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The Hartz myth
A closer look at Germany's labour market reforms

By Christian Odendahl

CENTRE FOR EUROPEAN REFORM

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Germany's labour market and welfare reforms of the early 2000s have gained an outsized importance over time. For some, these reforms put an end to Germany's social market economy and pushed millions into insecure, low wage jobs. For others, notably many international observers, these 'Hartz reforms' are one if not the main reason why Germany – formerly known as the 'sick man of Europe' – is now Europe's export powerhouse and strongest economy.

The importance of this debate can hardly be overstated. In Germany, the forthcoming election will in part be fought on the issue of 'social justice'. Martin Schulz is putting corrections to the Hartz reforms at the centre of his campaign.

In Europe, no other narrative has so persistently shaped the response to the on-going euro crisis as the idea that some countries struggle because they have lost their 'competitiveness', and they should therefore reform like Germany in order to grow and reduce unemployment. The election of Emmanuel Macron will test the validity of this narrative, as he is vowing to reform France along German lines. If that narrative turns out to be false, however, he may well fail to deliver growth and employment.

A sober look at the German reforms shows that their economic impact was modest. They targeted weaknesses in Germany's labour market and benefits system and:

★ combined unemployment and social assistance into a single system, to help more people find jobs or retrain;

★ curbed incentives to 'retire early' by preventing people from claiming generous unemployment benefits before reaching retirement age, thus increasing the employment rate among older workers;

★ made job search, training and job centres more efficient, which helped to reduce unemployment by an estimated 1.5 percentage points; and

★ provided more incentives to take up work, which increased temporary and marginal employment.

There were fewer negative side effects than are commonly attributed to the reforms. For example, the large low-wage sector – Germany has the largest in the EU after the Baltic States, Poland and Romania – predates the reforms. But the number of people in insecure jobs and at risk of poverty increased after the reforms. The effect on income inequality is ambiguous.

Many argue that one consequence of the Hartz reforms was wage restraint, which is why the rest of Europe should follow Germany's lead in order to gain 'competitiveness'. But wage restraint started in 1995, not with the reforms in 2004. It was mostly a consequence of high unemployment, globalisation and the threat of offshoring and outsourcing by businesses. Only low wages were pushed down further as a consequence of the reforms.

Nor does wage restraint explain Germany's subsequent economic recovery and employment growth. The export successes of Germany after 2004 coincided with a worldwide economic boom, notably in emerging markets. Lower prices of German export goods played a role, but German businesses lowered costs mostly through outsourcing, reorganising factories and management, and building supply chains in central and eastern Europe.

And wage restraint came with costs of its own, for German workers but also for Europe. Lower wages meant lower consumption and imports in Germany. As a result, Germany started exporting capital – capital that helped to build up debt and property bubbles elsewhere, which burst and caused widespread economic misery.

If the rest of Europe wants to learn from Germany, it should draw the right lessons from the Hartz reforms.

★ Timing is everything, and Germany's timing of the reforms was impeccable. Not all economies would take off similarly after such reforms.

★ The right diagnosis is crucial. In Germany, the diagnosis was incomplete, focusing on important issues in the labour market but ignoring the country's macroeconomic situation. This could have backfired (but did not, see lesson 1, page 21).

★ There are smarter ways to reform the labour market during an economic slump. Investment in training and incentives should come first, cuts to benefits and deregulation only when the economy has recovered. Germany got lucky (see lesson 1, page 21).

★ Labour market and benefits reforms can bring hardship and increase economic insecurity, which should be mitigated right from the start.

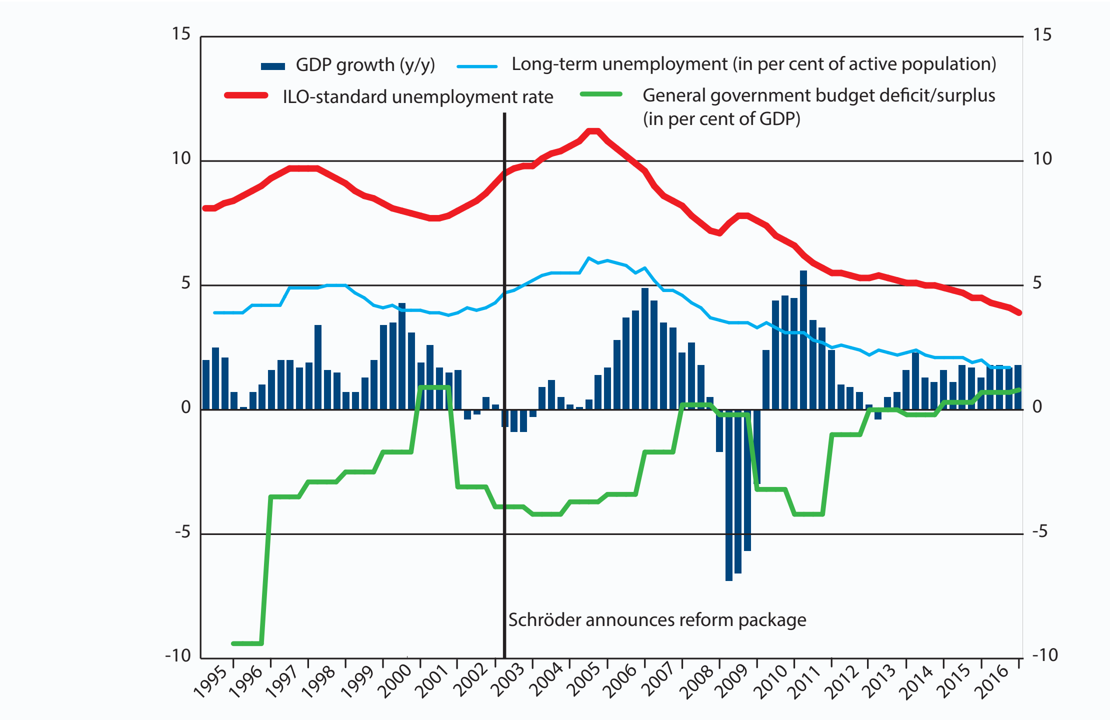
★ More flexible labour markets do little if anything to boost productivity. Germany failed to complement its labour market reforms with a productivity agenda for those affected most by the reforms.

★ Labour unions and works councils that were willing to accommodate themselves to change were crucial for Germany's adaptation to globalisation. But unions should be strong enough to demand appropriate wage increases. Striking the right balance is not easy, but should be a key concern for policy-makers.

In early 2003, German Chancellor Gerhard Schröder of the centre-left social democrats (SPD) announced a major reform package entitled 'Agenda 2010', of which the 'Hartz' reforms were a part.[1] At the time, Germany was in a tough economic situation: unemployment was at 9.5 per cent, almost one in twenty was unemployed for more than a year and economic growth had ground to a halt (see Chart 1). Meanwhile, Germany's budget deficit was approaching 4 per cent of GDP; at that level, Germany was in breach of the same fiscal rules that Berlin had insisted on as a condition of launching the euro just a few years earlier. Suggesting that Germany could ever reach full employment again was considered utopian, and there was a broad consensus that something had to be done.

Chart 1: German unemployment, economic growth and fiscal balance over time

Source: Haver.



The reform package, implemented between 2003 and 2005, covered three main areas:

★ how to make social insurance systems, especially pensions, fiscally sustainable;

★ how to bring people into new jobs faster and create opportunities for the long-term unemployed;

★ and, most controversially, how to increase incentives for the jobless to take up work.

But did those reforms cause the *Beschäftigungswunder* (employment miracle) that Germany has experienced since 2005? Did they do so at the cost of creating a large low-wage sector? Did they force German wages lower, making export firms more competitive on world markets, but at the same time suppressing demand at home and causing problems for the rest of the eurozone? And should other eurozone countries follow Germany's example in order to reach full employment and a balanced budget? This policy brief explores these questions.

What the Agenda 2010 reforms were about

The first part of the Agenda reform programme was essentially a pension reform. It moved the German system away from the previous defined-benefits system, limited the yearly rise in pensions and introduced tax subsidies for private pensions. The economic effect was modest.

The reform did lower the tax wedge (the difference between a firm's total labour costs and the take-home pay of the worker). But since that was achieved mostly by cutting pensions (and taxing energy), the effect on total consumption was broadly neutral. The reform did bring

1: The reforms were named after Volkswagen board member Peter Hartz, who chaired the commission that developed most of the ideas underlying the reforms. For Schröder's speech announcing the reforms see Deutscher Bundestag, 'Stenografischer Bericht 32. Sitzung', March 2003.

down wage costs for firms slightly, which were deemed too high for German 'competitiveness'. But as discussed below, lower wage costs were only part of the reason why Germany grew strongly after the reforms.

The second part of the reform changed the way the German labour market operated and de-regulated labour-intensive parts of the economy. These reforms

★ created a subsidised 'Me Inc.' scheme for those who wanted to become self-employed;

★ expanded the already existing 'minijobs' scheme (subsidised jobs for those who want to work just a few hours a week);

★ made it easier for companies to offer fixed-term contracts and hire subcontracted workers;

★ removed entry barriers to Germany's *Handwerk* (skilled crafts and trades) by removing the highest level of occupational licensing from more than half the occupations;

★ made it easier and cheaper to dismiss workers, especially for small firms with fewer than 10 employees;

★ privatised some institutions that provide training and help people to find jobs; and

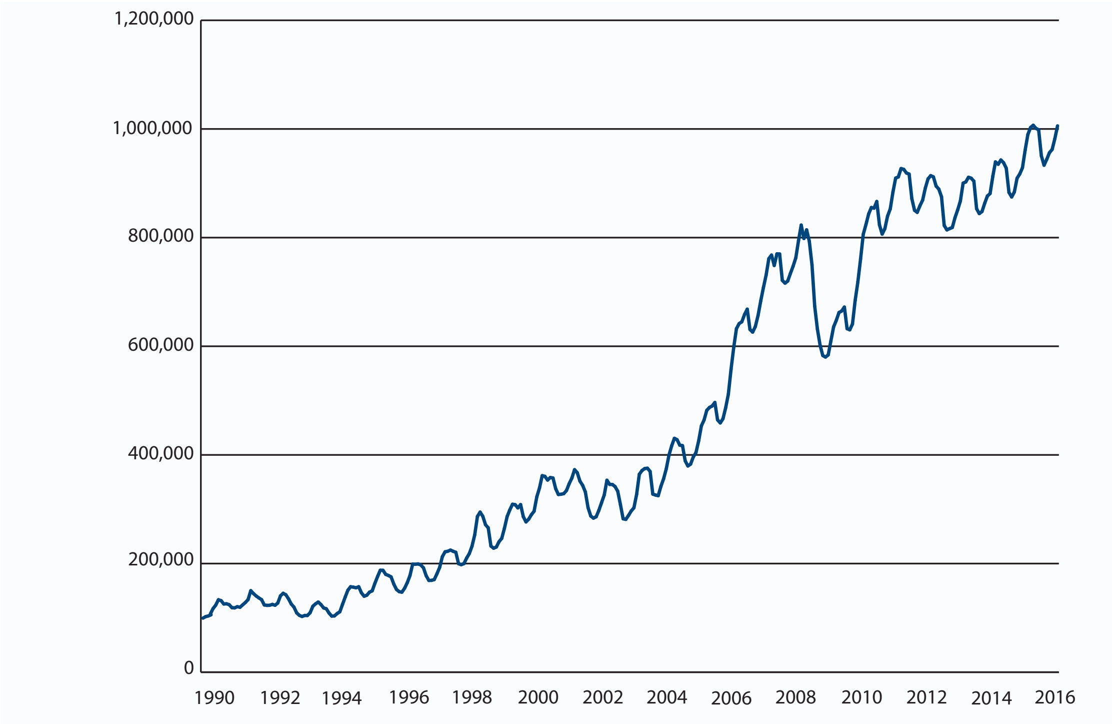
★ started a major overhaul of *Arbeitsämter* (job centres) which had been found to spend too much time and effort on internal processes rather than helping the jobless to find work.

The aim was to increase demand for labour by making it easier for firms to hire suitable workers; and to make it easier for workers to find jobs, retrain or start their own business.

A first look at employment statistics suggests that some of these reforms have worked as intended. The cost of firing workers in Germany is now low by international standards, according to a survey by Deloitte, a consultancy.[2] The number of subcontracted workers has risen from around 300,000 in 2003 to one million in 2016 (see Chart 2). In 2002, 4.1 million workers were in 'minijobs'; by 2005, that figure had risen to 5.1 million. Most of that increase was accounted for by men who had an apprenticeship or higher qualification – a group that was the main target of the reforms. There is some evidence, however, that such 'minijobs' replaced full-time jobs, especially in hospitality and retail.[3]

Chart 2: Subcontracted workers in Germany

Source: Bundesagentur für Arbeit.



2: Deloitte, 'International dismissal survey', May 2015.

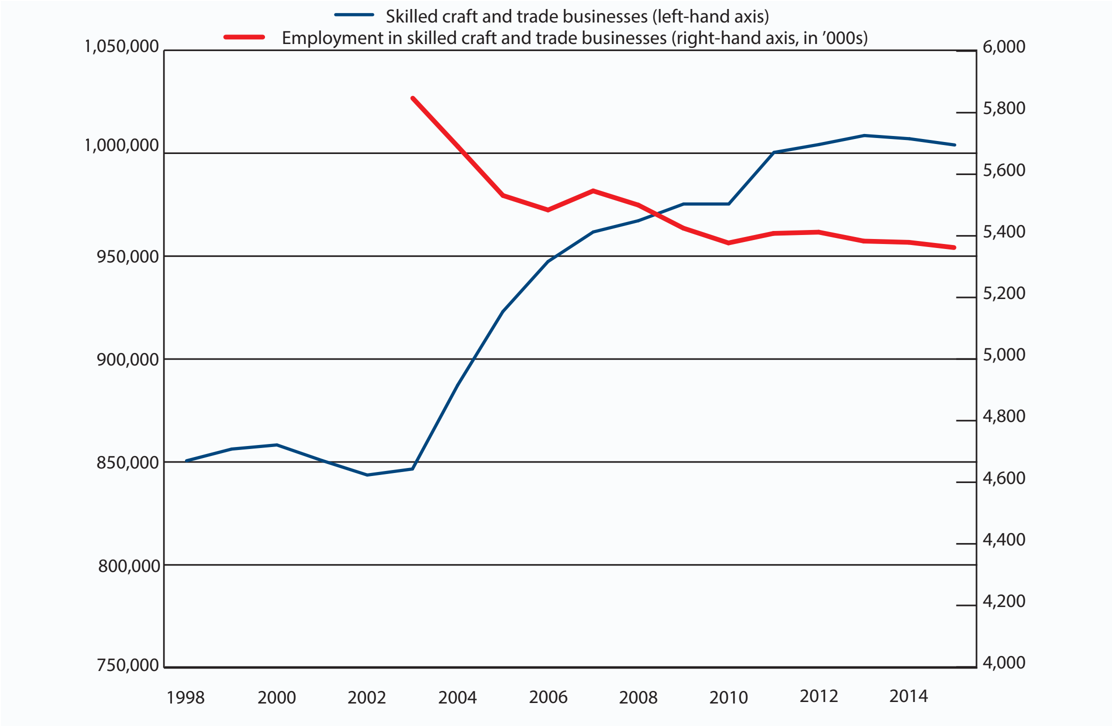
3: Christian Hohendanner and Jens Stegmaier, 'Umstrittene Minijobs', IAB Kurzbericht, 2012.

Other reforms did not have such noticeable effects. The share of workers in fixed-term employment increased, but only from 6.5 per cent in 2003 to 8.5 in 2015, which is still lower than the EU average. The proportion of new contracts that are fixed-term rose only a little, from 40 to 45 per cent.

The number of skilled craft and trade businesses increased considerably after the government watered down occupational licensing in 2004. But employment in these companies continued to fall until 2010, and has stagnated since (see Chart 3).

Chart 3: Number of skilled craft and trade businesses and their employees

Source: Zentralverband des Deutschen Handwerks.



Examining employment trends can only provide a rough idea of the effects of the Hartz reforms. Econometric studies, which isolate the reforms' effects from other causes of change in the labour market, show that these parts of the reform package did improve the efficiency of the labour market: the unemployed were more quickly brought into new jobs, one of the key goals of the reform.[4]

The Beveridge curve provides us with a graphical way to see this effect. It plots the number of unemployed against the number of job openings for each month (see Chart 4). The further to the top right, the more poorly the job market is functioning: despite a high number of job openings, the number of unemployed workers is also high, because workers do not have the skills firms need, are far away from where the jobs are, or do not have the incentives or sufficient help to find jobs.

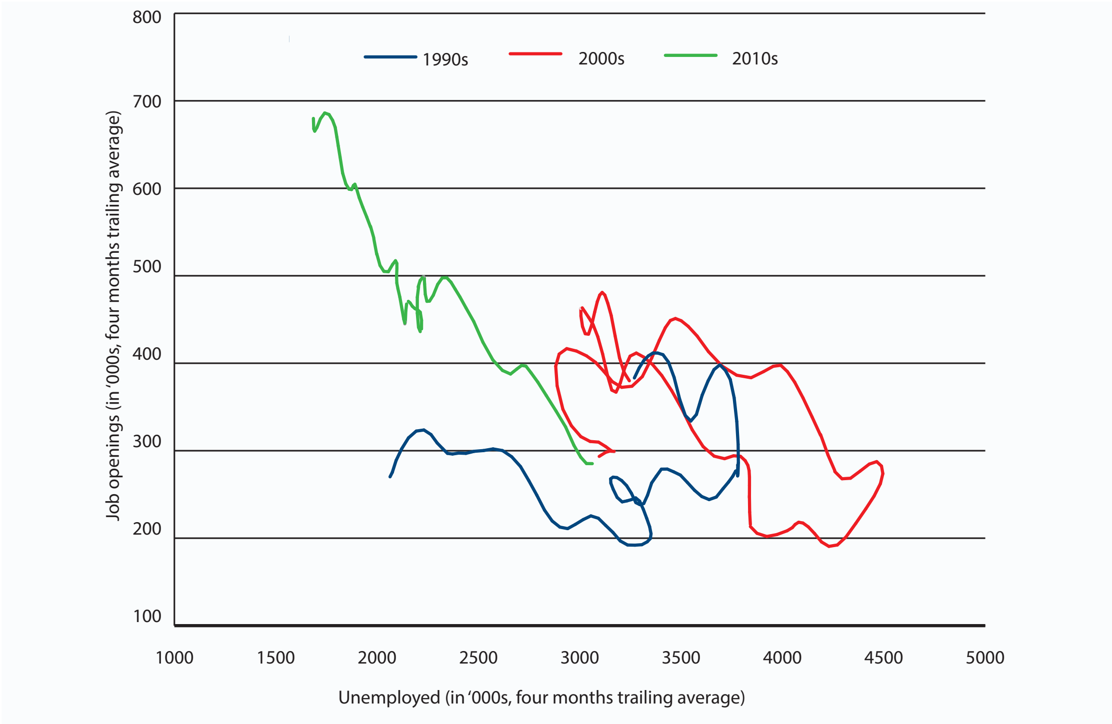
Travelling along Germany's Beveridge curve through time shows that it shifted outward in the 1990s, largely as a result of reunification, and shifted back inward after the reforms, signalling that the market was functioning better. This inward shift amounts to roughly a 1.5 percentage point reduction in the unemployment rate.[5]

4: Matthias Hertweck and Oliver Sigrist, 'The aggregate effects of the Hartz reforms in Germany', SOEPpapers, DIW Berlin, 2013; René Fahr and Uwe Sunde, 'Did the Hartz reforms speed-up job creation? A macro-evaluation using empirical matching functions', German Economic Review, 2009.

5: Christopher Pissarides, 'Unemployment in the Great Recession', CEP Discussion Paper, May 2013.

Chart 4: Germany's Beveridge curve shifting in and outs

Source: Haver, Bundesagentur für Arbeit.



Whether less employment protection creates jobs is highly controversial. Proponents argue that in times of uncertainty, firms fear that hiring workers is too risky as they would bear the costs of dismissal in case of an economic downturn. By lowering those costs, more firms should be willing to risk hiring additional workers. Most international studies estimate minor (positive) employment effects of less employment protection, but the empirical evidence is not very strong.[6]

Overall, the impact of these reforms (Hartz I-III laws and a few others) was broadly as intended. They created more flexible opportunities for the unemployed – or less secure ones, depending on your political point of view. And they made job searching and matching between firms and workers more efficient, which reduced unemployment.

The infamous Hartz IV reform

The most controversial parts of the reform package were those that aimed to push unemployed workers to take up jobs – by restricting access to benefits or by making them less generous. A range of different benefits were reduced to two: unemployment insurance, which provides payments based upon previous income; and social assistance, which provides payments at a flat rate once the right to insurance pay-outs has been exhausted.

★ The reforms reduced the length of unemployment insurance pay-outs from 32 months to one year.

★ After one year, the unemployed no longer received the open-ended 'unemployment assistance' that paid roughly 50 per cent of the recipient's previous net income. Instead, they fell back on a new social assistance (often called 'Hartz IV'), today worth €409 a month.

★ Those previously on the old social assistance were also put into Hartz IV, which meant a financial improvement for many, who were now also covered by job centres.

★ Hartz IV was more rigorously means-tested than previous unemployment assistance. The unemployed had to get support from their spouse and draw on their family's savings before they could receive assistance.

★ The rules on the kinds of jobs insurance recipients must take were more strictly enforced. For those receiving Hartz IV, the rules on the kinds of jobs recipients had to a take were tightened considerably, such that any job that was available must be taken, and they were strictly enforced.

It is these changes that created most of the frustration and fear among the German public. They moved the system from one that protected living standards indefinitely to temporary protection of living standards followed by much lower income with strict conditions attached. Before the

6: See Tito Boeri, 'Institutional reforms in European labor markets', Handbook of Labour Economics, 2011; and David Autor, John Donohue and Stewart Schwab, 'The costs of wrongful-discharge laws', The Review of Economics and Statistics, May 2006 reforms, the incentives to take up work were low, especially for the low skilled. Moreover, generous unemployment benefits made it easy for firms and older workers to collude to start 'retirement' by drawing on unemployment support before reaching the official retirement age.

An enormous number of people were affected (see Chart 5). Before the reform, around 4 million people were on benefits that were tied to their previous living standards. By 2008, fewer than 1 million were. At the other end of the spectrum, many unemployed who were on social assistance before were brought into the labour market with the new social assistance and given access to job centres and training. The total number of Hartz IV recipients who were able to work reached 5.3 million in 2006, and still stands at around 4.3 million today.

Chart 5: Recipients of unemployment insurance and social assistance benefits

Source: Bundesagentur für Arbeit.

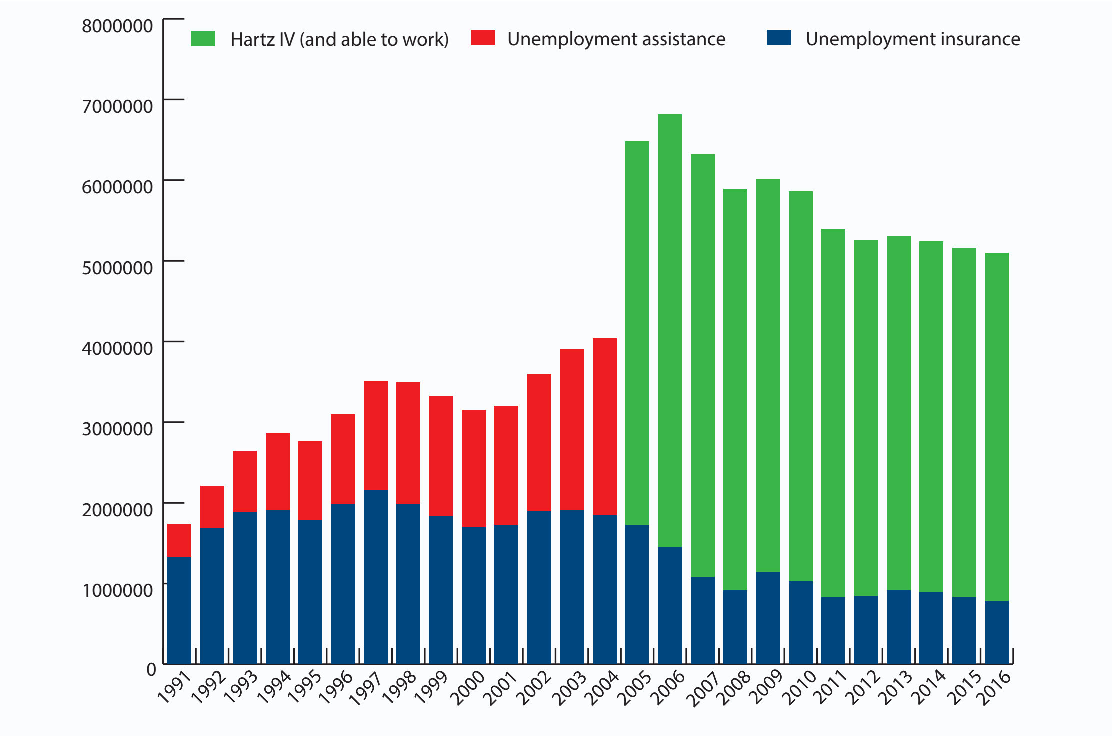
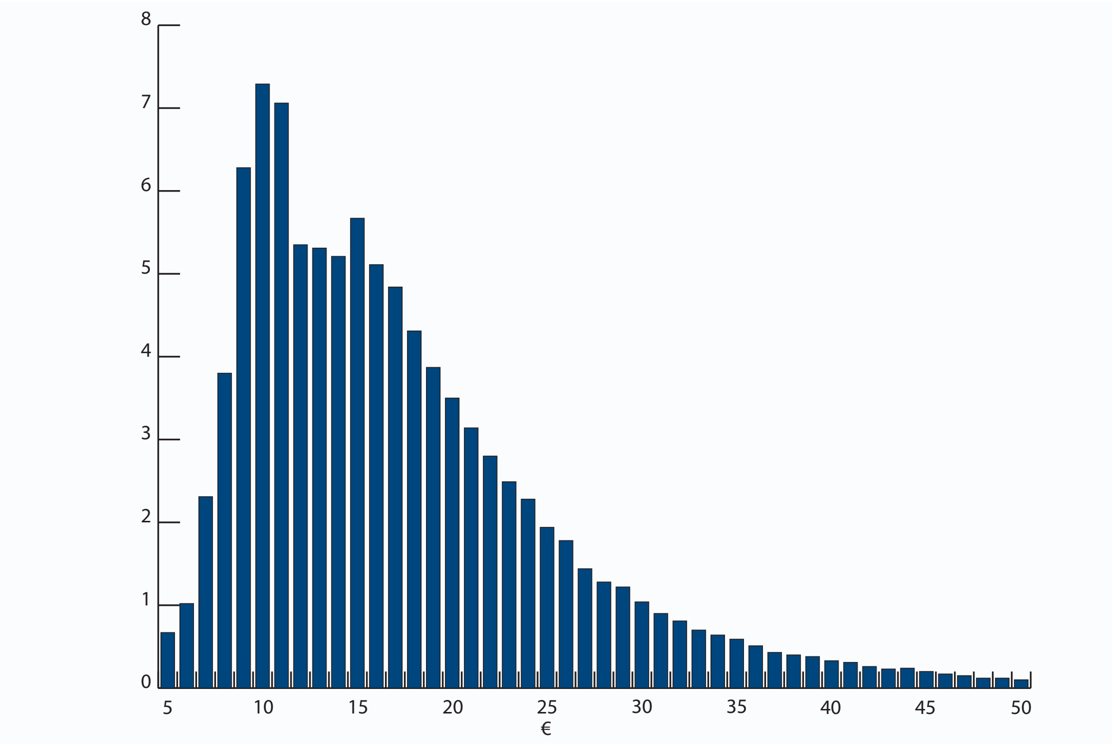


Chart 6: Distribution of hourly wages in Germany (in per cent)

Source: Destatis.

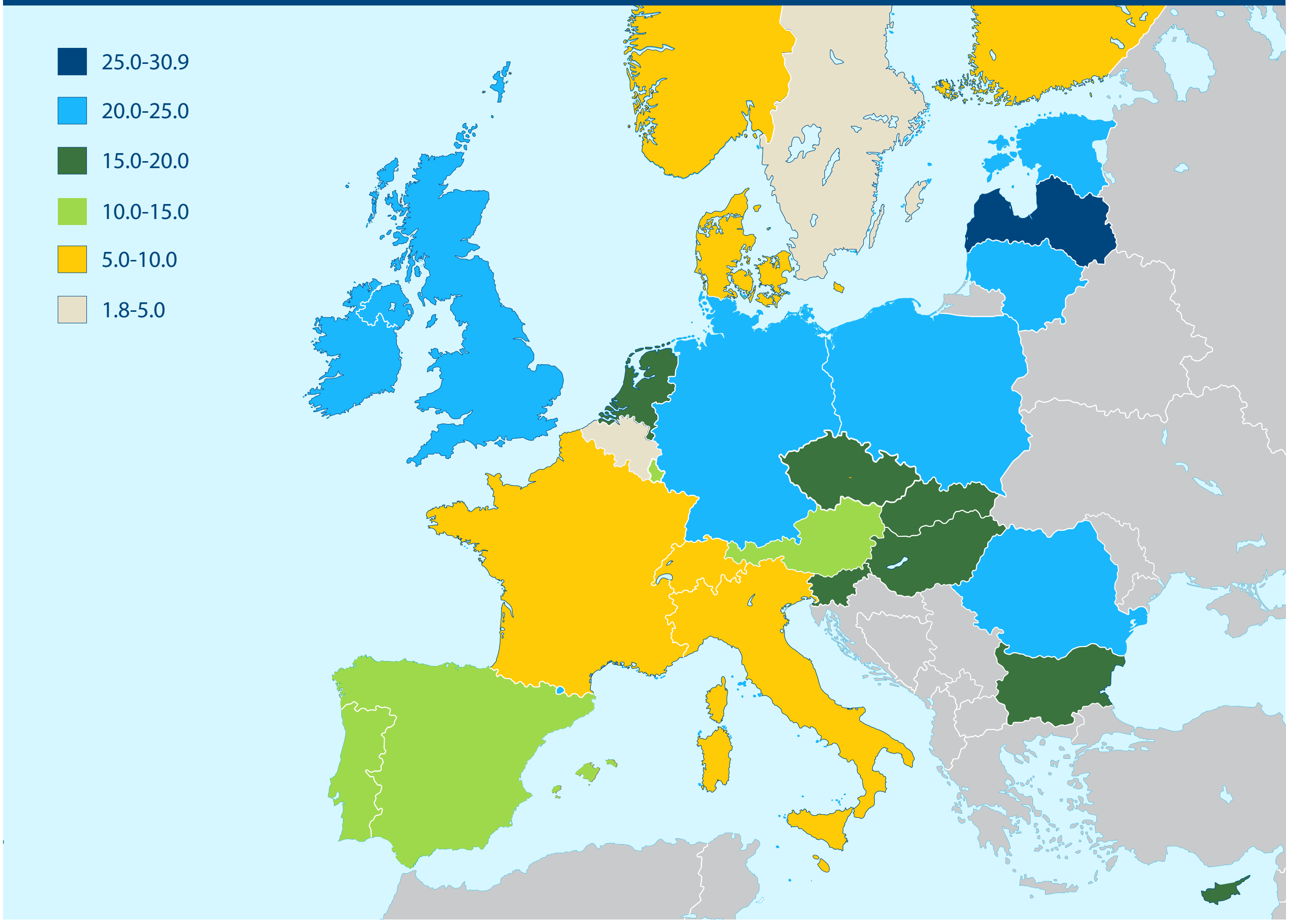


Notes: Wages above €50 are not included in this chart for clarity. The calculation excludes people still in apprenticeship.

What were the effects of these 'Hartz IV' reforms? Combined with the other reforms above, critics argue that they have created a low wage sector. In 2014, the latest available data, 20 per cent of German workers earned less than €10 an hour, and a third less than €12 (see Chart 6). In Europe, only the Baltic countries, Poland and Romania have a larger share of people employed on low wages, with the UK and Ireland closely behind (see Map 1).[7]

But the large low-wage sector in Germany predates the start of the reforms (see Chart 7). Thirty-nine per cent of East Germans were paid low wages in 2013, a similar proportion to the mid-1990s. In the West, the share of those on low wages has also barely increased since 2003. The large increase in the number of low-wage earners in Germany occurred before 2003.

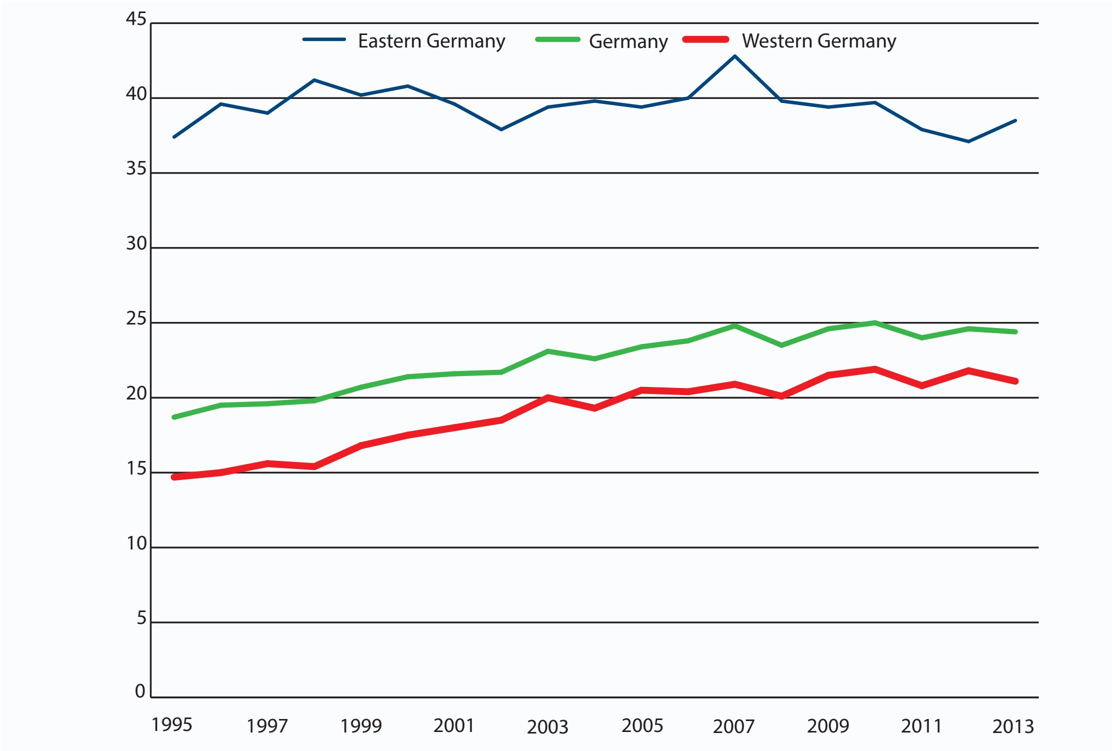
Map 1: Low-wage earners as a share of all employees



7: Low wages are internationally defined as being below two thirds of the median wage. For Germany, that threshold for low wages is €10.50 an hour.

Chart 7: Low-wage earners as a share of all employees in Germany (in per cent)

Source: Replicated from Thorsten Kalina and Claudia Weinkopf, 'Niedriglohnbeschäftigung 2013: Stagnation auf hohem Niveau', IAQ-Report, 2015.



Did the cuts to benefits increase the pressure on the unemployed to seek work? As discussed above, empirical studies have shown that the unemployed were brought back into jobs faster. But to what extent cuts to benefits were behind this is less clear. A study using 20 years of German data has shown that restricting the duration of benefits has only a low impact on how long people stay unemployed. Nor is there any evidence that the unemployed now put more effort into finding work.[8]

The impact of the reforms on older workers was a lot stronger. While employment rose across all age groups after 2003, the largest rise was among those that would have been tempted to retire early under the old system: before 2003, fewer than 40 per cent of those aged 55-64 were employed; by 2016, the employment rate of that age group had risen considerably (see Chart 8).

The impact of the Hartz reforms on wages

The Hartz reforms did grease the wheels of the labour market but many argue that its main impact on the German economy – and by extension on Europe – was through their impact on wages. The argument is that the reforms put pressure on unions and their workers to accept lower wages and that the pension reform further lowered wage costs for firms. That in turn increased Germany's 'competitiveness' – a notoriously ill-defined concept – creating jobs in the export and import-competing sectors.[9] The reforms were thus the main driver of Germany's subsequent economic recovery, rise in employment and post-crisis performance.

This argument is overblown. There are several reasons, unrelated to the reforms, why wage growth in Germany was weak. And there is reasonable doubt as to whether wage restraint was an important factor behind Germany's growth and employment story. This means that Europe should be careful when drawing lessons from the German experience.

Start with the reasons for wage restraint. The first is that Germany might have entered the euro at an overvalued exchange rate. A different way to put this is that Germany had a demand problem that it could not solve by the usual means, that is, by expansionary monetary and fiscal policy. Interest rates were set for the eurozone as a whole and were around 1-1.5 per cent too high for the German economy in the early 2000s.[10] A simple way to see this is to consider real interest rates, that is, the interest rate after subtracting inflation. Before the introduction of the euro, Germany's had been the lowest among the

8: Johannes Schmieder, Till von Wachter and Stefan Bender, 'The effects of extended unemployment insurance over the business cycle: evidence from regression discontinuity estimates over twenty years', Quarterly Journal of Economics, 2012. The average effect is 0.1 months of additional unemployment per month of additional benefits; and Karl Brenke, 'Fünf Jahre Hartz IV – Das Problem ist nicht die Arbeitsmoral', DIW Wochenbericht, February 2010.

9: Christian Odendahl, 'European competitiveness, revisited', CER insight, January 2016.

10: Alfred Boss et al, 'Ursachen der Wachstumsschwäche in Deutschland 1995–2005', IfW Kiel, 2009.

West's big countries (see Table 1).[11] After 1999, it was the highest. Fiscal policy, meanwhile, was constrained by a combination of German economic orthodoxy and Europe's fiscal rules, and thus unavailable to stimulate the economy.

Chart 8: Largest increase in the employment rates among the old (in per cent)

Source: Haver.

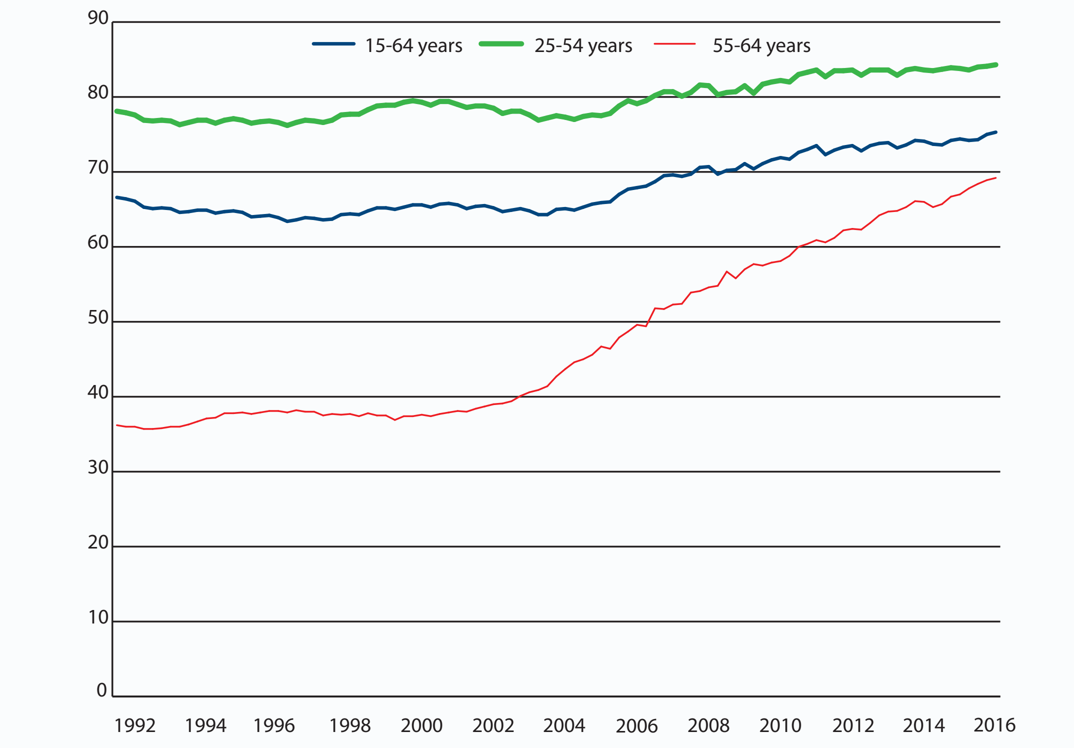


Table 1: Real interest rates in the West (in per cent)

	Germany	France	Italy	Spain	UK	USA
1991-98	4.0	5.5	5.7	5.0	4.7	4.7
1999-07	3.5	2.8	1.6	0.7	2.2	3.0

Source: Alfred Boss et al, 'Ursachen der Wachstumsschwäche in Deutschland 1995–2005', IfW Kiel, 2009.
Notes: The interest rates are calculated using the 10-year government bond yield and subtracting the current inflation, using the GDP-deflator.

In such a situation, cutting wages and prices in Germany was a way to replicate a currency devaluation: German exports would become cheaper, and imports relatively more expensive, both within and outside the eurozone. The hope was to create demand for exports and thus generate growth and employment. However, this kind of wage restraint, which resulted from a demand problem, had nothing to do with labour market reforms.

Moreover, such an approach carried problems for Germany and the eurozone. Trying to solve a demand problem through wage restraint depresses domestic demand further, and only works if demand from abroad is strong enough to (over)compensate. Lower consumption, higher savings and lower investment in Germany also led to the export of capital, which was then invested in other parts of Europe and the world – sometimes in unsustainable consumption and property booms. German wage restraint thus contributed to unsustainable growth, inflation and the build-up of debt elsewhere; those factors in turn threatened the stability of the eurozone a few years down the line.

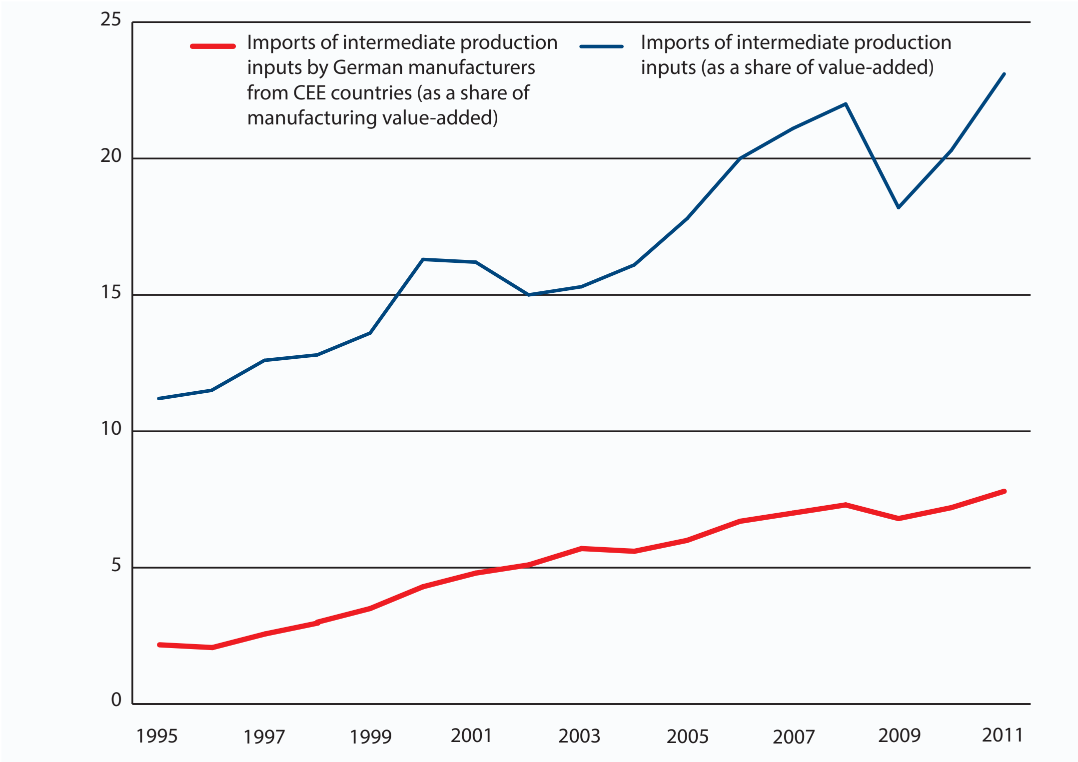
The second reason for wage restraint was globalisation and how German labour unions and works councils responded to it. Since the mid-1990s, Germany had become increasingly integrated into the world economy. Imports of production inputs ('intermediate goods') more than doubled from 11 per cent of total German value-added to 23 per cent in 2011 (see Chart 9).

11: Christian Odendahl, 'The eurozone's real interest rate problem', CER insight, July 2014.

A sizeable chunk of that increase was accounted for by supplies from Central and Eastern European countries, which became increasingly integrated into the EU's internal market. Their economies are now so closely connected to German supply chains that their business cycles almost coincide with the German one.[12] Relocating production or outsourcing parts of the supply chain became a credible threat for German employers to make, and succeeded in moderating wage demands. Recent work by the IMF shows that this is not just a German phenomenon: the more intermediate goods a country imports, the lower the share of national income that goes to labour.[13]

Chart 9: German intermediate imports from central and eastern Europe

Source: OECD – WTO Trade in Value-Added (TiVA) database, 2016 edition.

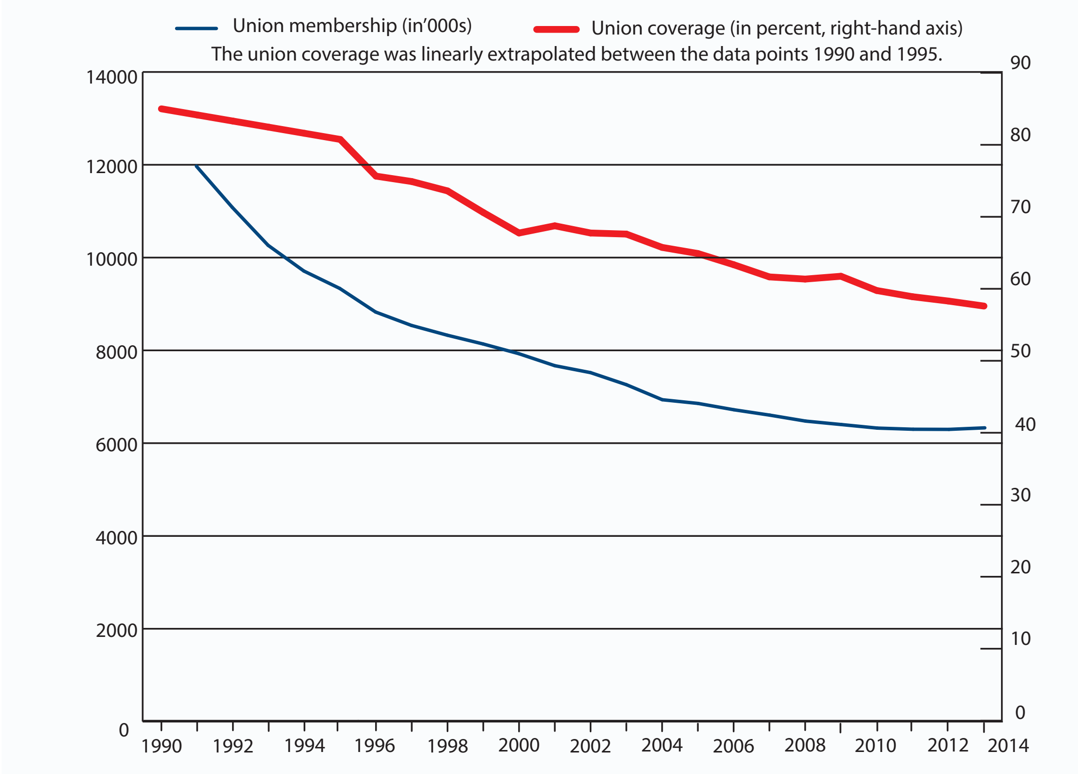


Unions and local works councils therefore came under pressure to help firms meet the challenges of globalisation – more so than in other countries because German manufacturing was and continues to be a much larger chunk of the economy than in almost any other country, and unemployment was high. In addition, union membership and, more importantly, the coverage of employees by collective bargaining agreements were already in decline (see Chart 10). In response, collective bargaining became more flexible, for example with an increasing number of so-called 'opening clauses', which allowed individual firms to deviate from a collective agreement. In 1993, only 600,000 workers were affected by such opening clauses; by 1998, almost 7 million were.[14] Unions negotiated agreements that preserved jobs rather than boosted wages. As a result, real wages in Germany have been growing slowly – since the mid-1990s, not since the reforms.

12: International Monetary Fund, 'German-central European supply chain – cluster report', August 2013.
13: International Monetary Fund, 'Understanding the downward trend in labour income shares', World Economic Outlook, April 2017.
14: Wolfgang Streeck and Britta Rehder, ' Der Flächentarifvertrag: Krise, Stabilität und Wandel', MPIfG Working Paper, July 2003; and Anke Hassel and Britta Rehder, 'Institutional change in the German wage bargaining system: The role of big companies', MPIfG Working Paper, December 2001.

Chart 10: Union membership and coverage of collective bargaining in Germany

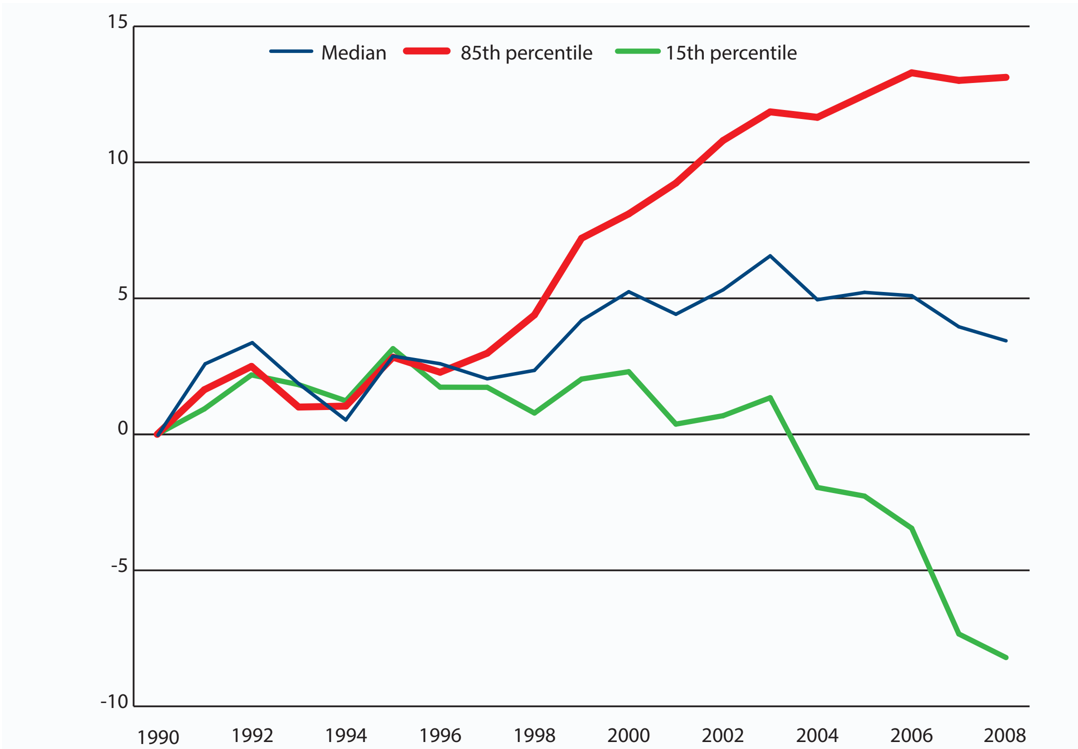
Source: Jelle Visser, 'ICTWSS database, version 5.1', Amsterdam Institute for Advanced Labour Studies (AIAS), September 2016.



Notes: The adjusted coverage ratio used here is the share of all employees whose wages and/or working conditions are covered by collective bargaining as a share of all employees that are eligible for collective bargaining.

Chart 11: Cumulative change in Western Germany real wages (in per cent)

Source: Replicated from Dustmann, Fitzenberger, Schönberg and Spitz-Oener, 'From sick man of Europe to economic superstar: Germany's resurgent economy', Journal of Economic Perspectives, 2014.



Notes: The authors only use Western Germany data, as East German wages are heavily influenced by reunification and subsequent deindustrialisation.

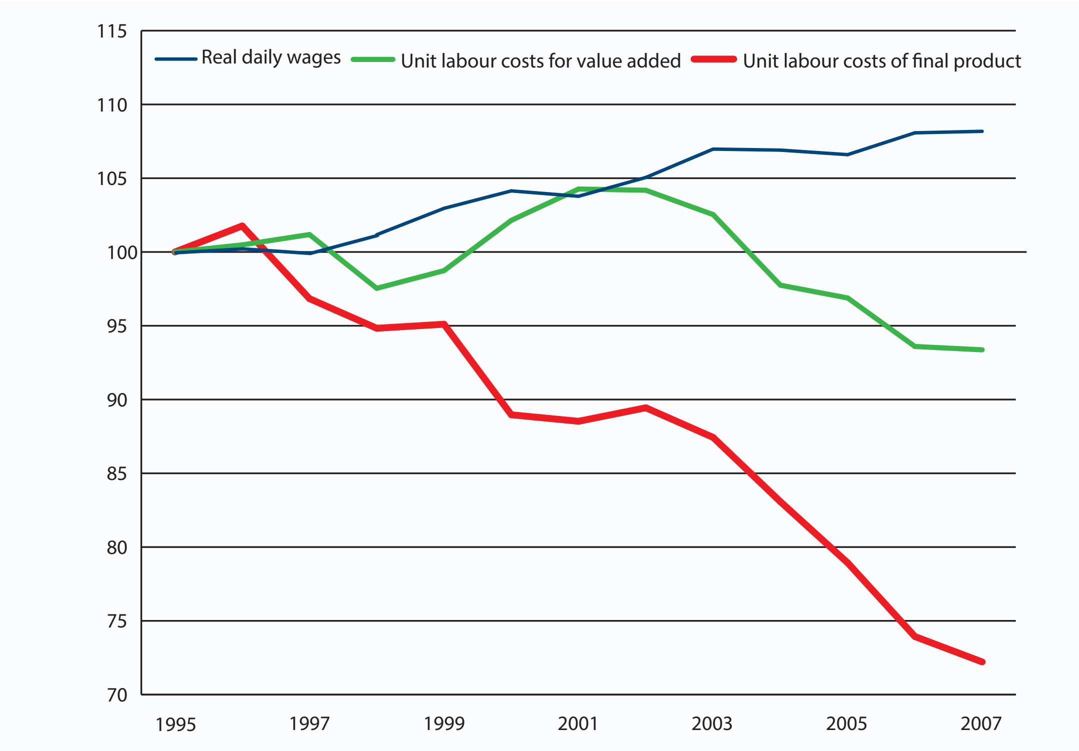
Firms also started to outsource parts of their operations in order to remove these workers from collective bargaining agreements and lower costs. This created a two-tiered labour market: those under union contracts and in the core manufacturing businesses, and those outside, especially in services. And indeed, a closer look at German wages shows that high wages kept growing, while the median wage stagnated and low wages fell (see Chart 11). Wage restraint was practiced mostly in services, not in the tradable manufacturing sector.[15] By the time of the reforms in early 2004, that divergence between the different tiers of the German labour market was already well underway. Only the decline in real wages at the bottom of the wage distribution coincides with the introduction of the reforms and is likely to be related to them.

Another way to see how wage restraint in German businesses took place is to look at how German manufacturing businesses cut costs. Real daily wages in manufacturing have risen modestly but steadily since 1995 (see Chart 12). But unit labour costs (the labour costs per unit of output) declined. This means that value added per worker (ie productivity) must have increased. The second explanation is that manufacturing firms were able to lower the costs of their production inputs, for example through outsourcing or offshoring.[16] As the chart shows, unit labour costs of the final manufactured product declined considerably more than the unit labour costs of the value that was added in manufacturing firms themselves.

Overall, the Hartz reforms did contribute to German wage restraint, but mostly in the bottom parts of the wage distribution. They increased the pool of available labour and made unemployment an even more unappealing experience, thus putting further pressure on unions and work councils to preserve jobs. But there were other factors that were more important in driving German wage restraint.

Chart 12: Wages and unit labour costs in tradable manufacturing (1995 = 100)

Source: Replicated from Dustmann, Fitzenberger, Schönberg and Spitz-Oener, 'From sick man of Europe to economic superstar: Germany's resurgent economy', Journal of Economic Perspectives, 2014.



Notes: Unit labour costs are the costs for labour per unit of output, where the output here is either value added by the sector itself or final product, including the unit labour costs of sectors providing intermediate production inputs.

15: See Christian Dustmann, Bernd Fitzenberger, Uta Schönberg and Alexandra Spitz-Oener, 'From sick man of Europe to economic superstar: Germany's resurgent economy', Journal of Economic Perspectives, 2014.

16: See also Wendy Carlin and David Soskice, 'German economic performance: disentangling the role of supply-side reforms, macroeconomic policy and coordinated economy institutions', Socio-Economic Review, January 2009.

The Hartz reforms and Germany's economic recovery

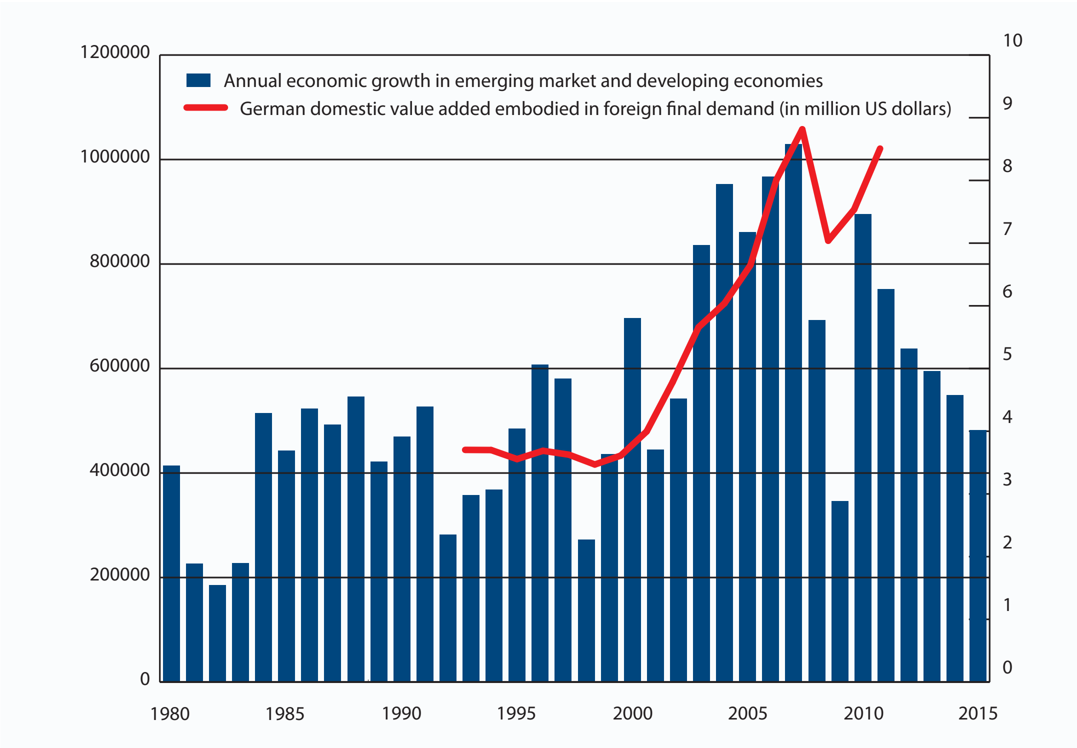
After the reforms, starting in the second half of 2005, Germany's economy recovered strongly from a long slump. Germany also rebounded quickly from the 2008-09 financial crisis and fared relatively well during the subsequent euro crisis. Today, Germany is close to full employment, is running a budget surplus and is still growing steadily. Many in Germany and abroad attribute this economic success story to the Hartz reforms and suggest the rest of the eurozone should follow Berlin's example. But were the Hartz reforms and wage restraint really that important? There are reasons to be sceptical.

First, emerging and developing economies entered into an unprecedented boom around the time of the reforms. Growth in these countries had averaged around 3.5 per cent between 1980 and 2002, only to double in the years after until the global financial crisis hit in 2008. During the same period, foreign demand for German products surged (see Chart 13). This was not surprising: investment in emerging economies grew by 12-14 per cent a year during that time, so demand was high for investment goods such as equipment and machinery, which Germany specialises in.[17] With growing incomes in emerging markets, demand for German consumption goods, such as cars, surged too.

Wage restraint in Germany, only partially attributable to the Hartz reforms in any case, was not decisive for growth in exports to these countries. And it is easy to see why. While Germany kept wages and prices low, the euro appreciated. As a result, Germany's real exchange rate (the exchange rate after factoring in wage and price changes) was hardly lower in 2009 than it had been at the euro's founding in 1999 (see Chart 14). German exports to other eurozone countries increased steadily, but not more so than those of the average eurozone country (see Chart 15). In fact, Germany's market share in intra-eurozone exports was two percentage points lower in 2016 than it had been in 2004.

Chart 13: How the German economy surged on the back of an emerging market boom

Source: International Monetary Fund, World Economic Outlook database; OECD-WTO Trade in Value Added (TiVA) database.

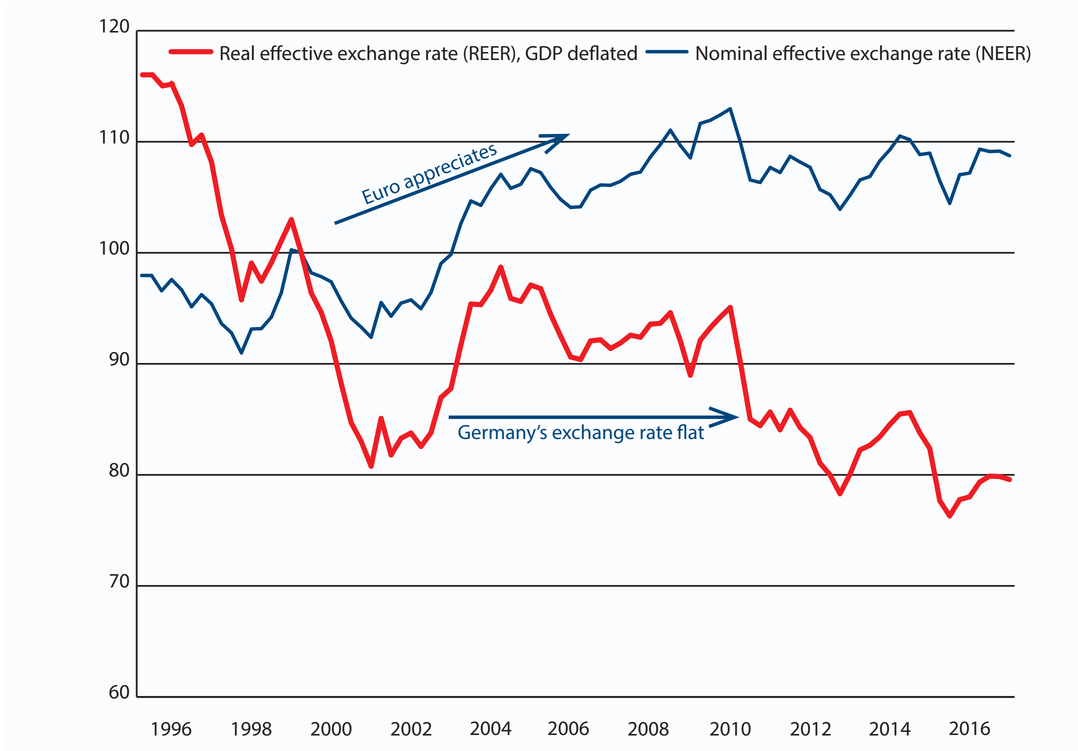


Notes: 'Value-added' is the basic ingredient of GDP. It measures the value of final output minus intermediate production inputs (which have been counted elsewhere as final output already). The red line is the amount of German value added that was consumed or invested abroad ('final demand').

17: See Stephan Danninger and Fred Joutz, 'What explains Germany's rebounding export market share?', Working Paper, International Monetary Fund, 2007, who also find that German wage restraint as such does not explain the surge in exports to emerging markets.

Chart 14: Germany's nominal and real effective exchange rates (1999 = 100)

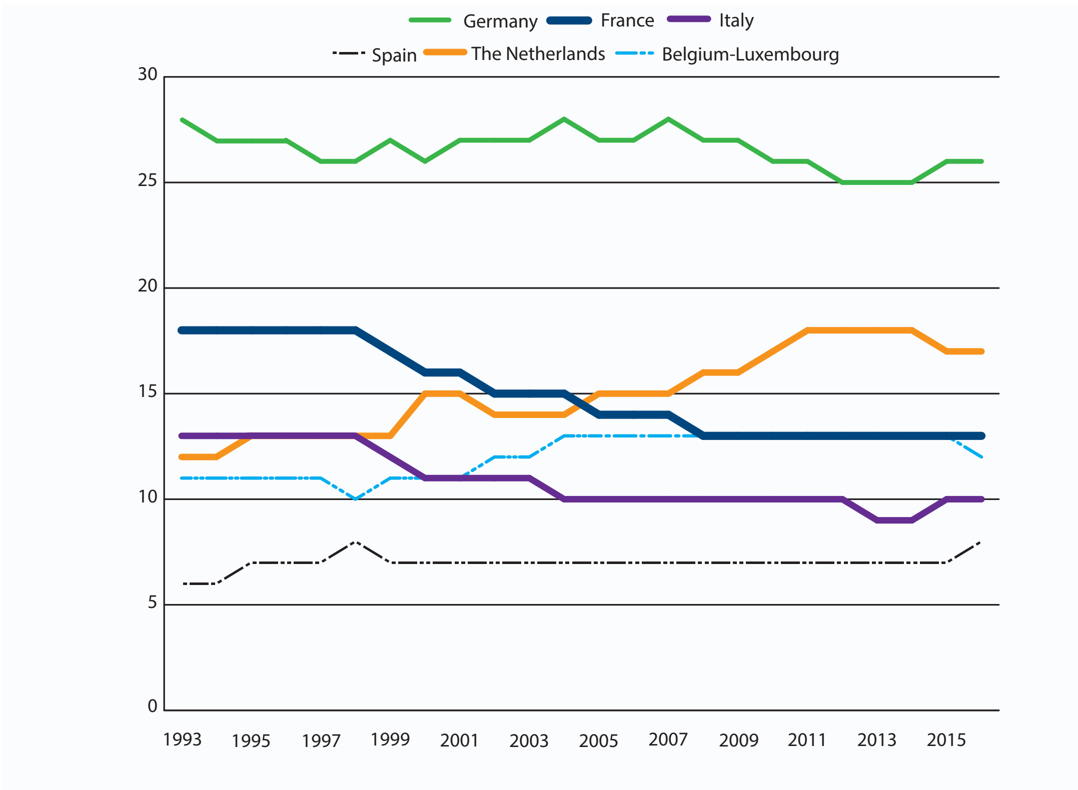
Source: Haver.



Notes: The nominal effective exchange rate (NEER) is an average exchange rate of the euro vis-à-vis the currencies of Germany's most important trading partners. The real effective exchange rate (REER) is the NEER but adjusted for inflation in Germany and these trading partners. The measure used here is not consumer price inflation but inflation of GDP, the so-called GDP deflator. The results with a consumer price or wage inflation measure would look very similar.

Chart 15: Market shares in intra-eurozone goods trade

Source: IMF Direction of Trade Statistics.



The second economic trend that spurred Germany's recovery was that the country's banks and firms had changed in response to globalisation – a process that was starting to bear fruit just when the reforms were implemented.

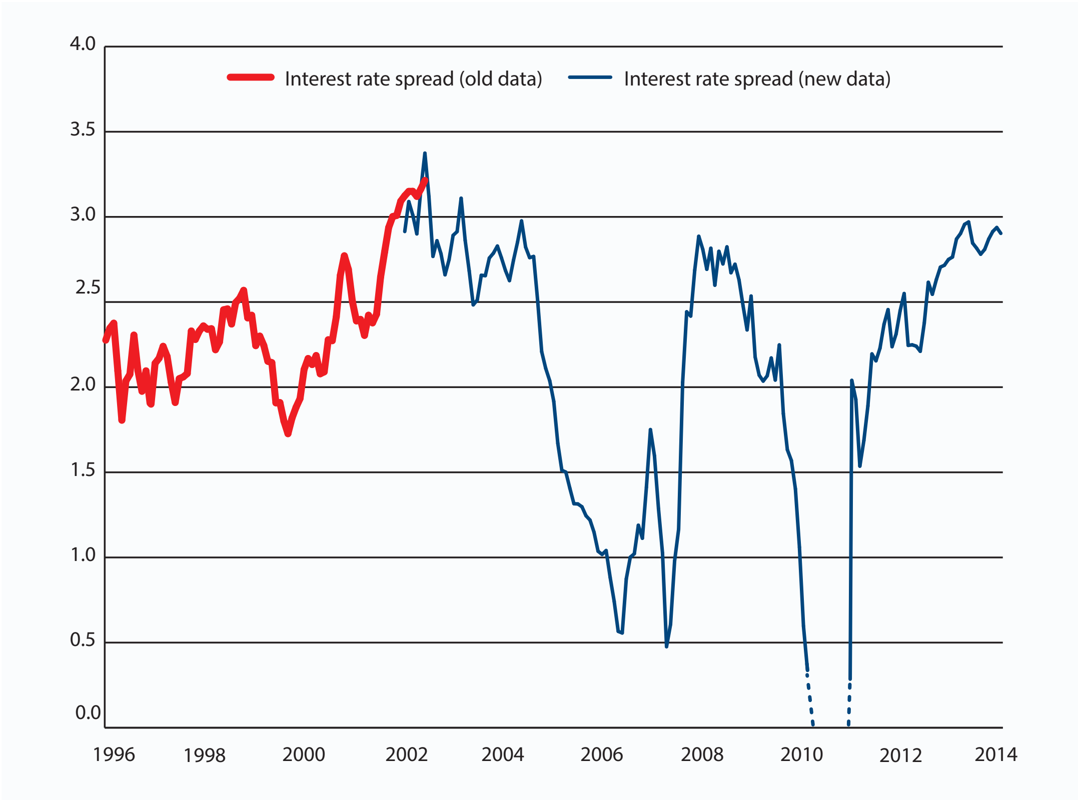
Germany's state-led banking system traditionally funded local and regional investment by firms at very low interest rates. As a result, German firms had invested a lot, but the productivity of the German capital stock was low in the early 2000s.

Banks were not the only reason for the low productivity of the German capital stock. Another element was the so-called *Deutschland AG* (Germany Inc.), a network of mutual stakes in companies centred around the large German banks and insurers. This largely closed network dominated the boards of German companies. Board members did not put as much pressure on German firms to increase their (comparatively low) profitability.

Those conditions came to an end around the start of the 21st century. A tax reform under Chancellor Schröder in 2000 allowed profits from the sale of these mutual stakes to go almost untaxed. This encouraged businesses to sell their stakes in other companies, putting German businesses under the scrutiny of international capital markets instead of Germany Inc. Banks, likewise under pressure to increase their return on capital, increased funding costs for German firms (see Chart 16).[18]

Chart 16: Corporate interest rate spreads over government bond yields in Germany

Source: Haver, Bundesbank.



Notes: The spread is calculated as the interest rate on German corporate loans minus the interest rate on eurozone government bonds, returning the mark-up or 'spread' that German corporates have to pay more than eurozone governments. The 2011/12 period is an anomaly as the result of the euro crisis. In early 2003, there was a change in methodology, but the data series are comparable (both are long-term interest rates on corporate loans).

As a result, German companies had to increase their profitability: through changes in management practices and production processes, through outsourcing parts of the business, by building supply chains in low-wage countries and by putting pressure on unions and work councils to lower wages and agree to more flexible work hours.[19] By the time the Hartz reforms were implemented, this transformation was almost complete. What looked like a 'Hartz recovery' was in part the fruit of this restructuring process among German businesses.

Another positive factor was the end of the long decline of the German construction sector, just when the reforms were being implemented. The sector had contracted ever since the end of the post-reunification boom. Between 1994 and 2005, construction output

18: See Ben Broadbent, Dirk Schumacher and Sabine Schels, 'No gain without pain – Germany's adjustment to a higher cost of capital', Global Economic Paper 103, Goldman Sachs, 2004.

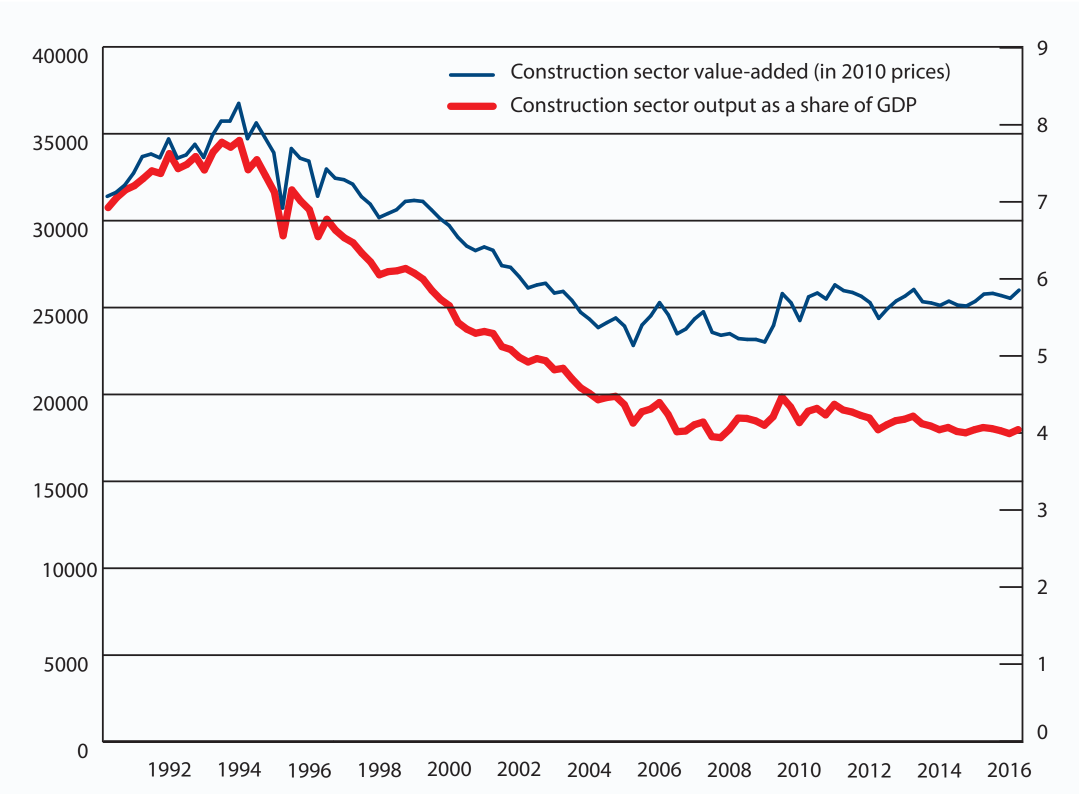
19: See also Bundesbank, 'Investment activity in Germany under the influence of technological change and competition among production locations', Monthly Report, January 2007.

fell from almost 8 per cent of GDP to around 4 per cent, acting as a drag on growth throughout this period (see Chart 17). Around a third of the gap in GDP growth between Germany and its European neighbours was down to construction alone.[20]

One policy that did not contribute to Germany's economic recovery was fiscal policy. Despite violating the eurozone public deficit limit of 3 per cent of GDP, Germany ran mildly restrictive fiscal policy in 2003-2007, and in fact in almost every year since the early 1990s (see Chart 18). Far from constituting a fiscal stimulus that other countries in the eurozone are denied today, Germany's fiscal policy in the 2000s subtracted unnecessarily from German growth.

Chart 17: The long decline of the German construction sector

Source: Haver.



Did the Hartz reforms contribute to making Germany one of the best-performing countries after the recent financial crisis? There are two reasons to be doubtful. First, foreign demand for German goods, especially from emerging markets, surged once more just after the crisis, helping to pull Germany out of the slump (see Chart 13 above). Second, employment held up not because of the reforms but because companies mostly held on to their staff for fear of losing skilled workers.[21] They instead made use of a scheme called *Kurzarbeit* – allowing firms to reduce working hours at publicly subsidised pay while retaining their staff – and 'work time accounts', which store overtime from boom years to reduce work hours in a downturn. Both schemes existed long before the Hartz reforms.

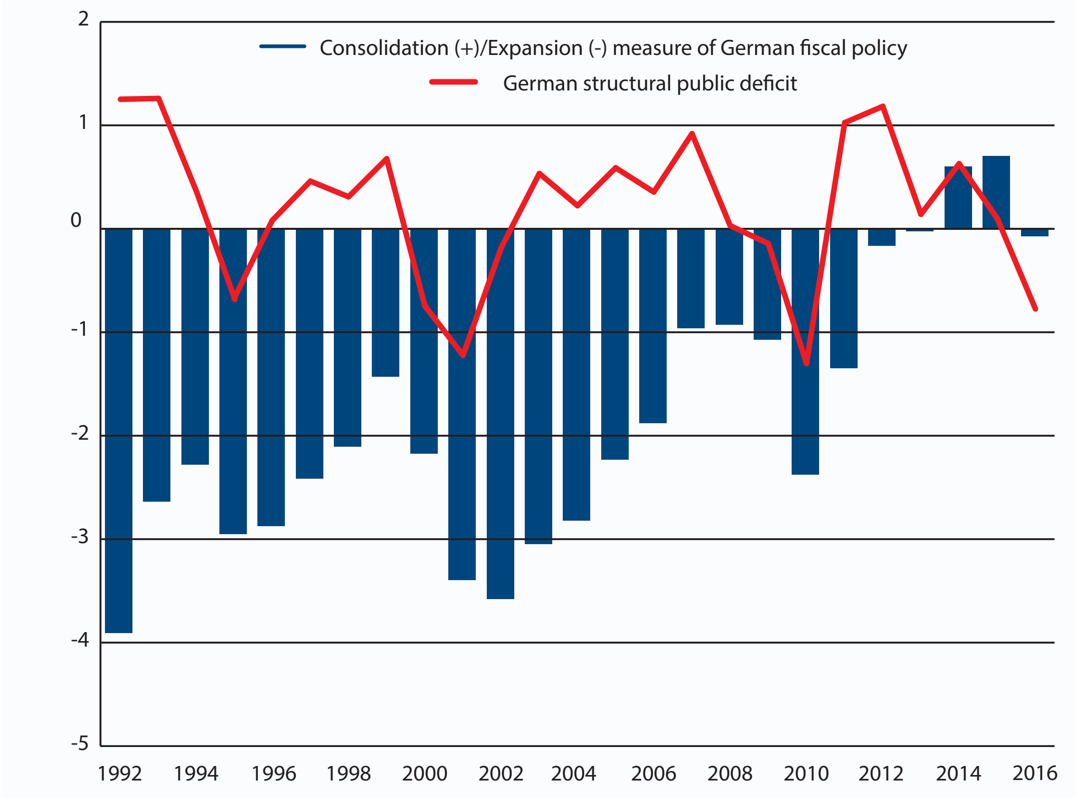
There is one final caveat. Germany did experience a strong rise in employment, from 39 million in 2003 to 40 million in 2008 to 43.5 million today. But hours worked, a measure of how much work was created, have only recently reached the levels of the early 1990s (see Chart 19). This is not necessarily a bad thing, if employees like to work fewer hours, but it does cast the 'employment boom' in a somewhat different light.

20: European Commission, 'Germany's growth performance in the 1990's', May 2002.

21: Michael Burda and Jennifer Hunt, 'What explains the German labour market miracle in the Great Recession?', Brookings Papers on Economic Activity, 2011.

Chart 18: German fiscal policy of the last 25 years (in per cent of potential GDP)

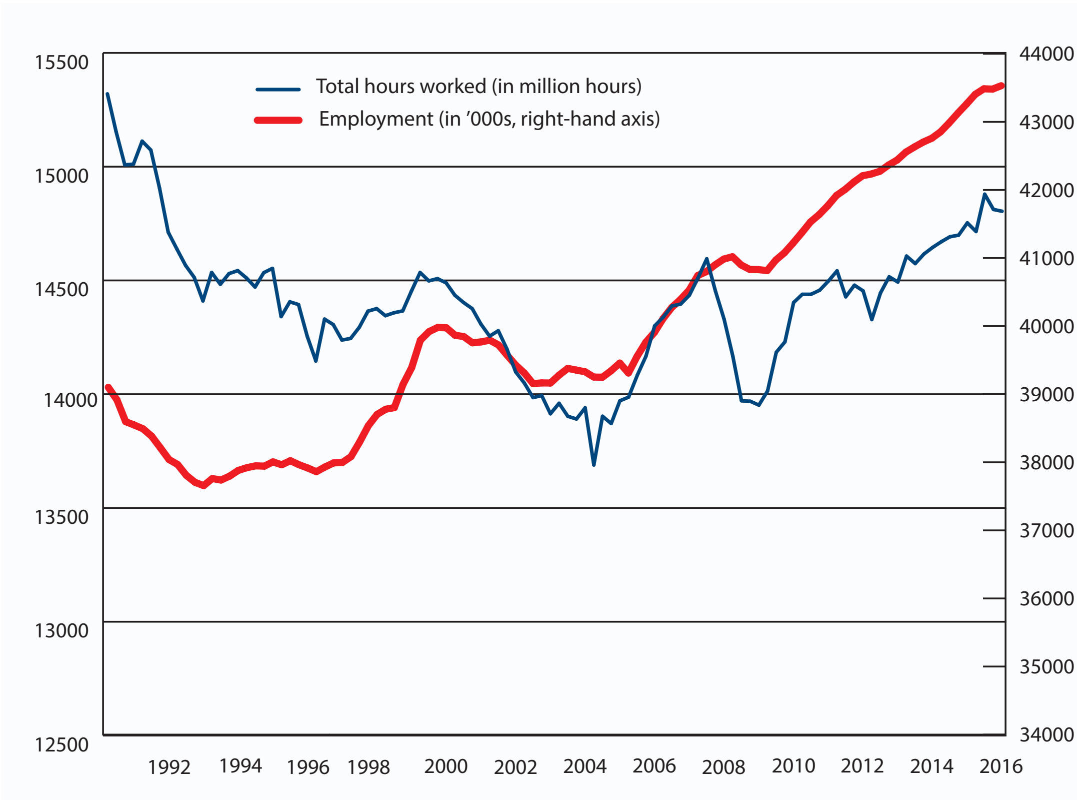
Source: International Monetary Fund, World Economic Outlook Database.



Notes: The structural public deficit is the public deficit after subtracting the influence of the business cycle on government revenues and spending, as well as one-off effects like the sale of mobile phone frequencies (as happened in Germany in 2000). The consolidation and expansion measure of fiscal policy is the change in the structural public deficit.

Chart 19: Employment and hours worked in Germany

Source: Haver.



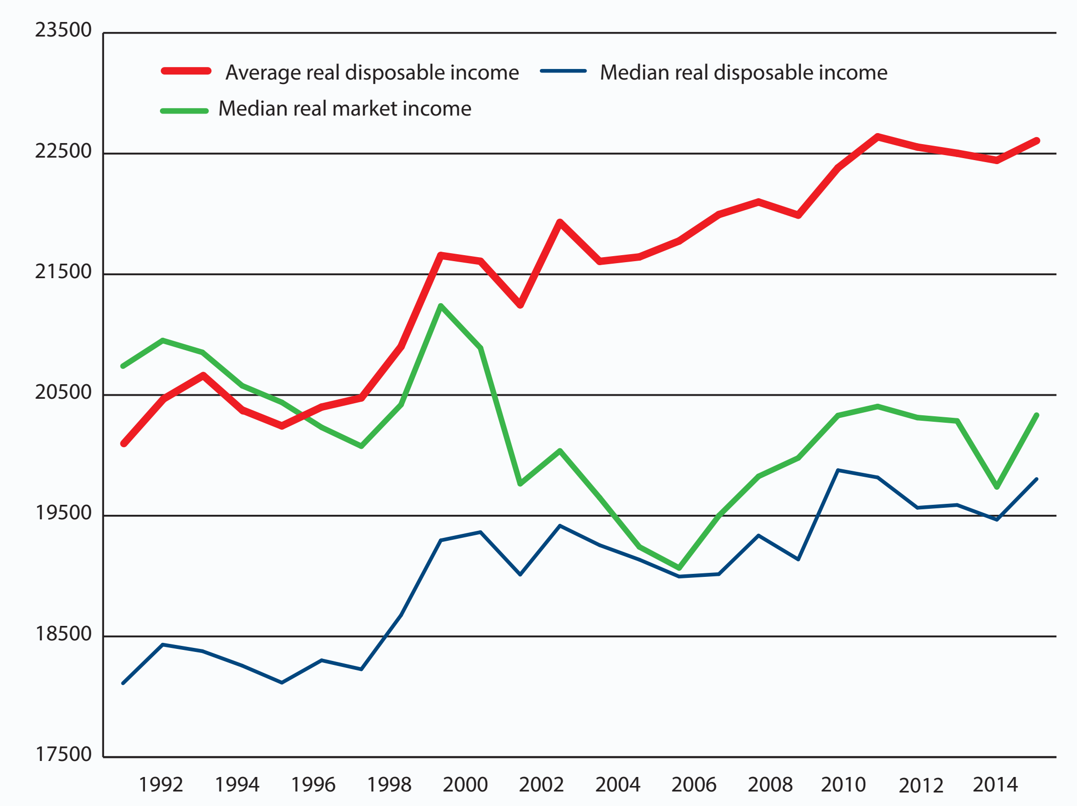
How the Hartz reforms have affected inequality and poverty

A comprehensive assessment of whether the German reforms could be a template for Europe also needs to take broader measures of welfare into account. Average German household income, adjusted for inflation, has grown steadily since the reforms. But the median German household is barely richer today than it was in 1999 (see Chart 20).

The effect of the reforms on income inequality is controversial. It is true that income inequality has remained stable since 2005, after a steep increase (see Chart 21). But inequality has also stagnated or even fallen in other European countries that did not witness such growth in employment and GDP.

Meanwhile, some indicators point to a rise in economic insecurity. For example, the Bundesbank found that consumption hardly grew between 2005 and 2007, despite a strong economic recovery. Instead, households seem to have increased their precautionary savings.[22] Nor has Germany made progress in fighting poverty. The share of people at risk of poverty has in fact risen from around 11 per cent in the 1990s to around 16 per cent today (see Chart 22).[23]

Chart 20: Real income growth in Germany



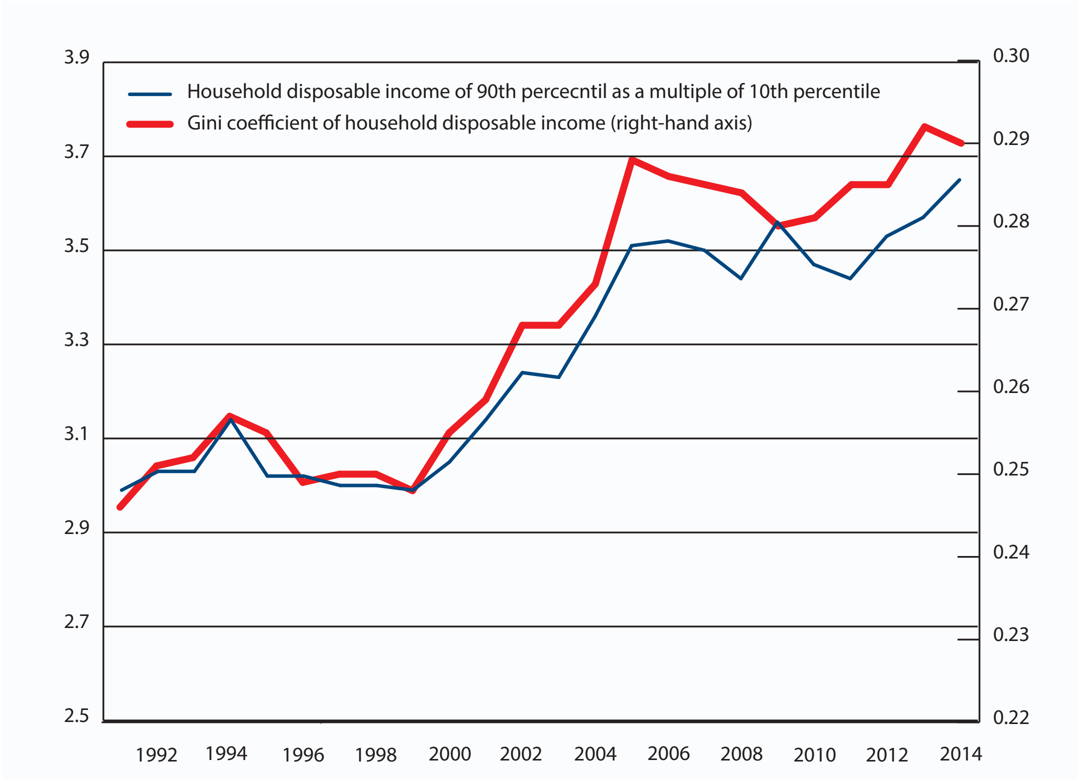
Source: Replicated from Markus Grabka and Jan Goebel, 'Realeinkommen sind von 1991 bis 2014 im Durchschnitt gestiegen – erste Anzeichen für wieder zunehmende Einkommensungleichheit', DIW Wochenbericht, 2017.
Notes: Market income is income before taxes and transfers, after which it is disposable income.

22: Bundesbank, 'Private consumption in Germany since reunification', Monthly Report, September 2007.

23: This measure is defined as people having less than 60 per cent of the median disposable income (after social transfers).

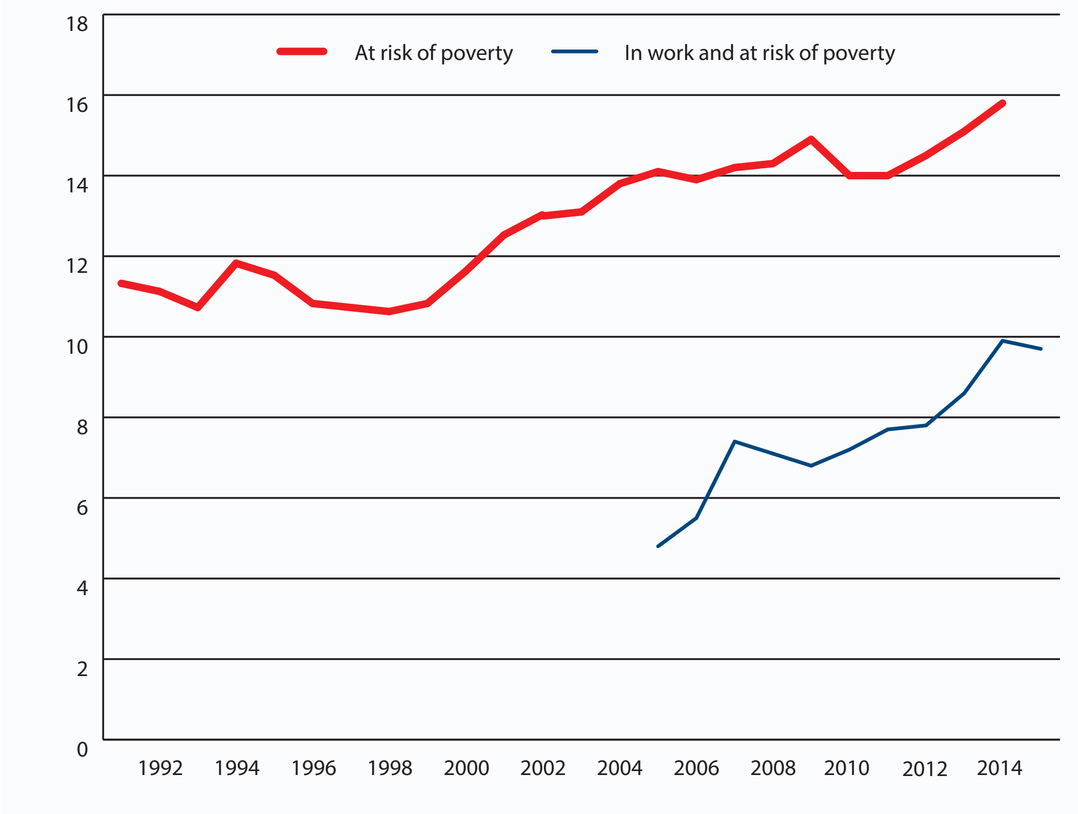
Chart 21:
Income inequality in Germany

Source: Haver.



Source: Replicated from Markus Grabka and Jan Goebel, 'Realeinkommen sind von 1991 bis 2014 im Durchschnitt gestiegen – erste Anzeichen für wieder zunehmende Einkommensungleichheit', DIW Wochenbericht, 2017.
Notes: Disposable income is income after taxes and transfers.

Chart 22:
Germans at risk of poverty



Source: Data from Markus Grabka and Jan Goebel, 'Realeinkommen sind von 1991 bis 2014 im Durchschnitt gestiegen – erste Anzeichen für wieder zunehmende Einkommensungleichheit', DIW Wochenbericht, 2017; and from Eurostat EUSILC database.
Notes: Disposable income is income after taxes and transfers.

Lessons for Germany and Europe

If German politicians could turn back time, would they implement the same set of reforms? As the discussion above shows, the economic impact of the Hartz package was modest.

★ It did increase the efficiency of the German labour market, bringing the unemployed into new jobs more quickly, which by some estimates reduced German unemployment by 1.5 percentage points.

★ It put an end to early retirement via the unemployment benefits system, and increased the employment rate of older workers.

★ It put pressure on benefit recipients to find work, and brought previous social assistance recipients into the labour market.

But the reasons for Germany's economic rebound from 2004 onwards lie elsewhere: in the restructuring of German businesses, which adapted to an increasingly globalised economy; in the wage restraint and the flexibility of German unions and local works councils since the mid-1990s, which focused on preserving jobs rather than wage increases; and, most importantly, in the boom of emerging market economies, which increased demand for German goods.

German politicians could – and should – offer the following lessons from Germany's reform experience to other eurozone countries.

First, timing is everything. The reason why the Hartz reforms have become a founding myth of Germany's economic strength is that they were phenomenally well-timed: right in the middle of an economic boom in emerging markets; just when the long decline of the German construction sector had bottomed out; as well as at the end of a major restructuring and cost-cutting effort by German businesses and trade unions. Unfortunately for him, Chancellor Schröder lost his nerve in 2005 and called snap elections just as the German economy took off. The German economic recovery fell into Angela Merkel's lap.

Second, the right diagnosis is important to identify an economy's ills. In Germany, politicians thought that economic growth was largely constrained by a rigid labour market. This was partly correct. But a crucial component was missing: the macroeconomic backdrop. Germany was trapped in a monetary union with a fiscal deficit approaching 4 per cent, despite tight fiscal policies, and inflation below target. In other words, Germany also had a demand problem. Such an incomplete diagnosis could have easily backfired but did not, for the reasons discussed above.

This leads to the third lesson. Reforming the labour market in an economic slump is brave, as the short term impact is likely to be negative.[24] Germany's experience of immediately entering an economic boom, should not be seen as a consequence of the reforms but as luck.

If a country is in a slump, and the labour market has been identified as a binding constraint on growth, there are other ways to reform it. Countries should first lower payroll taxes, invest in training and job centres, and make it easier for people to move to where the jobs are. Only when the economy has recovered, should the labour market be made more flexible. For example, and unlike in Germany, unemployment benefits could include automatic extension during recessions, because there are fewer jobs around. When the economy has recovered, they would automatically be reduced.

The labour market should not be reformed at the same time as the government attempts to consolidate public finances. Germany was lucky that external demand came to its rescue. Since Chinese economic growth is slowing, German imports are showing no sign of booming and the US economy is ticking along at only a moderate pace, other eurozone countries will not be that lucky. If sweeping labour reforms are implemented, they should be accompanied by expansionary macroeconomic policy.

Fourth, labour market and benefits reforms can bring social hardship. Germany failed to address the downsides that the Hartz reforms brought with them. For example, there was no minimum wage at the time. Some of the hardship was alleviated later, but given Germany's poverty rate, there is clearly scope for improvement.

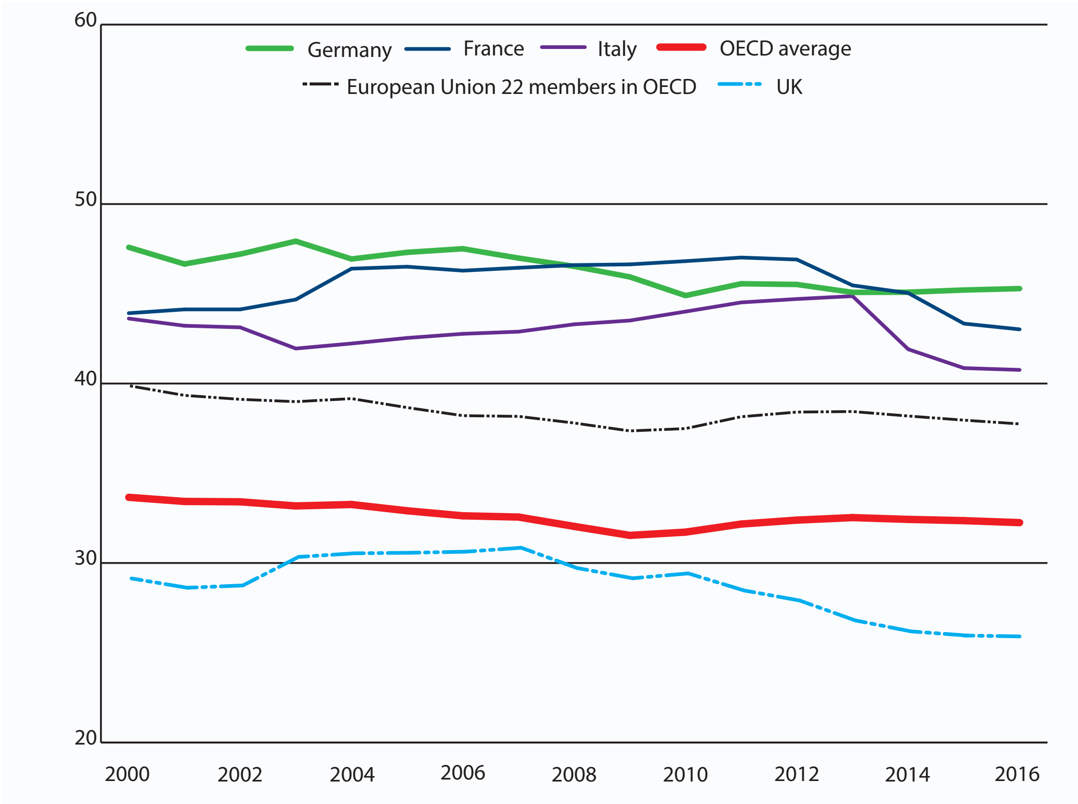
Reformers should think carefully about how to mitigate social hardship from the outset, preferably through policies that empower the unemployed, not more means-tested hand-outs. In Germany, benefit payments are still reduced at a steep rate of more than 80 per cent when recipients take up work. (In the UK, universal credit is reduced by just 63 pence for every pound a recipient earns.) Low wage earners are then taxed at 45 per cent in Germany, which is a whopping 13 percentage points higher than the OECD average (Chart 23).[25]

24: International Monetary Fund, 'Time for a supply-side boost? Macroeconomic effects of labour and product market reforms in advanced economies', World Economic Outlook, April 2016.

25: OECD, 'Taxing wages', Database, 2017.

Chart 23: Average taxes and employee social security contributions as a share of income for low wage earners

Source: OECD, 'Taxing wages', Database, 2017.



Notes: The data shows the average 'tax wedge' (taxes and employee social security contributions) for a childless single earner on 67 per cent of the average earnings.

Fifth, giving companies more flexible access to workers and allowing more pressure on wages and working conditions can give firms an advantage over international rivals, but it does little if anything to boost productivity.[26] In fact, it can even be harmful if such reforms lower the incentives for companies to invest in workers and equipment.

If reformers boost labour flexibility, they should consider additional efforts to boost productivity at the same time: through innovation and R&D as well as investments in infrastructure and ICT capital. Ideally, such efforts should target those most affected by the reforms: countries should invest in the productivity of the lowest paid workers, which usually are found at the lowest productivity firms.[27] Oddly, that aspect is largely absent from the current German debate on how to correct or complement the Hartz reforms.

Finally, how gains in productivity are divided between workers and employers is not a given, but in turn depends on the institutions of the labour market, and hence, policy. Increased labour market flexibility and the pressure on companies to raise productivity meant that labour unions and local works councils in Germany had to be flexible and agree to pay freezes, overtime and outsourcing in order to protect jobs. That has helped German businesses to thrive under the pressure of globalisation. But it can be taken too far, to the point where unions shy away from demanding appropriate wage increases for fear of risking jobs, or of firms exiting collective bargaining arrangements. Striking the right balance is not easy, but should be a key concern for policy-makers.

Germany has successfully met the challenges of reunification, globalisation and a common currency. With record-low unemployment, fiscal surpluses and a high living standard, it is now portrayed as the example to follow. But no economic theory would predict that a set of labour market reforms that targeted only parts of the workforce would be the only or even main reason for such a success. The economic impact of these reforms was modest; German businesses and trade unions as well as the worldwide economic boom did most of the heavy lifting. The rest of Europe, rather than copying these reforms, should learn more nuanced lessons from the German experience.

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July 2017

26: International Monetary Fund, 'Where are we headed? Perspectives on potential output', World Economic Outlook, April 2015.

27: Andy Haldane, 'Productivity puzzles', Bank of England, March 2017.