# From a Bulwark of Eurosclerosis to a Flexibility Champion?

## Why did the German Economy and the Labour Market do so well during and after the Great Recession?

Joachim Möller*

### Introduction

It is only a decade or so that Germany was described as the sick man of Europe in the international media. For almost a decade starting in the mid-1990s the German economy was characterized by low GDP growth rates and stubbornly high unemployment. However, the roots of the problems pre-dated this period. At the heart of Germany's labour market problems was the steady deterioration in labour market performance since the early seventies. Since then, the unemployment rate at cyclical peaks showed a monotonous upward trend. Indicating a growing mismatch, the Beveridge curve markedly shifted outwards. Problems were aggravated by ill-designed economic strategies following German re-unification and the fiscal consequences of the re-structuring of the East German economy and modernization of its infrastructure. It is remarkable that a social-democratic chancellor, Gerhard Schröder, and not a conservative, initiated what Michael Burda has dubbed the "teutonic turnaround". The Schröder reforms undoubtedly marked a historical departure for Germany.

However, looking at macroeconomic data reveals that some deep structural changes started as early as the mid-nineties. Economic key variable such as wages or skill premia clearly indicated structural changes compared to previous trends. Based on social security data for West Germany, Figure 1 shows an index of the average real earnings of 40 year-old male workers by skill group. For the low and intermediate skill group roughly three phases can be distinguished: (i) a wage increase from the mid-1980s to the early 1990s, (ii) wage stagnation or slight decline from the time of re-unification to 2002/2003 and (iii) a significant fall since then. It is remarkable that, at the end of the observation period, the real wages of a 40 year-old low-skilled full-time worker have returned to the level that they were at 25 years ago. At the lower deciles of the wage distribution the situation is even worse. Sizeable groups experienced a deterioration in their real earnings over this period. By contrast, other groups like university type graduates were among the winners. Whereas the real earnings of this group developed more or less in parallel with the two other skill groups until the mid-1990s, it has shown a significant deviation since then. By the end of the observation period the highly-skilled realized almost 25 percent gains in real earnings compared to the mid-1980s.

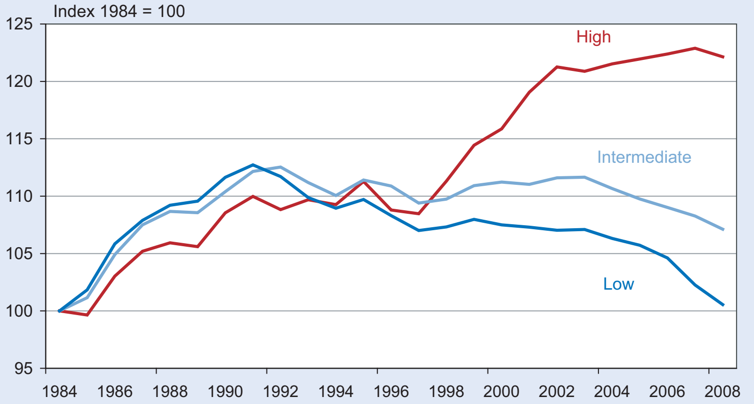
At least two important conclusions can be drawn from Figure 1. Firstly, there has been a sharp increase in skill premia. Secondly, as the low and intermediate skill groups represent the vast majority of German workers, there is a clear indication of remarkable overall wage moderation since the early and mid-1990s. The disadvantages were borne not only by the low skilled, but also by the intermediate skill group. This is particularly noteworthy since unionization is especially high for the intermediate skill group (trained workers).

What happened to fundamentally alter the balance of forces between the social partners? A plausible potential explanation is that, after the fall of the iron curtain, low-wage competitor countries emerged as direct neighbors for Germany. The threat of production site (and workplace) relocation had a massive influence on union bargaining power. At the same time, there was increasingly sharp wage competition within the country as the unions' strategy of imme-

* University of Regensburg and Institute for Employment Research (IAB), Nuremberg.

**Figure 1**

Real Wages of Full-Time 40 Year-Old Male Workers in West Germany by Skill Group, 1984–2008




Source: Own calculations with IAB data (SIAB).

diate wage adjustment between Western and Eastern Germany did not work out successfully.

Despite the wage moderation, however, there were no signs of a sustainable improvement in Germany's economic performance in general; and the labour market in particular. At least the systemic rise in unemployment was not interrupted. It seemed that wage moderation was a necessary, but not sufficient condition for resurgence of the German labour market. At least its unsatisfactory development can partly be attributed to the creation of the Eurozone. Although Germany as an export-oriented country was expected to profit from a common currency, in the initial phase at least this was not the case. The introduction of the common currency in 1999 first caused the German economy to suffer due to higher interest rates and diversion of massive capital flows to the southern European countries (Sinn 2010). This phase, with relative gains in the European periphery countries and relative losses for the core, lasted until the mid 2000s at least.

For Germany things changed fundamentally after the courageous Schröder reforms. The labour market reform package, the so-called Hartz legislation, did indeed alter the foundations of Germany's post-war institutional system. In his famous government declaration of March 2003 Chancellor Schröder argued that if the country refrained from modernizing its labour market institutions, then it would be modernized by the brute forces of the global markets, barely leaving room for a social protection net. The key concept of addressing workers in the Hartz reforms was "supporting and demanding". These reforms were implemented in different steps between 2003 and 2005. Concrete elements of the reforms included lower job protection, reduction of the maximum period for unemployment insurance benefits, tightening of the job acceptance regulations for the unemployed and the deregulation of temporary work agencies. Merging unemployment assistance for the long-term unemployed and social assistance had far-reaching consequences. From then on unemployed person were obliged to accept any reasonable job, and unemployment benefits became means-tested for the long-term unemployed. Hence, the social office could access the recipients' savings or other private assets. According to business surveys, this threat of losing social status led to important changes in individual behavior. Among others, the willingness to accept less attractive working conditions, low pay or higher commuting time increased (Kettner and Rebien 2009).

Although some parts of the Hartz reforms can be criticized for various reasons, the package as a whole undoubtedly had an overall positive impact on the functioning of the labour market. Unemployment fell from its peak level of over five million in 2005 to roughly three million in less than four years. It was the first time since almost four decades that a cyclical upswing let to a significant melting of systemic joblessness. The harmful hysteresis mechanism that increased structural unemployment from business cycle to business cycle was interrupted and turned into a favorable development. Matching efficiency – as indicated by an inward shift of the Beveridge curve – improved after the labour market reforms and the marked decrease in long-term unemployment added to the overall positive perspective.

## Favorable economic structure and gains in competitiveness

Through wage moderation the competitiveness of the German economy relative to its trading partners, especially in the Eurozone, improved markedly. Whereas the average yearly change of wage costs in the Eurozone was 2.7 percent in the last decade, it was no higher than 1.8 percent in Germany.[1]

[1] Own calculations on the basis of Destatis (2010) data.

A further crucial factor is closely related to the structure of the German economy. Compared to other OECD countries, the German economy still has a strong specialization in manufacturing industries. This has transformed from a bane to a boon. Previously, it was argued that a relatively high share of manufacturing industries could mean that the country would lag behind in structural change. As an example one can take Barry Eichengreen's warning that what happened to Italy when "China moved up the technology ladder into the production of more sophisticated consumer goods will happen to Germany as China moves into the production of more sophisticated producer goods" (Eichengreen 2007, 2). In his view, it is highly advisable to specialize in the design of new products and to support a knowledge-based service economy. From today's point of view it seems somewhat ironic that Eichengreen proposes to take the UK as a role model because "it got out of manufacturing and into financial and other services at the right time" (Eichengreen 2007, 3). The financial crisis casts some doubts on the sustainability of a mainly service-driven growth in advanced countries. With its seemingly outdated industry structure, Germany performed surprisingly well, whereas countries with a weak industrial basis are suffering. It has to be stressed that Germany's capital goods like advanced machinery or infrastructure equipment, as well as high-quality chemicals and durable consumer goods like cars, are in high demand and not only in advanced countries. There are strong indications that exports to emerging countries are steadily increasing. This is due to a hunger for machinery and equipment, as well as for high-quality durable consumption goods like automobiles.

Of course, the process of structural change is continuing at a swift pace. Some types of production are less likely to survive in high-wage countries. Modernization of production lines, the design of new products and the maintenance of technological leadership in some strategic areas play a key role. As for today, however, there are no signs that Germany is losing ground in the areas where it was traditionally strong.

Additionally, and somewhat paradoxically, not all aspects of the Euro crisis were harmful for the German economy. In contrast to events when the Euro was introduced, Germany recently seems to have profited from the redirection of capital streams (coming back to a secure harbor) and historically low interest rates (reducing the burden of public debt). Moreover, in contrast to non-Euro countries like Switzerland, German firms exporting to the US, China or Eastern Europe benefit from the relatively weak Euro.

However, a dominating influence over Germany's overall economic performance has been the increase in its relative competitiveness within the Eurozone. This also contributed to the extraordinary high surpluses in Germany's current account in recent years. Figure 2 shows the inverse of a harmonized effective real exchange rate on the basis of unit wage cost for Germany and the Eurozone. Both series increased in parallel from the mid-1990s to mid-2001. Then, after a temporary fall in 2003 to 2005, German competitiveness continued to increase, whereas the Euro-zone fell markedly behind. Using the two time series we constructed an indicator of relative competitiveness of Germany[2] compared to its partner countries. This indicator exhibits an astonishingly close relationship to Germany's current account surplus measured as a percentage of GDP. This is shown in Figure 3. The correlation coefficient is 0.93. Hence the German net export surplus is closely related to the indicator of competitiveness vis à vis its trading partners in the Eurozone. As already noted above, this development is basically driven by unit wage costs.[3]

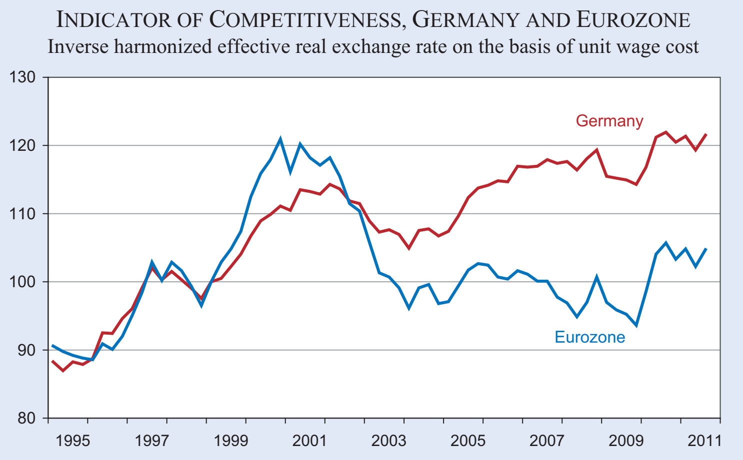
## The German labour market during and after the crisis

It is remarkable that in the Great Recession triggered by the US sub-prime crisis the change in the German unemployment rate was the lowest of all in OECD countries – although the country had to cope with a heavy shock to real GDP that led not only to the sharpest recession after World War II in Germany, but also exceeded the shocks that hit other countries. This flexible response might have come as a surprise to those who were used to blaming Germany as the bulwark of Eurosclerosis. In cushioning the enormous shock of minus 5.1 percent to GDP and about 6.5 percent relative to the trend, the German labour market evidently behaved in an

[2] Let x (X) be the inverse effective real exchange rate for Germany (the EU, respectively) based on unit wage costs as calculated by the ECB. Then our relative measure of German competitiveness is given by $100(x/X–1)$.

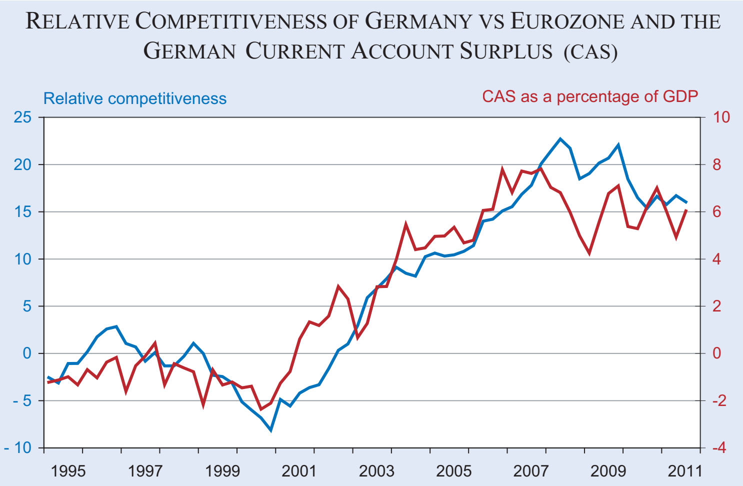
[3] Not surprisingly Germany's current account surplus is mirrored by a deficit on the part of other countries, especially in the Eurozone. However, one should note that the Eurozone as a whole does not exhibit a current account surplus. Therefore, an elimination of Germany's surpluses would more or less inevitably lead to a substantial current account deficit for the Eurozone overall.

**Figure 2**



Source: Own calculations with original data from the ECB.

**Figure 3**



Source: Own calculations based on data from the ECB.

The basic facts can be briefly described as follows. The recession directly hit the export sectors of the economy. These are concentrated in the southern and north-western regions. The export-oriented regions like Bavaria or Baden-Wuerttemberg are among Germany's economic top performers. It is a well-established fact that export-oriented firms typically perform above average with respect to productivity, innovative capacity and profitability. Hence the economically strong firms in the leading regions were the first to be affected. These firms were quite confident about their profitability and world-wide competitiveness in the medium-run. The recession was not seen as a long-lasting structural crisis, but only as a temporary demand-driven decline. Moreover, firms still had in mind the recruitment problems of the previous boom period; and lastly, there are clear indications of over-utilization of the workforce in the period before the crisis. Keeping the workforce was a perfectly rational strategy under these circumstances.

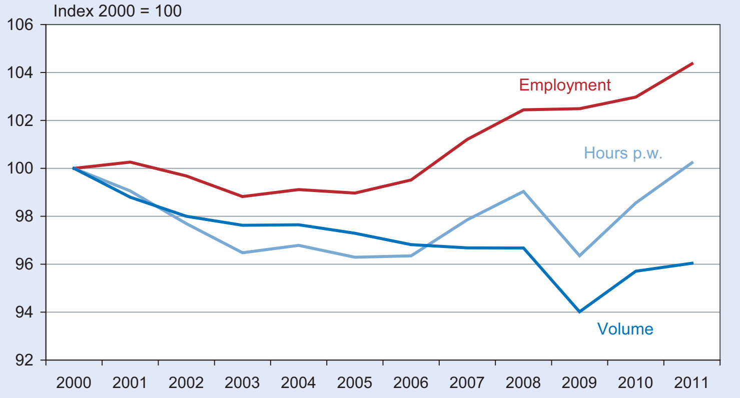
exemplary manner. There were no mass lay-offs and firms and their employees, as well as consumers, acted with composure.

Employment protection regulations cannot be used to explain why firms typically did refrain from lay-offs, even given the high under-utilization of the work force during the crisis. If anything, employment protection has been weakened over time, and massive layouts were observed in former recessions, despite these regulations. Rather than assuming that firms were not able to downsize due to legal sanctions, it is therefore much more likely that a typical firm voluntarily decided to follow a strategy of labour hoarding. Hence the adjustment to the shock was mainly based on unprecedented flexibility within firms (Möller 2010a).

An important additional factor is that labour market instruments and institutions strongly supported the labour hoarding behavior. Although in this context the short-time working allowance (Kurzarbeitergeld) plays a key role, it was not the only institutional factor that has to be mentioned. Working-time accounts have become quite common, especially in exporting industries. Together with the fall in overtime hours, the reduction of surpluses in working-time accounts led to a cushioning effect of a similar magnitude to the short-time working allowance. Furthermore, the crisis showed the smooth functioning of the social partnership in Germany. The so-called alliances for jobs have to be mentioned in this respect. These initiatives that typically combine wage restraint with job guarantees were formed at the establishment level.

**Figure 4**

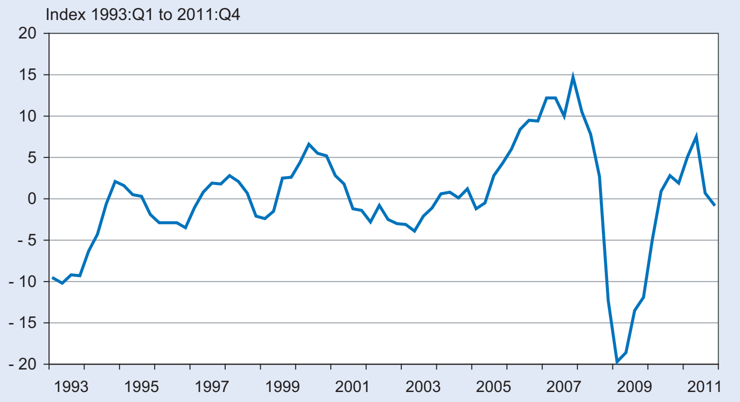
Employment, Hours per Worker and Total Volume of Working Hours




Source: IAB Working Time Account.

**Figure 5**

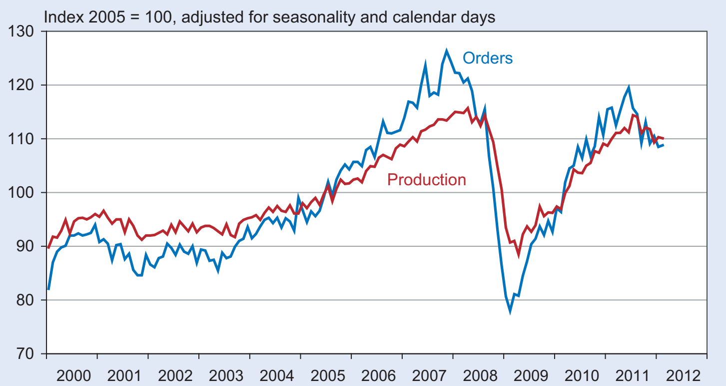
Order-Capacity




Note: The quarterly data based on monthly wages (three month average).
Source: Deutsche Bundesbank; for the method see Knetsch and Reimers (2006).

**Figure 6**

Orders and Production in Manufacturing Industries
2000:01 to 2012:12
in constant prices




Source: Deutsche Bundesbank.

To analyze the need for adjustment it is helpful to use a decomposition method.

Figure 4 shows an index of employment, average hours per worker and the volume of total working hours in the economy. We see a slightly declining trend for average hours per worker. This is not due to the average working hours of full-time workers – which were roughly stable over this period – but to the rising share of part-time workers.[4] Total employment stagnated until the middle of the decade and started to grow after the implementation of the labour market reforms. The volume of working hours from 2005 to 2008 developed in parallel. In the crisis year of 2009, hours per worker declined relative to the trend by about 2.5 percentage points. Whereas the impact of the crisis on employment was barely more than a slowdown of its upward movement, the volume of total working hours also shrunk by 2.5 percent. This marked reduction substantially contributed to cushioning the cyclical shock.

At the same time productivity per working hour fell in 2009 by 2.5 to 3.0 percent relative to the trend. Hence the reduction in working hours and the slowdown in productivity growth were of the same order of magnitude. Both variables clearly indicate

[4] The share of part-time workers increased from 27.2 percent in 2000 to 34.5 percent in 2011. Although the share of male workers in part-time employment is also rising, female workers represent the lion's share in part-time work.
[5] A time series graph shows that productivity per working hour was well above its log linear trend in 2006 to 2008. Hence it is plausible to argue that the work force was over-utilized in that time period. The development after 2008 can also be seen partly as a process towards normalization (see Burda and Hunt (2011) and Möller (2010b) in this context).

labour hoarding.[5] After 2009 the volume of working hours quickly recovered and returned to its pre-crisis level as early as 2010. By the end of the observation period the volume of working hours slightly exceeds its 2000 level, whereas the average hours are roughly four percent below the initial level and employment is four percent above this figure.

The recovery after the Great Recession was prompt and strong. The order-capacity index as calculated by the Bundesbank is show in Figure 5. Again, this shows the strong boom after 2005 until the eve of the downturn and the V-shaped recession. This corroborates the view that the recession was mostly demand-driven. Since the competitiveness of German industries was high, the recovery of the world economy after the 2009 slump quickly transformed into higher orders for German firms. Moreover, because part of their experienced work force was idle, it was possible for German companies to respond to these demand impulses immediately.

This can be seen from Figure 6, where production after the trough in orders (78 percent of the 2005 average!) in February 2008 recovered promptly.

## Conclusions

Since the mid-1990s many German workers have suffered from real wage losses and poor overall employment performance. However, after a decade of blood, sweat and tears the labour market reforms brought the turnaround. The German industry gained massively in competitiveness. The functioning of the labour market including the active labour market instruments is becoming more efficient. Systemic unemployment has fallen for the first time since the 1960s. The boom in the years 2006–2008 initiated something like a chimney effect for more employment. During these years the workforce in many firms was over-utilized. Over-time was widely used and employees accumulated surpluses on their working hour accounts. In the Great Recession the German labour market superbly withstood this extreme stress test. The system of internal flexibility worked well. The shock was almost completely cushioned by labour hoarding on the part of firms, accompanied by different forms of social partnership and support through the Federal Employment Agency, especially through the instrument of short-time work subsidies. The strategy worked well because for Germany the crisis had the character of a severe, but only temporary demand shock. Fortunately, there are no fundamental problems like an inadequate product mix or a cost structure. Hence the situation is in sharp contrast to countries like Spain with its massive problems stemming from the bursting of the real estate bubble, an oversized construction sector and low international cost competitiveness in manufacturing and tradable services.

The downside of the German success story is the rise in inequality accompanied by signs of increasing labour market segmentation, with precarious low-paid jobs for the low skilled on the one hand; and secure well-paid good jobs with long tenure for the well-qualified on the other. For large parts of the workforce the real wage development of the last two decades was not satisfactory. Against this background it is understandable that signs of markedly higher wage demands in the years to come are now getting stronger. All in all, the German economy is in fundamentally good shape and can cope with these challenges if a sense of proportion is safeguarded.

## References

Burda, M. C. and J. Hunt (2011), "What explains the German labour market miracle in the Great Recession?", *Brookings Papers on Economic Activity* no. 1, 273–319.

Destatis (2010), „Arbeitskosten im 2. Quartal 2010: + 0,4% gegenüber Vorquartal", press release no. 311, 08 September.

Eichengreen, B. (2007), "The German economy: be careful what you ask for", http://www.eurointelligence.com/eurointelligence-news/archive/single-view/article/the-german-economy-be-careful-what-you-ask-for.html (accessed 03 April 2012).

Kettner, A. and M. Rebien (2009), "Job Safety first? Zur Veränderung der Konzessionsbereitschaft von arbeitslosen Bewerbern und Beschäftigten aus betrieblicher Perspektive", *Ordnungspolitische Diskurse* no. 2009–07, http://hdl.handle.net/10419/55435.

Knetsch, T.A. and H.-E. Reimers (2006), "How to Treat Benchmark Revisions? The Case of German Production and Orders Statistics", *Deutsche Bundesbank Diskussionspapier 1*, no. 38.

Möller, J. (2010a), "The German labour market response in the world recession - De-mystifying a miracle", *Zeitschrift für Arbeitsmarkt Forschung* 42(4), 325–36.

Möller, J. (2010b),"Germany's job miracle in the world recession – Shock-absorbing institutions in the manufacturing sector", in K.F. Zimmermann and C. Wey, eds., *The economy, crises, and the labour market. Can institutions serve as a protective shield for employment?* Applied Economics Quarterly Supplement 61, Duncker und Humblot, Berlin, 9–27.

Sinn, H.-W. (2010), „Die Bedeutung des Gewährleistungsgesetzes für Deutschland und Europa", *ifo-Schnelldienst* 10, Mai 2010, 3–8.