, it is also clear that almost all points for France are situated to the North-East of the German ones. This implies that France needs a higher rate of unemployment to keep wage increases at the same level as Germany (but the magnitude of this difference is highly uncertain).

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<sup>7</sup> A recent Bundesbank (2016) study claims that the relationship between inflation (measured by consumer prices, not wages) and unemployment has been stable. That study investigated 72 variants of the Phillips curve. But it also found that in  $\frac{3}{4}$  of the cases at least one estimated coefficient for HICP inflation had the wrong sign (mostly the key indicator for economic slack).

**Figure 10: Phillips curves France and Germany**



Source: European Commission.

The famous Hartz reforms thus apparently did not have an impact on wage formation, at least not a direct one.<sup>8</sup> The purpose of these reforms had been to bring marginal labor market participants into employment by making unemployment less attractive relative to low paying jobs. The purpose had not been to induce wage moderation. However, these reforms might have encouraged moderate wage demands because they increased the effective labor supply, thus keeping wage demands lower than they otherwise would have been.<sup>9</sup> In France, by contrast, the relationship

<sup>8</sup> The impact of the Hartz reforms on inequality is also much more difficult to judge than commonly believed because the increase in (earnings) inequality started much earlier and actually paused after 2005.

<sup>9</sup> It has been suggested that the quality of the employment fostered by the Hartz reforms was low because it made especially part time employment (especially of early retirees) more attractive. This is not correct if one looks at the total of hours worked, which have increased since 2005 by 7 percent in Germany (against only 2 percent in France) while employment has increased by ‘only’ 6 percent. But the latter was sufficient to bring the unemployment rate from 11 to less than 5 percent today. For an in depth presentation of productivity, employment and hours worked etc. in France and Germany see the blog post by Piketty 2017, <http://piketty.blog.lemonde.fr/2017/01/09/of-productivity-in-france-and-in-germany/>

between unemployment and wages was much looser, and strong domestic demand kept unemployment lower than in Germany, at least during the early years of the Euro.

Lower wages contributed to higher profits and lower personal incomes, which translated into higher (national) savings as German firms apparently did not invest much of the higher profits which mechanically result from lower wages. What remains to be explained is why the trend towards a higher profit share which one can observe also in the US and the UK did not lead to higher national savings rates in these countries.

## **6. Public finance**

Governments can control public finance outcomes. Wages, prices and trade balances are determined by decisions in the private sector for which the government can at most influence the framework, but not the outcome. Deficits and debt levels, by contrast can be considered the direct outcome of political choices.

Any longer-term comparison of the relative fiscal positions of the two countries shows a structural break. But this break is rather recent, not related to unification.

Figure 11 below shows the public debt-to-GDP ratio for France and Germany, which is a useful summary statistics of longer term trends in fiscal policy (especially since it also incorporates the cost of off budget items). It is apparent at first sight that the two lines tended to evolve together. Until the early 1990s France had actually a lower debt ratio than Germany. Somewhat surprisingly the French debt ratio increased relatively to that of Germany after unification. In principle one would have expect the opposite to happen given the huge fiscal cost of integrating the ‘new Länder’ into the (West-)German welfare system. However, the opposite happened: the German debt ratio did increase (from about 60 percent of GDP at the time the Maastricht treaty was signed) to about 80 percent of GDP a decade later, but the French debt ratio increases slightly more. From the start of EMU the two lines move very closely together with the business cycle. Both France and Germany violated the Stability Pact in 2003/04, and joined forces (with Italy) in defeating the Commission who played its role as the Guardian of Treaty.

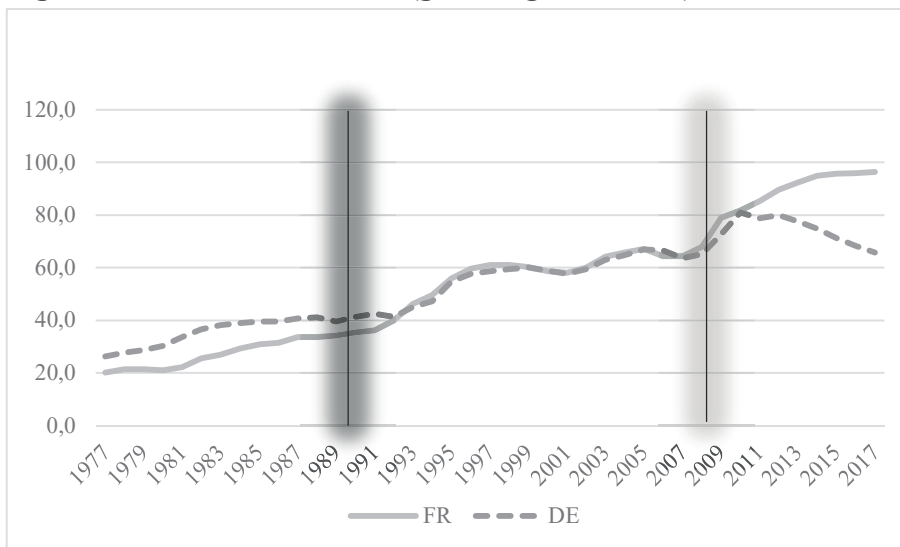
The reaction to the Euro crisis then brought about an unprecedented divergence: Germany chose to reduce its deficit soon after the concerted fiscal expansion of 2009, whereas France continued to run high deficits. This has led now to a difference of over 30 points in the debt to GDP ratio; a difference which is still growing since at present (2017) the difference in the deficits is over 3



percentage points of GDP (deficit around 3 percent of GDP for France, against a slight surplus for Germany).

The fact that the evolution of the difference in the debt ratios has followed closely that of the difference in the deficits suggests that austerity has not been ‘self-defeating’. Over the last years it has often been argued that with interest rates at the lower bound any fiscal contraction would lead to such a fall in demand that the debt/GDP ratio would actually increase. This does not seem to have been the case if one compares France to Germany.

**Figure 11: Debt-to-GDP ratio (general government)**

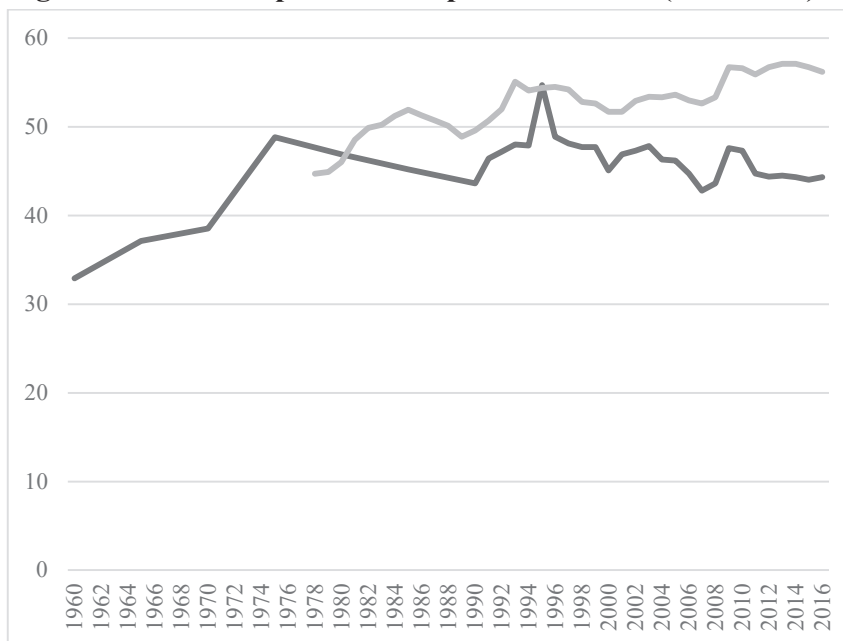


Source: European Commission.

What is the reason for this sudden better performance of Germany after 2007? One explanation might be that the German political system was laboring for years under the great strain resulting from unification. Although the country ran deficits close to the 3 percent of GDP limit for a number of years, the political system took the formal breach in 2003 very seriously. A very strong political effort was thus made to keep the deficit under control even if the economy was not running well. When the economy rebounded after the Great Recession at a time when the cost of unification had faded away, the system put in place delivered surpluses by just maintaining the same effort as before. It is as if a swimmer had been training while swimming against an adverse current. When the current suddenly stops, the swimmer will suddenly be much quicker.

Another strategic Franco-German difference is apparent in the importance of (total) public expenditure in GDP.<sup>10</sup> The view that France had traditionally higher public expenditure than Germany is only partially confirmed by the pre-unification data (see Figure 12 below). But it is clear that the difference has increased considerably since the start of EMU. During the 1990s, when the costs arising from re-unification were still considerable, the expenditure-to-GDP ratio in Germany was ‘close to, but below’ 50 percent of GDP, whereas that of France was somewhat above this threshold, with the difference between the two countries amounting to about 5-6 percentage points. Today this difference has doubled to 12 percentage points, with the (general) government in Germany spending about 44 percent of GDP, against close to 56 percent of GDP in France (Figure 12).

**Figure 12: Public expenditure in percent of GDP (1960-2016)**



Source: European Commission. Grey = DE, black = FR.

This difference in expenditure ratios (combined with the difference in debt levels) has profound implications for the tax system since expenditure must sooner or later be financed by taxes. The

<sup>10</sup> Here it is difficult to document longer-term trends because the major international institutions have the data only for united Germany. However, one can use German sources to get some data for West Germany.

strategic decision for the new French administration is how to achieve sustainable public finances, by reducing expenditure or increasing taxes.

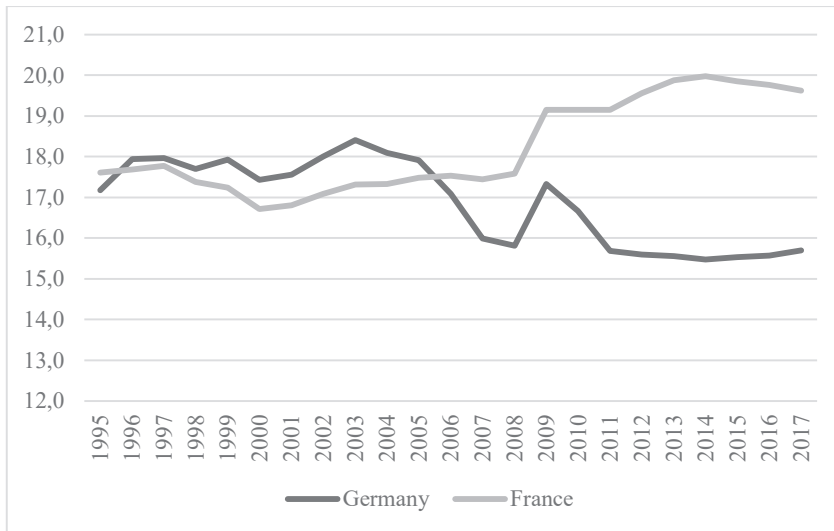
**Figure 13: Public expenditure in percent of GDP (1986-2016)**



Source: European Commission.

We now finally turn towards the heavily discussed interaction between fiscal policy, labor market reforms and inequality. In this context, it is important to note that most of the divergence between France and Germany in total government spending over the last two decades came from social security spending (as percent of GDP), which increased in France, but went down in Germany, see Figure 14 below). In Germany, the decline starts around 2003-5 whereas in France there is a slow trendwise increase until 2008, which is then followed by a stepwise increase in 2008/9. In Germany, there is also an increase during the financial crisis, but it is temporary.

**Figure 14: Social security expenditure in percent of GDP**

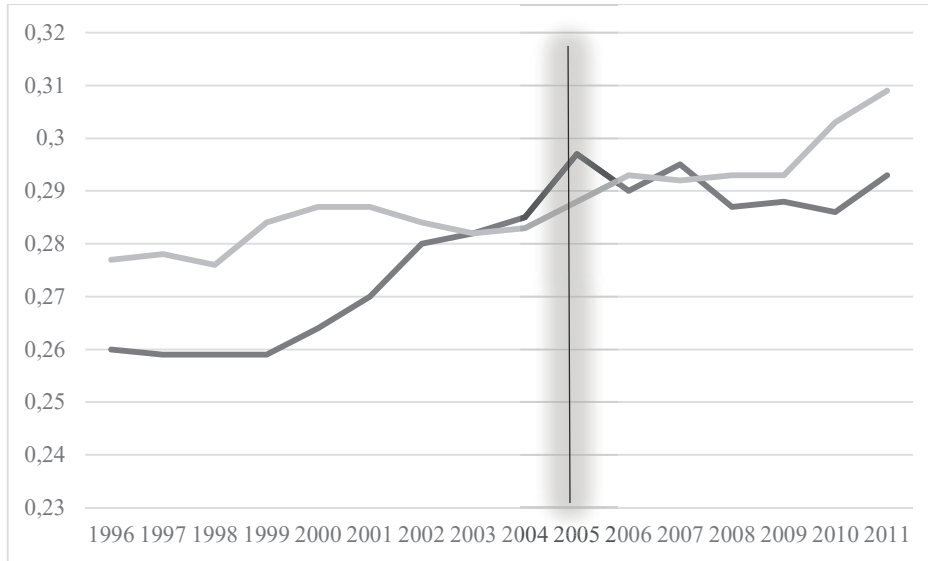


Source: European Commission.

A priori one would expect that lower (relative and absolute) spending on social security leads to an increase in inequality. Superficially this seems to be the case since inequality in Germany is now (last year with comparable data: 2011) higher than during the post-unification period (and higher than before unification) (Figure 15 below). This seems to confirm the narrative that the recovery of the German labor market had a price in terms of higher inequality.

However, the time path of inequality is the opposite of one would expect if it had been caused by a combination of the Hartz Reforms and lower expenditure on social security (both of which start around 2003-5). Figure 15 shows the Gini coefficient (incomes after taxes and transfers) for both Germany and France since the 1990s according to the OECD (one of the few sources for comparable series).

**Figure 15: France and Germany: Inequality (Gini) index compared**



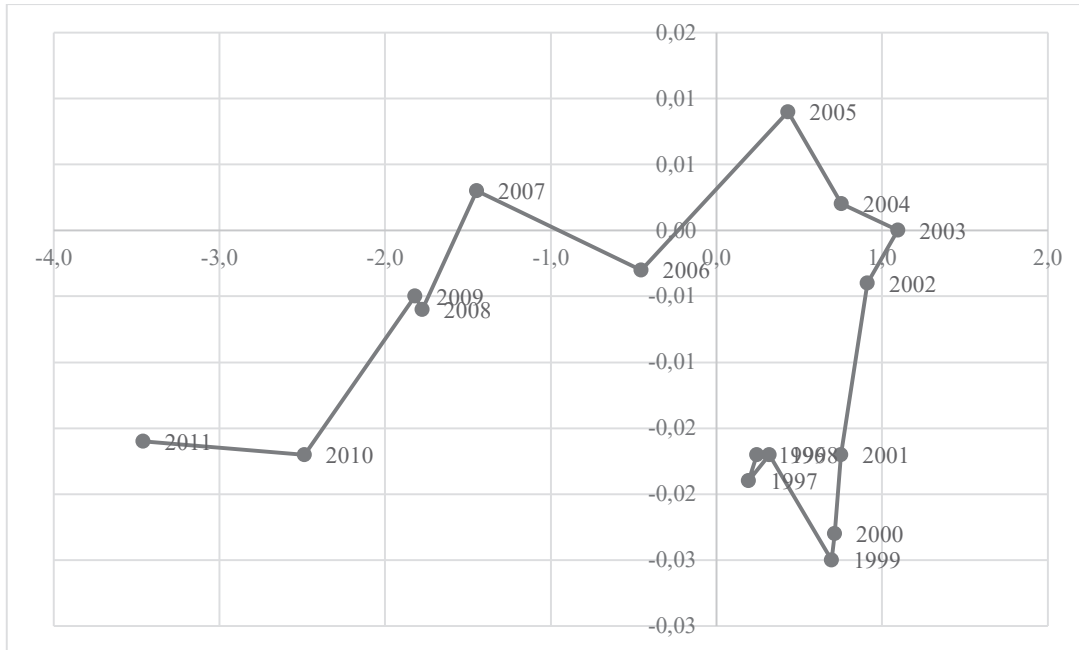
Source: OECD. Grey = FR, black = DE.

It is apparent that in Germany inequality had increased trendwise since the mid-1990. However, inequality reached the peak the very year the Hartz reforms became law and around the same time the fiscal adjustment started (2005). One would thus have expected that the combined impact of these two policy choices would lead to a further increase in inequality. But the opposite happened: after 2005 inequality (after transfers) started to fall, albeit only little.

The Gini coefficient is of course only one way to measure inequality. Other measures, such as the 9/1 deciles and measures looking only certain age classes show somewhat different time paths. However, a number of German studies (see Bundesfinanzministerium (2017)) have looked at a number of these indicators and confirmed the general finding that the increase in inequality stopped around 2005.

Given that France made the opposite choice of Germany by increasing social security expenditure around this time, it is interesting to compare the two countries in terms of inequality and social security expenditure. Figure 16 below does this by comparing the difference in social security expenditure (as a share of GDP) between France and Germany with the difference in the two Gini coefficients.

**Figure 16: Social security spending and inequality compared**



Source: Own calculations.

Horizontal axis: difference France/Germany in social security expenditure (percent GDP).

Vertical axis: difference in Gini coefficient (after tax), again France/Germany.

This chart shows that between the mid-1990s and 2005 French and German social security spending followed a very similar time path, but Germany became gradually more unequal. But the pattern changed after 2005: Germany started to spend less on social security (relative to France and absolute) but inequality fell (mostly relative to France, but also absolute).

The key purpose of the Hartz reforms had not been to make the labor market more flexible (as seems to be the aim of the current efforts in France) (Belke and Baas, 2014). The main problem, as perceived then, was that Germany's wages were set for its famous 'Facharbeiter', i.e. skilled (manufacturing) workers. But this left out a considerable part of the population whose productivity was much lower. Moreover, the social security system provided a generous alternative income, often based on a high percentage of previous wages and usually with very long benefit periods. The key purpose of the reforms was thus to 'make work pay'.

The reforms thus involved drastic cuts in benefits for the long-term unemployed and tighter job search and acceptance obligations. The benefit cut and the acceptance obligations of alternative jobs were accompanied by a system to top-up the incomes of these with low wages. The promise of the reforms was thus more employment (at lower wages) but an unchanged income distribution.

Moreover, one would expect that this type of reforms leads to lower social security expenditure since at least part of the (essentially unchanged) income of the formerly unemployed would come for wages. This could be the explanation for the observed stable degree of inequality in Germany, alongside lower social security spending.

The tighter job search and acceptance obligations required an efficient administration, able to help with job search and qualified to judge what would constitute 'acceptable' jobs. A key part of the Hartz reforms was thus a deep reform of the bureaucracy dealing with the unemployed, transforming it from an agency which used to hand out unemployment benefits into a real job search and counselling agency (Belke and Baas, 2014)

## **7. Concluding remarks**

Kollmann et al. (2014) conclude in their study of the evolution of the German current account since 1996 that: "The most important factors driving the German surplus were positive shocks to the German saving rate and to ROW demand for German exports, as well as German labor market reforms and other positive German aggregate supply shocks." The more qualitative approach followed here tends to confirm this view. There are two phenomena which need explaining, and which should be kept separate: the strong increase in German exports and the large current account surplus.

Improvements in price competitiveness cannot explain the strong growth of German exports. A positive supply shock must have been at work. An increase in supply did come from two sources: First of all the gradual creation of a modern economy in the Eastern part of the country, which increased the effective supply of labor by about one fourth. Second the increase in effective labor supply resulting from reforms which made even low paid work more attractive relative to social security support (the Hartz reforms). Through these two sources the export supply function might have shifted outwards by up to 30 percent, providing an explanation of the 'export records'.

But higher exports mean also higher incomes, which if spent, should keep the balance of payments unchanged. The external surplus was thus mainly the result of weak internal demand, or, equivalently, higher domestic savings. Here again it matters what reference period one uses. If one compares the last years of West Germany to today one finds that the counterparts to the higher current account surplus today can be found equally in investment and savings. The investment share in GDP is now about 2 percentage points lower than in 1989/90. But France experienced a

very similar decline in investment. The other change with respect to 1989/90 is that the savings rate of (united) Germany is about 2 percentage point higher than that of West-Germany then, whereas the savings rate of France is lower today (by the same amount). In the longer term view, the higher Germany national savings must have come entirely from the private sector since the government was roughly in equilibrium in both periods (today and in 1990).

A shorter-term view would again emphasize government policy. If one compares the mid-1990s with today, the balance of the government improved by several percentage points, once the domestic economy had recovered from the after-shocks of unification. Another source of increased domestic savings were the higher profits of the corporate sector, which resulted from lower wages, which, in turn had been driven a weak labor market. The main impact of wage moderation on the current account was thus probably through domestic income re-distribution, rather than a (limited) gain in competitiveness which has been the focus of attention so far. However, one must be careful in attributing too much of the observed increase in savings to the observed increase in inequality since the Anglo-Saxon countries, like the UK and the US have experienced even higher inequality without any increase in savings.

However, the more general point which emerges from analyzing longer term data is that the changes since 1996 represent mainly a return to the 'status quo ante unification'. The main macroeconomic indicators today are similar to the ones of 1989/90.

Wage moderation, which started already before EMU, represented mainly a slow correction of excessive increases during the unification boom. Today's competitiveness indicators are very close to long term averages. The massive increase in German exports was thus not due to 'competitive disinflation', but, if one takes 1990 as the starting point, a result of two natural developments: the German economic potential has grown (that of united Germany is approximately 25 percent higher than that of West Germany), and the German economy has become more open. West Germany was already more open in 1989/90 than the other large EU Member States. Globalization thus had naturally a stronger absolute impact on Germany although its impact in relative terms was similar elsewhere in Europe.

The more general policy implication is that any analysis which compares today to the trough of German performance after unification risks over-estimating the potential of the country (see also Belke, 2017). Given that the 'internal unification' process is complete one should not expect the Germans to continue to outperform its European neighbors as it has done over the last two decades.



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