



EUROPEAN
COUNCIL
ON FOREIGN
RELATIONS
ecfr.eu

**POLICY
BRIEF**

A GERMAN MODEL FOR EUROPE?

Sebastian Dullien

SUMMARY

Since the euro crisis began, many in Europe have begun to see the German economy as a model. In particular, they have urged others in the eurozone to emulate the reforms introduced under Chancellor Gerhard Schröder from 2003 onwards, which are widely thought to have produced Germany's current economic success. In fact, Germany's large current account surplus, low unemployment rate, and acceptable growth rate are the product of a combination of nominal wage restraint, supported by labour market reforms that have brought down the reservation wage and have put downward pressure on wages, and severe spending restraints on public investment as well as on research and development and education.

While this approach has worked well for Germany for a few years, it cannot serve as a blueprint for Europe. If everyone followed the German approach of cutting spending on research and development and on education, it would mean a lower rate of technological progress and hence lower long-term growth than would be otherwise possible. If they emulated Germany's deflationary wage policy, it would reduce aggregate demand. Rather than copying the German approach, European leaders should carefully examine which elements of the reforms introduced in Germany in the last decade could actually increase productivity, output, and employment without a detrimental effect on others in Europe or on long-term growth.

Since the euro crisis began, many in Europe have begun to see the German economy as a model.¹ While growth has not been particularly impressive, unemployment in Germany is lower than at any time since reunification and lower than in any other large European country or the United States. The German public budget is almost in balance and the level of public debt as a share of GDP is also lower than in any other of the large OECD countries. Moreover, the German economy continues to expand its exports and consistently runs a large current account surplus. These stable macroeconomic conditions have made Berlin the decisive voice in discussions about rescue measures: Germany seemed to be the only country that had adequate financial resources to pay for bailouts.

This memo will examine the reasons for the success of the German economy during the last decade. In particular, it will describe the elements of the Agenda 2010 – essentially a set of labour market reforms implemented by Chancellor Gerhard Schröder from 2003 onwards – and explore their contribution to Germany's macroeconomic performance. It will point out some problematic elements of Germany's economic performance during the last decade. It will conclude that Germany's economic success is a product of a combination of nominal wage restraint, supported by labour market reforms that have brought down the reservation wage and have put downward pressure on wages, and severe spending restraints on public investment as well as on research and development and education. On the whole, this cannot serve as a blueprint for Europe.

Modell Deutschland

In November 2011, Volker Kauder, the chairman of the parliamentary group of the Christian Democrats, triumphantly declared that “all over Europe, German is now spoken”. The implication was that the whole of Europe was following the German policy approach and in particular its *Sparpolitik*, or austerity policy. The constitutional amendment introduced by Germany in 2009, popularly known as the *Schuldenbremse*, or “debt brake”, was the blueprint for the fiscal compact agreed in 2011, which obliges eurozone countries to limit their structural deficits to 0.5 percent of GDP. Many outside Germany support this attempt to copy Germany. For example, in April 2012, the *Economist* ran a long piece entitled “Modell Deutschland über alles”, which strongly urged other ailing economies to copy Agenda 2010.²

Even though there is little academic literature to back it up, a simple narrative has emerged that is often heard from politicians and in the media: burdened with an excessive welfare state and sclerotic labour markets, the German economy experienced a protracted economic crisis in the early 2000s. After narrowly winning re-election in 2002, Schröder embarked on a comprehensive reform programme to overhaul Germany’s labour market, the social security system, and excessively large public sector. The labour market thus became more flexible in terms of working times, redundancy payments, and firing rules. Freed from the burden of the excessive welfare state, the German economy recovered from its protracted stagnation and started to outperform the rest of Europe again in terms of economic growth, employment creation, and unemployment.

However, it is striking how quickly the perception of the German model and the country’s economic fate has changed. Until the middle of the last decade, there was a completely different tone to discussions in Germany and elsewhere. In 2003, Katinka Barysch of the Centre for European Reform labelled Germany “the sick man of Europe”.³ The same year, the leading German economist Hans-Werner Sinn published a book entitled *Ist Deutschland noch zu retten?* (“Can Germany be saved?”).⁴ He concluded that unless very radical reforms were implemented, Germany was doomed economically. The book was followed by others, written by economists or leading journalists, that predicted the demise of the German economy.

Equally strikingly, the Schröder reforms were not seen as a game-changer when they were implemented. In 2007, Sinn said they were not “a real breakthrough”.⁵ The German Council of Economic Experts also repeatedly claimed that the reforms had not gone far enough. However, the same reforms are now often proclaimed as having been crucial for the German economic performance since the middle of the past decade. This quick turnaround in perceptions leads one to wonder how accurate this narrative of a German economy that has bounced back through decisive reforms really is. If the narrative were true, why was the recent improvement in economic conditions not foreseen by leading German economists when the Agenda 2010 package was passed?

What Agenda 2010 did – and did not do

In order to evaluate the impact of the German reforms, one first has to be clear about what Agenda 2010 did – and didn’t do. Some of the elements regularly attributed to the Social Democrats’ economic reforms in Germany were simply not included in the legislative reform packages passed by the Schröder government.⁶ The weight of other elements of the reform package has been exaggerated, possibly due to a lack of understanding of the specificities of the German labour market. Over the last two decades, German labour market institutions have changing endogenously – that is, through marginal changes in collectively bargained wage contracts rather than through government intervention.⁷ This process has been much more gradual and must not be confused with the changes brought about by the Schröder reforms.

The reform package of 2003 to 2005 contained six key elements:

- It merged the old unemployment benefit with the general social security system. Previously, unemployment benefit was paid to unemployed people who had exhausted the duration of their private unemployment insurance benefits, while social security was paid to those who were not covered by unemployment insurance benefits. While unemployment assistance was set as a proportion of past wages, social security was paid to anyone who did not have sufficient income or wealth to cover his or her subsistence. While social security was means-tested, unemployment assistance was not. Social security was a complicated system of lump-sum payments for food and other items of daily use plus payments for rent and occasional payment for special needs, such as new furniture or winter clothes, depending on individual

¹ A version of this memo was published in Stefan Collignon and Piero Esposito (eds), *Competitiveness in the European Economy* (London: Routledge, 2013).

² “Modell Deutschland über alles”, the *Economist*, 14 April 2011, available at <http://www.economist.com/node/21552579>.

³ Katinka Barysch, *Germany – the sick man of Europe?*, Centre for European Reform, December 2003, available at http://www.cer.org.uk/sites/default/files/publications/attachments/pdf/2012/policybrief_germany_man_kb-5422.pdf.

⁴ Hans-Werner Sinn, *Ist Deutschland noch zu retten?* (“Can Germany Be Saved?”) (Munich: Econ, 2003) (hereafter, Sinn, *Can Germany Be Saved?*). An updated translation was published under the same title as late as 2007, not long before the subprime crisis hit and completely changed perceptions of the German economy.

⁵ Sinn, *Can Germany Be Saved?*, p. 109.

⁶ For example, the short-work compensation, which has been deemed as being central to Germany’s labour market performance in the Great Recession of 2008–9, has already been introduced, in the 1950s, and was expanded as part of the stimulus package of 2009.

⁷ See Wendy Carlin and David Soskice, “German Economic Performance: Disentangling the Role of Supplyside Reforms, Macroeconomic Policy and Coordinated Economy Institutions”, June 2008, University College London, available at <http://eprints.ucl.ac.uk/16061/1/16061.pdf>.

need. One special feature of the German social security system was that any earnings were directly subtracted from benefit payments, which made part-time work very unattractive for those in the system.

The reform of unemployment benefit and social security had four effects. First, it abolished any connection between past income and payments received after individual unemployment insurance payments had run out (usually after 12 months) and replaced them with a lump-sum payment called *Arbeitslosengeld II* plus a rent subsidy. Second, it merged all payments for special needs into one single monthly lump-sum payment. Third, it made the payments in the system means-tested, forcing individuals with substantive savings to tap into them before claiming public benefits. Fourth, it allowed those receiving *Arbeitslosengeld II* to work and to keep a certain share of their wages, which effectively turned the system into a low-wage subsidy.

- It reformed the German labour office and active labour-market policies. Within the package, the organisational structure of the German labour offices was completely overhauled and the organisation was renamed the *Arbeitsagentur*, or “labour agency”. Prior to the reforms, municipalities were in charge of looking after those receiving social security and the old labour office was responsible for placement and payments to those receiving unemployment assistance. After the reforms, all recipients of *Arbeitslosengeld II* were placed under the responsibility of the labour agency.
- It liberalised market access to certain professions. Prior to the reforms, market entry in a large number of professions in Germany was strictly regulated so that only those having worked for a certain time in established companies who were able to provide documentation of training were allowed access to certain types of business. Agenda 2010 scrapped this requirement for 53 professions – but not for strictly regulated white-collar professions such as legal services, pharmacies, or tax consultants.
- It liberalised the market for temporary work agencies. This sector was heavily regulated prior to the reform. Rules limiting the time of employment in a temporary work agency were scrapped and a number of other restrictions were relaxed.
- It marginally reformed provisions for firing employees. Previously, the provisions applied to companies with a minimum of five employees. Agenda 2010 raised the threshold to 10 employees (the level before it was reduced to five in 1998). Agenda 2010 also incorporated some recent court rulings into German law. In particular, it introduced a dismissed employee’s legal right to a defined severance payment, which s/he previously had

to fight for in court. In general, it is agreed by experts on labour law that these changes did not have large material effects.⁸

- It lowered social security contributions for marginal jobs. A reduced but progressive rate of social security contributions was introduced for employees earning between €400.01 and €800 per month.

In addition, although they were not officially part of the Agenda 2010 reforms, the Schröder government passed austerity budgets in order to bring German public deficit back in line with the Stability and Growth Pact’s requirement to limit government deficit to 3 percent of GDP.

Note, however, what the Schröder reforms did *not* do. They did not touch the German system of collective wage bargaining. They did not change the rules on working time. They did not make hiring and firing fundamentally easier. They also did not introduce the famous working-time accounts and the compensation for short working hours, which helped Germany through the crisis of 2008–9. These rules all remained virtually untouched by the Schröder government’s legislation.⁹

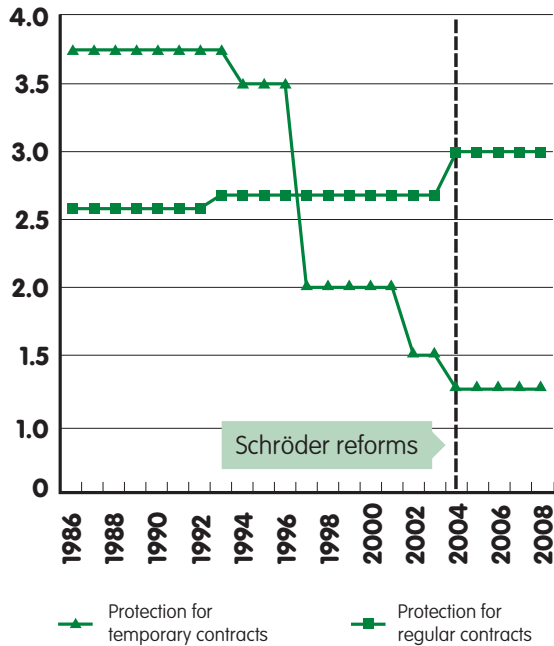
This conclusion might be surprising, given the predominant narrative of the German reforms, but it is backed by economic research. For example, the OECD compiles a widely regarded index for employment protection.¹⁰ According to this index, employment protection for regular work contracts actually became *stricter* in 2004 – exactly the opposite of what one would expect in the case of labour market deregulation – and it has not changed since. The index for the protection of temporary jobs dropped somewhat, but compared to prior changes and changes in other countries in other reform periods, this drop seems marginal (see Figure 1). Going into the subcomponents of the synthetic employment protection indicator, one can see that the fall in the index is entirely due to the changes in regulations on temporary work agencies, while dismissal rules for regular contracts were actually tightened.

⁸ Stefan Nägele, “Neuerung durch die Agenda 2010 – Kündigung mit Abfindungsanspruch”, *Der Arbeitsrechtberater*, Nr. 9/2003, p. 274–276.

⁹ One should mention here that during his first period in office (1998–2002), Schröder pushed through a number of tax reforms. For example, the top marginal tax rate was cut, sales of cross-holdings of corporations and banks was made easier (and cheaper), and corporate tax rates were lowered. However, these reforms were not part of the Agenda 2010 package and did not have a large effect on the labour market.

¹⁰ The OECD has a separate website with data and explanations for this indicator, available at http://www.oecd.org/employment/emp_oecdindicatorsofemploymentprotection.htm.

Figure 1
 Employment protection in Germany OECD Indicators (1 – least strict; 6 – most strict)



Source: OECD

Macroeconomic elements of Germany's economic success

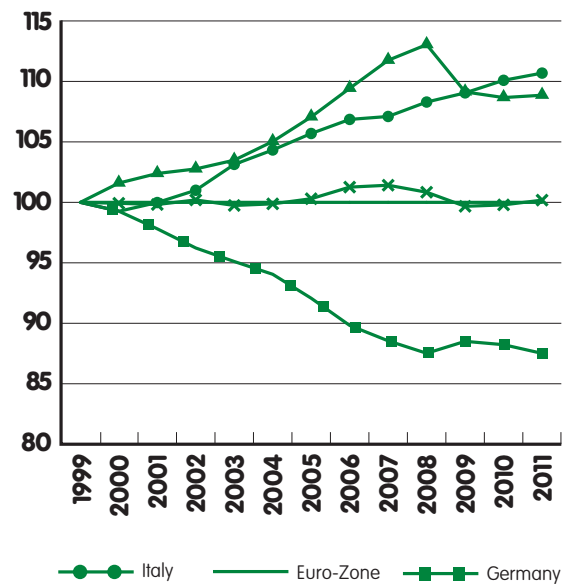
Germany's much-vaunted economic success has manifested itself in the last few years in the export performance of German companies: while many other European countries have lost market shares in world export markets, Germany was maintained or even increased its market share. In addition, Germany has gone from a current account deficit of 1.7 percent of GDP in 2000 to a whopping surplus of 7.4 percent of GDP in 2007, and it was able to maintain its surplus at above 5 percent of GDP in 2012, according to the IMF.¹¹

In Germany, there has been an ongoing debate on the underlying reasons for this development. Two elements are usually noted. First, the highly specialised German manufacturing sector was especially well-positioned to benefit from the growth of large emerging markets such as Brazil, China, and Russia. As Germany exports mainly capital equipment, industrial chemicals, and (upmarket) cars, the investment surge in the emerging markets and

the emergence of a large middle-class craving luxury goods has pushed up demand for German products abroad. In particular, since the onset of the euro crisis, this has also been credited in the public debate to the high quality of German products and German talents, as well as the high standards of the German stock of knowledge.

Second, an element that is often quoted and hotly debated among academics has been the increased price competitiveness of German companies, especially compared to other eurozone countries such as France. Measured in nominal unit labour costs, Germany has improved its price competitiveness relative to the rest of the eurozone by more than 10 percent (see Figure 2). Relative to some countries in the eurozone periphery such as Spain or Italy, the improvement has been a remarkable 25 percent. As can be seen when looking at the two elements of unit labour costs – nominal wages and productivity growth – this increase in competitiveness was not the result of large increases in productivity but from nominal wage restraint (in fact, growth in labour productivity in Germany was significantly lower in the 2000s than it had been earlier – see Figure 3).

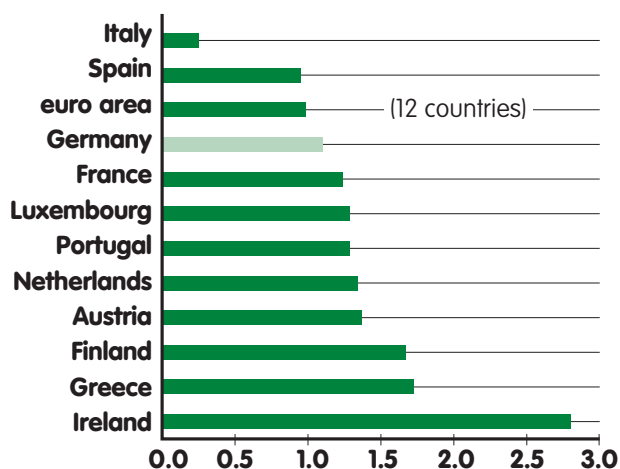
Figure 2
 Nominal unit labour costs Eurozone = 100



Source: AMECO database

¹¹ Of course, large current account surpluses are highly problematic, as they endanger the stability of the global and European economy. However, as these surpluses are generally perceived in the public debate as "successes", they will be treated as such in this paper.

Figure 3
Average Annual Productivity Growth
1999 to 2010, in %



Source: AMECO database

In Germany, there has been a controversial debate about how far this wage restraint has been at the heart of the country's large and persistent current account surpluses. While some claim that the significant improvement of German companies' prices had a decisive impact on the current account position, others point to weak aggregate demand, especially in investment or to capital flows as determinants of overall current account balances.¹²

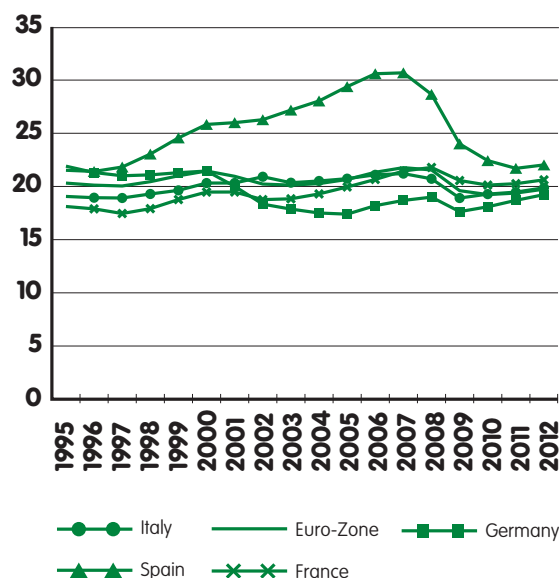
In fact, there are some very plausible reasons that, in addition to the improvement in price competitiveness, other factors also played an important role in Germany's strong export growth and the large improvement in the current account position. First, Germany has almost certainly benefited from its unique geographical position between a high-income, highly integrated European market (that is, the old EU member states) and poorer new EU member states that joined the single market only in 2004 and subsequently experienced an especially strong increase in their import demand.

Second, there are crucial indications that Germany's high current account surpluses are the product of weak domestic demand as much as superior price competitiveness. Just by accounting logic, weak domestic absorption leads to higher net savings for the German economy and hence larger

¹² On German companies' prices as an explanation for Germany's current account surplus, see Sebastian Dullien, Hansjörg Herr, and Christian Kellermann, *Der gute Kapitalismus* (Bielefeld: Transcript, 2009) (hereafter, Dullien, Herr, and Kellermann, *Der gute Kapitalismus*) and J. Priewe, "Anmerkungen zu 'Irrungen und Wirrungen mit der Leistungsbilanzstatistik' von Georg Erber", *Wirtschaftsdienst*, Vol. 93 (1), pp. 52–59. On weak demand, see European Commission, Current account surpluses in the EU, *European Economy*, 9/2012. On capital flows, see G. Erber, "Irrungen und Wirrungen mit der Leistungsbilanzstatistik", *Wirtschaftsdienst*, Vol. 92 (7), pp. 465–470.

current account surpluses. While the weakness of German consumption has often been mentioned (and can be traced as a side effect of wage restraint), the persistent weakness in domestic investment is less well known. In fact, as can be seen in Figure 4, Germany's fixed asset formation as a share of GDP has underperformed the rest of the eurozone from 2000 onwards. It has sometimes been argued that this weak performance is related to the low profitability of the German corporate sector and hence shows the need for more wage restraint. But this argument is actually not very plausible given other data, especially on the profitability of German companies or the wage share, which all point to very good profit situations.¹³

Figure 4
Gross fixed investment Total economy,
in % of GDP



Source: AMECO database

If one looks in contrast into the details of the statistics on gross fixed capital formation, two elements stick out. First, public investment in Germany has been extremely weak. Net government investment fell from an already weak 0.4 percent of GDP in 1995 and actually turned negative in 2003, the year the Schröder reforms were passed. Only with the onset of the economic and financial crisis of 2008–9 (and the passage of large stimulus packages, which included significant public investment) did this component temporarily improve again. In fact, until the onset of the euro crisis (which depressed public investment in the crisis

¹³ Sachverständigenrat, 20 Punkte für mehr Wachstum und Beschäftigung, *Jahresgutachten 2002/2003*, Wiesbaden, 2002, p. 329; Sachverständigenrat, Chancen für einen stabilen Aufschwung, *Jahresgutachten 2010/2011*, Wiesbaden, 2010, p. 103.

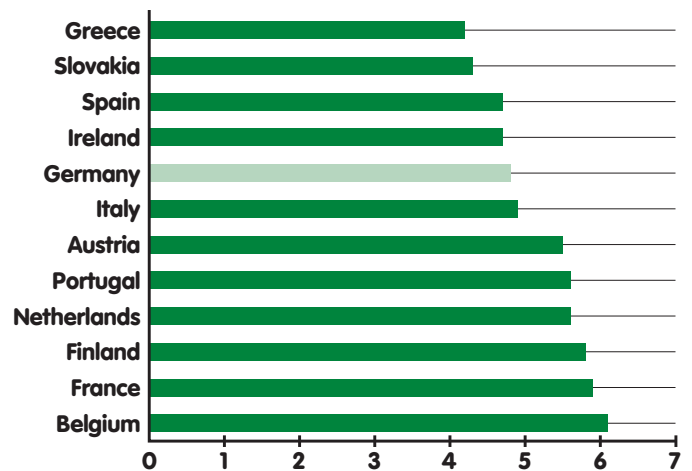
countries as they were forced to cut public expenditure), German public investment lagged significantly behind that of other EU member states. Second, investment in housing was extremely weak until 2008–9. This development can also be traced back to economic policy, as subsidies for individual home construction were repeatedly reduced in recent years and finally scrapped in 2006.¹⁴ Thus one can conclude that the current account surplus has been caused to a significant extent by tight fiscal policies.

However, the combination of austerity and wage restraint has not only helped to improve export performance and the current account position. It also had some important negative economic and social side effects. The most striking is low productivity growth. Labour productivity not only grew more slowly in the years 1999 to 2010 than in the past, it also underperformed most other eurozone countries (see Figure 4) as well as the United States. Modern growth theory would predict that countries can improve productivity in either of two ways. First, it can catch up to the technological frontier, and hence adapt technology, organisation, and management methods from further advanced economies. Second, it can invest in human capital and research and development. Given that Germany is already rather close to the technological frontier, the latter option is especially relevant for it. However, compared to other European countries, spending on education and research and development combined is only mediocre (see Figure 5). In fact, Germany is in a similar league to countries such as Italy and Spain and only slightly ahead of Slovakia and Greece – all countries with a long record of underinvestment in education.

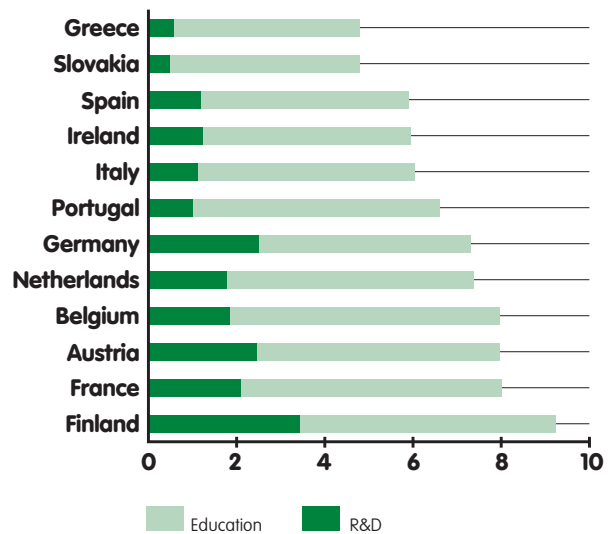
Finally, over the past decade, Germany has developed one of the largest low-wage sectors in Europe. In 2008, almost seven million Germans, or almost 20 percent of all employees, worked for low wages (defined as wages below €9 per hour).¹⁵ The lower two quintiles saw their real wages fall between 2000 and 2006.¹⁶ Even though the German wage-bargaining system has not been touched by the reforms, it can be argued that this growth in the low-wage sector is at least partly a result of the Schröder labour market reforms. German unions and employers have always taken the labour market situation in different segments into account when negotiating wages; moreover, important parts of low-wage industries have not been covered under the collective-bargaining contracts since the early 1990s.

Thus it can be argued that, in this segment of the market, a simple neoclassical supply-and-demand analysis can be applied to wage setting (albeit with a delayed adjustment

Figure 5
Spending on education 2006,
in % of GDP



Spending on education and R&D 2006,
in % of GDP



Source: OECD

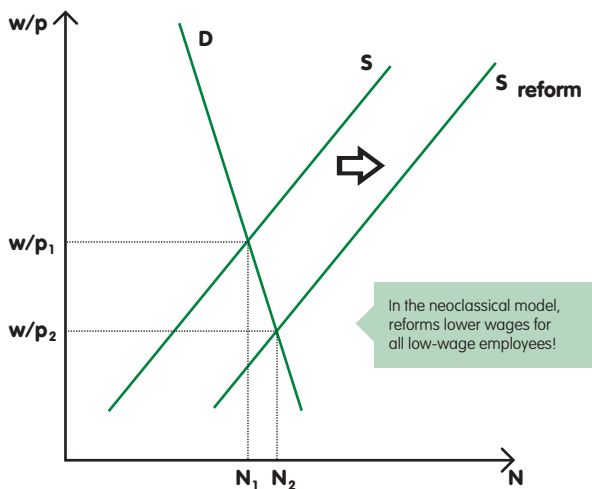
towards equilibrium, as existing nominal wages are usually sticky). The impact of the reforms on this labour market segment has been twofold: first, they have increased the supply of low-wage workers as pressure has been put on workers to take up employment even if the job does not adequately match their qualifications; second, the reforms have lowered the reservation wage, as the new rules allowed for social security to top up low-wage earning, effectively introducing a de facto low-wage subsidy. This has further increased supply in the labour market, which has led to a fall of real wages in the low-wage sector. Figure 6 shows this process in a simple supply-and-demand diagram of the

¹⁴ See Sebastian Dullien and Mark Schieritz, "Die deutsche Investitionsschwäche: Die Mär der Standortprobleme", *Wirtschaftsdienst*, Vol. 91 (7), pp. 458–464. Jahresgutachten 2010/2011, Wiesbaden, 2010, p. 103.

¹⁵ See Thorsten Kalina and Claudia Weinkopf, *Niedriglohnbeschäftigung 2008: Stagnation auf hohem Niveau – Lohnspektrum franst nach unten aus*, IAQ Report 1010–06, Essen, 2010.

¹⁶ See Dullien, Herr, and Kellermann, *Der gute Kapitalismus*.

Figure 6
Supply and demand diagram for low-wage sector



Source: Own elaboration

low-wage sector: the supply curve has shifted to the right, lowering the real-wage for *all* low-qualified workers, while at the same time the number of hours worked in this sector has increased.

What if everyone followed the German approach?

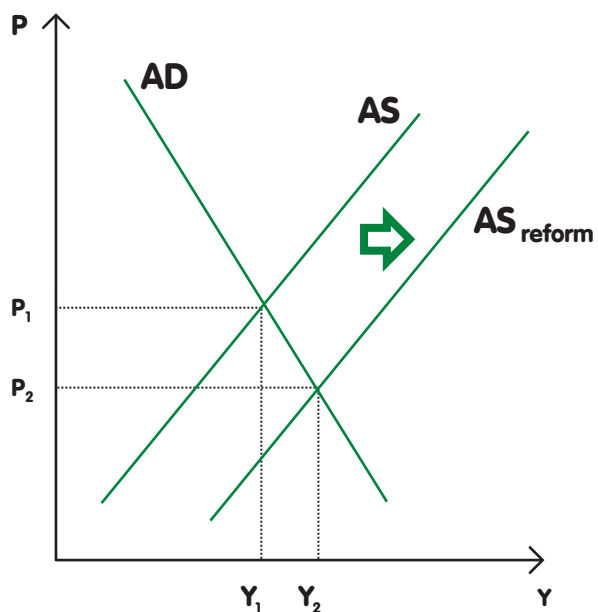
Especially since 2010, other European countries have frequently been told to follow the German model and pass similar reforms to Germany. However, Germany’s economic success does not necessarily make it a blueprint for everyone. To remain in the German tradition of thought, we can put this argument into the language of the philosopher Immanuel Kant, whose categorical imperative states: “Act only according to the maxim whereby you can, at the same time, will that it should become a universal law.” So how well do Germany’s reforms fare by these standards? What would happen if all countries in Europe followed the German approach?

For the rather low investment in research and development as well as in education, the answer is pretty straightforward. According to a large share of the broad body of literature of the New Growth Theory, technological progress is closely linked to spending on research and development as well as education.¹⁷ Moreover, technological progress usually has

positive spillover effects to the countries with which an innovating country is trading.¹⁸ Translated to Europe, this means that following the German pattern of low spending on research and development and education would mean a much lower rate of technological progress and hence lower long-term growth rates than would be otherwise possible. Against the background of the (admittedly now largely defunct) Lisbon Agenda, this means moving further away from the idea of making Europe the most technologically advanced region in the world.

The second important element of the German model has been nominal (and consequently real) wage moderation. Here again, the important question is what would happen if every country in Europe were to follow this approach. However, the answer to this question depends crucially on the economic paradigm one adheres to. In approaches based on the standard neoclassical textbook models, such as the neoclassical synthesis or AS–AD model, a fall in nominal wages usually leads to higher output, as it brings the actual real wage closer in line with the equilibrium real wage compatible with full employment. The fall in nominal wages would hence shift the AS curve to the right, as shown in Figure 7.

Figure 7
Impact of wage restraint on output and prices in the AS-AD model



Source: Own elaboration

¹⁷ Standard references include Paul M. Romer, “Endogenous Technological Change”, *Journal of Political Economy*, Vol. 98 (5), 1990, pp. 71–102; Gene M. Grossman and Elhanan Helpman, *Innovation and Growth in the Global Economy* (Cambridge: MIT Press, 1991); Philippe Aghion and Peter Howitt, “A Model of Growth Through Creative Destruction”, *Econometrica*, Vol. 60 (2), 1992, pp. 323–351.

¹⁸ Wolfgang Keller, “International Technology Diffusion”, *Journal of Economic Literature*, Vol. 42(3), 2004, pp. 752–82.

According to some economists, a fall in nominal wages might also increase aggregate demand.¹⁹ The implicit logic here is that lower nominal wages lead to lower prices. With a fixed nominal money stock, these lower prices translate to higher real money holdings (M/P) and, through the Keynes effect or the Pigou effect, to higher investment demand or higher consumption demand and hence to overall higher aggregate demand and higher output.²⁰ If one follows this interpretation, falling nominal and real wages and consequently a falling price level in the eurozone as a whole would be beneficial, leading to higher output.

The problem with this approach, however, is that a broad body of literature questions whether the nominal money stock can be seen as exogenously fixed and as net wealth of the private sector. If money is mostly endogenous, falling prices in a closed economy do not increase aggregate demand.²¹ Instead, in situations of fragile banking systems (which one can well argue is the case in Europe at the moment), falling prices lead to debt deflation which creates problems in the financial system, leading to less credit supply and hence *lower* aggregate demand.

If only one country in a monetary union follows such a deflationary policy, this counter-argument against wage deflation is less important. Here, a deflationary wage policy might well increase aggregate demand for the country's products as the country gains market shares from its trading partners (a typical beggar-thy-neighbour policy of real devaluation), compensating for weak domestic demand. This is exactly what critics of Germany say it has done since the middle of the past decade. However, if such a deflationary wage policy were followed by all eurozone countries, the negative effect on aggregate demand might dominate. Thus employment effects from nominal wage restraints can be expected to be much less beneficial for the eurozone as a whole than for Germany alone.

Conclusion

Germany's success – its large current account surplus, low unemployment rate, and acceptable economic growth – is the product of a combination of nominal wage restraint, supported by labour market reforms that have brought down the reservation wage and have put downward pressure on wages, and severe spending restraints on public investment as well as on research and development and education. On the whole, this cannot serve as a blueprint for Europe. Some of the elements of the German model have negative externalities on Germany's partners in Europe; others depress economic growth at home.

The nominal wage restraint bears elements of a beggar-thy-neighbour policy which could even turn into a negative-sum game if followed by all European countries. The reluctance to spend on research and development and education lowers potential growth rates not only in Germany, but through the existence of spillover effects also in the rest of Europe as the overall technological progress slows. This effect would be amplified if everyone acted similarly. Finally, weak spending on public infrastructure lowers the potential for productivity increases at home.

In short, rather than trying to copy the German approach as a whole, European leaders should carefully examine which of the elements of German reforms could actually increase productivity, output, and employment without detrimental effects on the partners or on long-term growth.

¹⁹ See Fabrizio Coricelli, Alex Cukierman, and Alberto Dalmazzo, "Monetary Institutions, Monopolistic Competition, Unionized Labor Markets and Economic Performance", *Scandinavian Journal of Economics*, Vol. 108 (1), 2008, pp. 39–63; David Soskice and Torben Iversen, "The Non-Neutrality of Monetary Policy with Large Price Setters", the *Quarterly Journal of Economics*, Vol. 115, 2000, pp. 265–284.

²⁰ For a more detailed description of these underlying assumptions and a criticism from an endogenous-money perspective, see Sebastian Dullien, *The Interaction of Monetary Policy and Wage Bargaining in European Monetary Union* (Houndsmill: Macmillan Palgrave, 2004).

²¹ See Sebastian Dullien, *The Interaction of Monetary Policy and Wage Bargaining in European Monetary Union*.

About the author

Sebastian Dullien is a Senior Policy Fellow at the European Council on Foreign Relations and a Professor of International Economics at HTW Berlin, the University of Applied Sciences. From 2000 to 2007 he worked as a journalist for the *Financial Times Deutschland*, first as a leader writer and then on the economics desk. He writes a monthly column in the German magazine *Capital* and is a regular contributor to Spiegel Online. His publications for ECFR include *What is Political Union?* (with José Ignacio Torreblanca, 2012) and *Why the euro crisis threatens the European Single Market* (2012).

Acknowledgements

This brief benefitted from a panel discussion in Berlin in June 2013 and discussions at a workshop jointly with the Konrad-Adenauer-Stiftung and the Confederation Lewiatan in Warsaw, also in June 2013, in which the merits and problems of the German model were discussed. The author benefitted from discussions at a workshop in Rome held in cooperation of the Scuola Superiore Sant'Anna and the German Embassy in Rome in July 2011. The author would also like to thank Stefan Collignon, Torsten Niechoj, Ulrich Fritsche and Peter Bofinger for useful comments. The brief has also benefitted from ongoing discussions within the ECFR, especially with Olaf Boehnke, Piotr Buras, Ulrike Guérot, Thomas Klau, Hans Kundnani, Mark Leonard and José Ignacio Torreblanca. Last but not least, the ECFR team in London, in particular Alba Lamberti, Nicholas Walton and Alexia Gouttebroze, made the internal publication process swift and smooth, while Hans Kundnani's editing has brought clarity to the language of this brief.

ABOUT ECFR

The **European Council on Foreign Relations** (ECFR) is the first pan-European think-tank. Launched in October 2007, its objective is to conduct research and promote informed debate across Europe on the development of coherent, effective and values-based European foreign policy.

ECFR has developed a strategy with three distinctive elements that define its activities:

- **A pan-European Council.** ECFR has brought together a distinguished Council of over two hundred Members – politicians, decision makers, thinkers and business people from the EU's member states and candidate countries – which meets once a year as a full body. Through geographical and thematic task forces, members provide ECFR staff with advice and feedback on policy ideas and help with ECFR's activities within their own countries. The Council is chaired by Martti Ahtisaari, Joschka Fischer and Mabel van Oranje.
- **A physical presence in the main EU member states.** ECFR, uniquely among European think-tanks, has offices in Berlin, London, Madrid, Paris, Rome, Sofia and Warsaw. In the future ECFR plans to open an office in Brussels. Our offices are platforms for research, debate, advocacy and communications.
- **A distinctive research and policy development process.** ECFR has brought together a team of distinguished researchers and practitioners from all over Europe to advance its objectives through innovative projects with a pan-European focus. ECFR's activities include primary research, publication of policy reports, private meetings and public debates, 'friends of ECFR' gatherings in EU capitals and outreach to strategic media outlets.

ECFR is a registered charity funded by the Open Society Foundations and other generous foundations, individuals and corporate entities. These donors allow us to publish our ideas and advocate for a values-based EU foreign policy. ECFR works in partnership with other think tanks and organisations but does not make grants to individuals or institutions.

www.ecfr.eu

ALSO AVAILABLE FROM ECFR

New World Order: The Balance of Soft Power and the Rise of Herbivorous Powers
Ivan Krastev and Mark Leonard, October 2007 (ECFR/01)

A Power Audit of EU-Russia Relations
Mark Leonard and Nicu Popescu, November 2007 (ECFR/02)

Poland's second return to Europe?
Pawel Swieboda, December 2007 (ECFR/03)

Afghanistan: Europe's forgotten war
Daniel Korski, January 2008 (ECFR/04)

Meeting Medvedev: The Politics of the Putin Succession
Andrew Wilson, February 2008 (ECFR/05)

Re-energising Europe's Security and Defence Policy
Nick Witney, July 2008 (ECFR/06)

Can the EU win the Peace in Georgia?
Nicu Popescu, Mark Leonard and Andrew Wilson, August 2008 (ECFR/07)

A Global Force for Human Rights? An Audit of European Power at the UN
Richard Gowan and Franziska Brantner, September 2008 (ECFR/08)

Beyond Dependence: How to deal with Russian Gas
Pierre Noel, November 2008 (ECFR/09)

Re-wiring the US-EU relationship
Daniel Korski, Ulrike Guérot and Mark Leonard, December 2008 (ECFR/10)

Shaping Europe's Afghan Surge
Daniel Korski, March 2009 (ECFR/11)

A Power Audit of EU-China Relations
John Fox and François Godement, April 2009 (ECFR/12)

Beyond the "War on Terror": Towards a New Transatlantic Framework for Counterterrorism
Anthony Dworkin, May 2009 (ECFR/13)

The Limits of Enlargement-lite: European and Russian Power in the Troubled Neighbourhood
Nicu Popescu and Andrew Wilson, June 2009 (ECFR/14)

The EU and human rights at the UN: 2009 annual review
Richard Gowan and Franziska Brantner, September 2009 (ECFR/15)

What does Russia think?
edited by Ivan Krastev, Mark Leonard and Andrew Wilson, September 2009 (ECFR/16)

Supporting Moldova's Democratic Transition
Nicu Popescu, October 2009 (ECFR/17)

Can the EU rebuild failing states? A review of Europe's Civilian Capacities
Daniel Korski and Richard Gowan, October 2009 (ECFR/18)

Towards a Post-American Europe: A Power Audit of EU-US Relations
Jeremy Shapiro and Nick Witney, October 2009 (ECFR/19)

Dealing with Yanukovich's Ukraine
Andrew Wilson, March 2010 (ECFR/20)

Beyond Wait-and-See: The Way Forward for EU Balkan Policy
Heather Grabbe, Gerald Knaus and Daniel Korski, May 2010 (ECFR/21)

A Global China Policy
François Godement, June 2010 (ECFR/22)

Towards an EU Human Rights Strategy for a Post-Western World
Susi Dennison and Anthony Dworkin, September 2010 (ECFR/23)

The EU and Human Rights at the UN: 2010 Review
Richard Gowan and Franziska Brantner, September 2010 (ECFR/24)

The Spectre of a Multipolar Europe
Ivan Krastev & Mark Leonard with Dimitar Bechev, Jana Kobzova & Andrew Wilson, October 2010 (ECFR/25)

Beyond Maastricht: a New Deal for the Eurozone
Thomas Klau and François Godement, December 2010 (ECFR/26)

The EU and Belarus after the Election
Balázs Jarábik, Jana Kobzova and Andrew Wilson, January 2011 (ECFR/27)

After the Revolution: Europe and the Transition in Tunisia
Susi Dennison, Anthony Dworkin, Nicu Popescu and Nick Witney, March 2011 (ECFR/28)

European Foreign Policy Scorecard 2010
March 2011 (ECFR/29)

The New German Question: How Europe can get the Germany it needs
Ulrike Guérot and Mark Leonard, April 2011 (ECFR/30)

Turning Presence into Power: Lessons from the Eastern Neighbourhood
Nicu Popescu and Andrew Wilson, May 2011 (ECFR/31)

Egypt's Hybrid Revolution: a Bolder EU Approach
Anthony Dworkin, Daniel Korski and Nick Witney, May 2011 (ECFR/32)

A Chance to Reform: How the EU can support Democratic Evolution in Morocco
Susi Dennison, Nicu Popescu and José Ignacio Torreblanca, May 2011 (ECFR/33)

China's Janus-faced Response to the Arab Revolutions
Jonas Parello-Plesner and Raffaello Pantucci, June 2011 (ECFR/34)

What does Turkey think?
Edited by Dimitar Bechev, June 2011 (ECFR/35)

What does Germany think about Europe?
Edited by Ulrike Guérot and Jacqueline Hénard, June 2011 (ECFR/36)

The Scramble for Europe
François Godement and Jonas Parello-Plesner with Alice Richard, July 2011 (ECFR/37)

Palestinian Statehood at the UN: Why Europeans Should Vote "Yes"
Daniel Levy and Nick Witney, September 2011 (ECFR/38)

The EU and Human Rights at the UN: 2011 Review
Richard Gowan and Franziska Brantner, September 2011 (ECFR/39)

How to Stop the Demilitarisation of Europe
Nick Witney, November 2011 (ECFR/40)

Europe and the Arab Revolutions: A New Vision for Democracy and Human Rights
Susi Dennison and Anthony Dworkin, November 2011 (ECFR/41)

Spain after the Elections: the "Germany of the South"?
José Ignacio Torreblanca and Mark Leonard, November 2011 (ECFR/42)

Four Scenarios for the Reinvention of Europe
Mark Leonard, November 2011 (ECFR/43)

Dealing with a Post-Bric Russia
Ben Judah, Jana Kobzova and Nicu Popescu, November 2011 (ECFR/44)

Rescuing the euro: what is China's price?
François Godement, November 2011 (ECFR/45)

A "Reset" with Algeria: the Russia to the EU's South
Hakim Darbouche and Susi Dennison, December 2011 (ECFR/46)

Ukraine after the Tymoshenko verdict
Andrew Wilson, December 2011 (ECFR/47)

European Foreign Policy Scorecard 2012
February 2012 (ECFR/48)

The Long Shadow of Ordoliberalism: Germany's Approach to the Euro Crisis
Sebastian Dullien and Ulrike Guérot, February 2012 (ECFR/49)

The End of the Putin Consensus
Ben Judah and Andrew Wilson, March 2012 (ECFR/50)

Syria: Towards a Political Solution
Julien Barnes-Dacey, March 2012 (ECFR/51)

How the EU Can Support Reform in Burma
Jonas Parello-Plesner, March 2012 (ECFR/52)

China at the crossroads
François Godement, April 2012 (ECFR/53)

Europe and Jordan: Reform before it's too late
Julien Barnes-Dacey, April 2012 (ECFR/54)

China and Germany: Why the Emerging Special Relationship Matters for Europe
Hans Kundnani and Jonas Parello-Plesner, May 2012 (ECFR/55)

After Merkozy: How France and Germany Can Make Europe Work
Ulrike Guérot and Thomas Klau, May 2012 (ECFR/56)

The EU and Azerbaijan: Beyond Oil
Jana Kobzova and Leila Alieva, May 2012 (ECFR/57)

A Europe of Incentives: How to Regain the Trust of Citizens and Markets
Mark Leonard and Jan Zielonka, June 2012 (ECFR/58)

The Case for Co-operation in Crisis Management
Richard Gowan, June 2012 (ECFR/59)

The Periphery of the Periphery: The Western Balkans and the Euro Crisis
Dimitar Bechev, August 2012 (ECFR/60)

Lebanon: Containing Spillover from Syria
Julien Barnes-Dacey, September 2012 (ECFR/61)

A Power Audit of EU-North Africa Relations
Nick Witney and Anthony Dworkin, September 2012 (ECFR/62)

Transnistria: A Bottom-up Solution
Nicu Popescu and Leonid Litra, September 2012 (ECFR/63)

Why the Euro Crisis Threatens the European Single Market
Sebastian Dullien, October 2012 (ECFR/64)

The EU and Ukraine after the 2012 Elections
Andrew Wilson, November 2012 (ECFR/65)

China 3.0
Edited by Mark Leonard, November 2012 (ECFR/66)

Time to grow up: what Obama's re-election means for Europe
Dimitar Bechev, Anthony Dworkin, François Godement, Richard Gowan, Hans Kundnani, Mark Leonard, Daniel Levy, Kadri Liik and Nick Witney, November 2012 (ECFR/67)

Jordan Tremors: Elusive consensus, deepening discontent
Julien Barnes-Dacey, November 2012 (ECFR/68)

The EU, Algeria and the Northern Mali Question
Susi Dennison, December 2012 (ECFR/69)

What is Political Union?
Sebastian Dullien and José Ignacio Torreblanca, December 2012 (ECFR/70)

Shooting In The Dark? EU Sanctions Policies
Konstantin Gebert, January 2013 (ECFR/71)

The New Political Geography of Europe
edited by Nicholas Walton and Jan Zielonka, January 2013 (ECFR/72)

European Foreign Policy Scorecard 2013
February 2013 (ECFR/73)

The Struggle for Pluralism after the North African Revolutions
Anthony Dworkin, March 2013 (ECFR/74)

Georgia's bumpy transition: How the EU can help
Jana Kobzova, April 2013 (ECFR/75)

Egypt, the IMF and European Economic Assistance
Farah Halime, April 2013 (ECFR/76)

Europe's Strategic Cacophony
Olivier de France and Nick Witney, April 2013 (ECFR/77)

Europe and The Vanishing Two-State Solution
Nick Witney, May 2013 (ECFR/78)

The Continent-Wide Rise of Euroscepticism
Jose Ignacio Torreblanca and Mark Leonard, May 2013 (ECFR/79)

Syria: the Imperative of De-Escalation
Julien Barnes-Dacey and Daniel Levy, May 2013 (ECFR/80)

Regime change in Russia
Kadri Liik, May 2013 (ECFR/81)

A Comprehensive Approach to Investment Protection
Jonas Parello-Plesner and Elena Ortiz de Solórzano, June 2013 (ECFR/82)

The European Council on Foreign Relations does not take collective positions. This paper, like all publications of the European Council on Foreign Relations, represents only the views of its authors.

Copyright of this publication is held by the European Council on Foreign Relations. You may not copy, reproduce, republish or circulate in any way the content from this publication except for your own personal and non-commercial use. Any other use requires the prior written permission of the European Council on Foreign Relations

© ECFR June 2013.

ISBN: 978-1-906538-83-5

Published by the European Council on Foreign Relations (ECFR),
35 Old Queen Street, London,
SW1H 9JA, United Kingdom

london@ecfr.eu