De Economist (2015) 163:461–472
DOI 10.1007/s10645-015-9262-z

The Labour Market in Germany: Reforms, Recession and Robustness

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Published online: 12 October 2015

Abstract This article discusses the German labour market development during the Great Recession as well as in the years before and until 2015. Germany's labour market witnessed a strong upswing during the recent decade and performed remarkably well in the Great Recession. Structural reforms before the crisis had improved the functioning of the labour market and initiated a solid upward trend that also helped overcome the crisis. High establishment-level flexibility allowed buffering the severe drop in GDP. While the employment upswing continued until today, critical developments concerned the increase in atypical jobs, weak wage growth and rising inequality.

Keywords Labour market · Germany · Unemployment · Great Recession · Hartz reforms

JEL Classification E32 · J23 · J64

I am grateful to Hans Dietrich, Sabine Klinger, Jan van Ours as well as participants of the 2015 conference on "Unemployment: the Great Recession and Beyond" in The Hague (organised by CPB Netherlands Bureau for Economic Policy Analysis and the Dutch Ministry of Social Affairs and Employment in cooperation with De Economist) for valuable comments and support. Franziska Kreß provided excellent research assistance.

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1 Introduction

Germany's labour market development stands in sharp contrast to repercussions of the recent economic crises both in the US and Europe. Since the 1970s Germany witnessed long-lived trends of labour market slack. These trends could be reversed in the last decade, unemployment fell rapidly. In the following, the Great Recession went by without causing substantial harm to employment. While many European countries suffered a second recession wave with the upcoming European debt crisis, strong job growth in Germany continued until the recent past.

This remarkable development makes Germany an interesting case for macro-labour research. Internationally, the discussion shows strongly differing positions. On the one hand, it is debated in how far Germany with its recent success can provide a model for others being plagued by severe and persistent labour market problems. On the other hand, Germany's economic course since the 1990s is seen as having induced disequilibria that aggravated the crisis in Europe.

This article gives on overview of the German labour market development during the recent period of crises. A special focus lies on structural macroeconomic explanations for the observed phenomena. Therefore, also the previous period is covered in order to shed light on the roots of the much-discussed remarkable labour market performance.

Section 2 provides descriptive evidence on German unemployment, its development and its structure. Subsequently, the labour market performance during the Great Recession is examined. Section 4 stresses the role of previous labour market reforms, whereas Sect. 5 directs the attention to critical developments that accompanied the upswing. The last section concludes.

2 Unemployment in Germany

Since the 1970s, unemployment in Germany had been rising for decades. Technological change and pressure on the traditional industrial structure, but also institutional weaknesses stand behind this development. Particularly, the trend was driven by substantial hysteresis effects of cyclical unemployment, in contrast e.g. to the US (Klinger and Weber 2015a). These problems in the labour market were aggravated by the difficult transition process of Eastern Germany after the reunification.

Figure 1 shows that the upward trend could only be reversed in 2005 when unemployment had reached 12 % of five million persons. In the following, unemployment as well as long-term unemployment could be reduced by nearly 50 %. For the first time since reunification also the situation in the East German labour market improved.

In the Great Recession, German unemployment rose only slightly (by 0.3 % points from 2008 to 2009). Obviously, this stands in stark contrast to many OECD countries. It is remarkable especially when the strong decline of economic activity in Germany by nearly 6 % is considered. By the same token, long-term unemployment did not increase, the effects remained cyclical. Immediately after the crisis, unemployment continued falling until 2011. Since then, no further significant changes occurred.

Over decades, unemployment increased above all for the low qualified (Fig. 1). Even after the German labour market upswing, it amounts to nearly 20 %. For those with

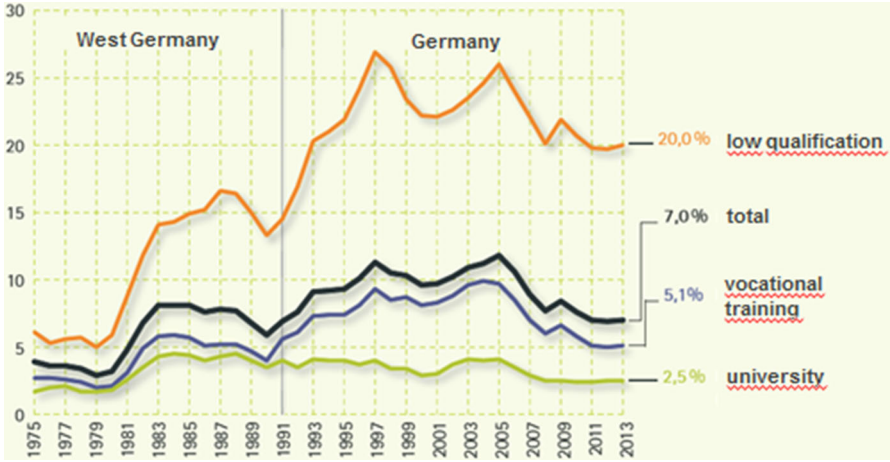

Fig. 1 Unemployment rates by qualification (in percent). *Source*: IAB

occupational qualifications—that traditionally play an important role in Germany—the rate lies 15 % points lower. In the segment of academic qualifications, the labour market situation is even not far from full employment. This segment also has grown considerably from 12 % of total employment in 1991 to 20 % in 2013. Reversely, the share of the occupational segment decreased from 72 to 64 % (but this process ended in 2005). The share of the low qualified remained largely stable at 14 %.

In general, these facts demonstrate that qualification—in Germany especially formal qualification—is key for the understanding of unemployment. While in the middle and upper segments, unemployment beyond what is implied by usual job search is quite limited, structural unemployment mainly concerns the low qualified. Further analysis reveals that within this group, variation of unemployment rates by school-leaving qualification is again substantial.

In many European countries, in particular youth unemployment emerged as a severe and urging problem. Also in Germany, incidence of unemployment is higher at the start of the career, due to frictions in the transition from the qualification system and high incidence of temporary jobs. However, as Fig. 2 shows, the unemployment rate (as measured by the Labour Force Survey) of those younger than 25 is quite moderate with about 8 %. The rate relative to the size of the whole age group (i.e., including those in education) is only half as high. In fact, today clearly <10 % of all unemployed are younger than 25 years, with declining tendency. In contrast, since 2003 the share of older unemployed has doubled to more than 20 %. While obviously demographic change plays a role here, job chances of unemployed older than 55 years remain rather low in Germany with about 3 % per month.

Figure 2 clarifies that youth unemployment is of another order of priority than abroad. While in Germany, the rate has been decreasing since 2005, the European Union (EU) witnessed a strong increase since the Great Recession. This development brought potential advantages of the German vocational education system on the agenda. Indeed, the German system with its practical orientation and establishment-

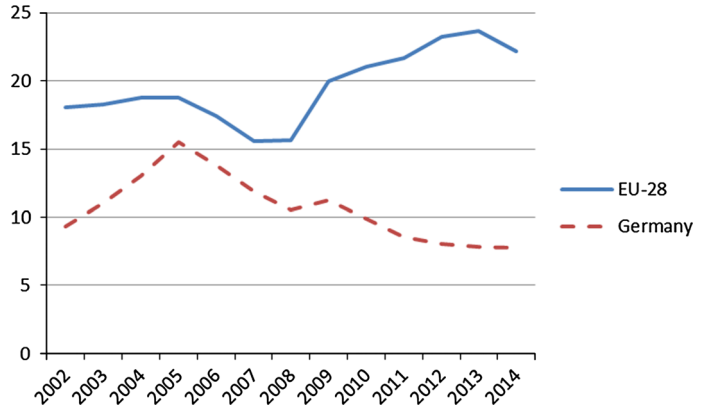

Fig. 2 Youth unemployment rates (in percent). *Source*: Labour Force Survey

based organisation has its strengths in contributing to an efficient transition from qualification to the job market. Furthermore, the public employment services provide a rather comprehensive structure of qualification and counselling measures. On the other hand, the unemployment gap between Germany and the EU is by no means confined to the young age group, so that differences in youth-specific institutions should not be overvalued as an explanation. In view of the digitalisation process of the economy, the German vocational education system still faces the challenge to strengthen its flexibility in addition to its well-established hands-on components.

3 The Great Recession

In the Great Recession Germany experienced a dramatic GDP decline of nearly 6 % from 2008 to 2009. Having its origins in the US subprime crisis, the recession hit hard the industrial and export sector in Germany. While severe labour market reactions had widely been expected by that time, almost no increase of unemployment occurred. In fact, the number of workers was hardly (and in annual averages not at all) reduced during the crisis.

Instead, as Fig. 3 shows, firms translated the breakdown of aggregate demand into reductions of hours per employee (−3.8 %) and production per hour (i.e., productivity; −2.6 %). In other words, the internal margin was crucial in cushioning the recession effects and preventing layoffs. In contrast, the time series evidence makes clear that in none of the previous recessions (1992–1993 and 2001–2003), similar reductions in productivity and hours per capita (beyond the trend coming from continuous growth of part-time jobs) occurred. In so far, the Great Recession was unique in Germany.

That said, it holds also true that the internal margin explains the complete development on an aggregate, but not on an establishment basis. Most importantly, the service sector (except temporary agency employment) continued increasing employment (+1.1 % in 2009) while reductions were common in the production sector (−2.5 %) and substantial in temporary agency employment (−15 %).

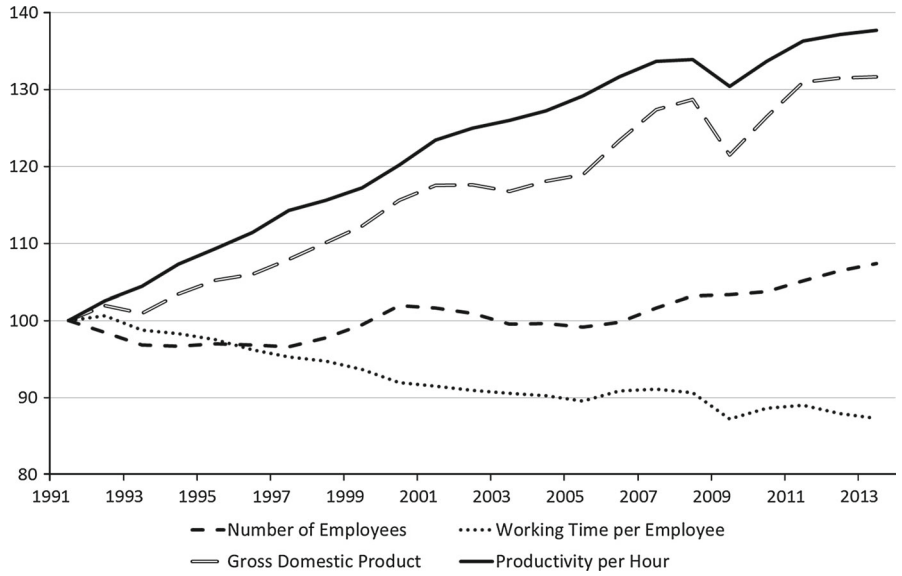

Fig. 3 Production-side decomposition of GDP (indices). *Source*: destatis, IAB Working Time Accounts

The adjustment of working time per capita was facilitated by several flexible instruments. Great attention received the short-time work programme called kurzarbeit (e.g. Bellmann et al. 2010). Here, the income effect of reducing hours per worker is partly replaced by the unemployment insurance. The desired effect is to strengthen the willingness to hoard labour in order to limit the number of layoffs. While the programme was also in place before the Great Recession, as a discrete measure, the maximum duration of kurzarbeit was increased in the crisis. kurzarbeit stands for about one fifth of the total hours reduction in the crisis (Fig. 4). Compared to previous recessions, its use was not extraordinary (Fujita and Gartner 2014). While kurzarbeit undoubtedly contributed to buffering the crisis impact, potential disadvantages such as deadweight effects, delay of structural adjustments and incentives against job creation must be taken into account.

Figure 4 clarifies that the working time reduction resulted from the use of a multitude of instruments (compare also Möller 2010). The regular weekly working time decreased substantially. This was enabled by flexible arrangements at the level of establishments and collective wage bargaining. Exemption clauses and company-level pacts supported working time reactions. In general, the national bargaining system had become more decentralized. The coverage of working time accounts has expanded a lot in German firms to more than 50 % of all employees. In the Great Recession, the accounts were broadly utilised (Herzog-Stein and Zapf 2014) and proved their usefulness for buffering the sharp drop in new orders. By the same token, overtime was strongly reduced.

Moreover, employment protection legislation could have played a role for the performance of the German labour market in the crisis. Regulations are rather strict in an international comparison, which might have prevented or at least postponed layoffs.

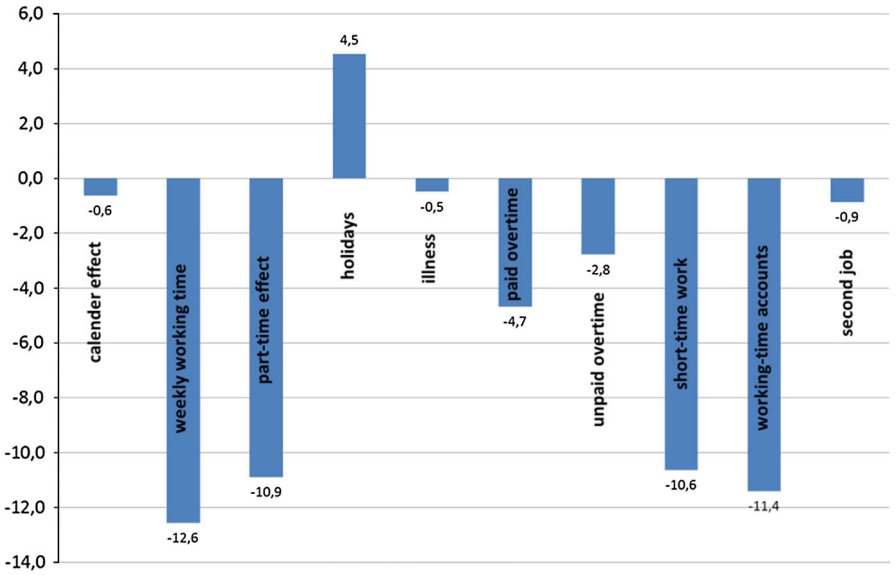

Fig. 4 Decomposition of 2009 working time change (in hours per capita). *Source*: IAB Working Time Accounts

Nevertheless, both kurzarbeit and employment protection legislation had also been present in earlier recessions that were accompanied by far more detrimental employment effects. However, as an important difference, for Germany the Great Recession represented an exogenous demand shock and had no characteristics of a structural crisis (except for parts of the financial sector). This explains the strong use of flexible instruments and firms' willingness to bear the costs associated with adjusting working time and above all accepting substantial productivity slack. By the same token, Germany just had experienced an extraordinary economic upswing that had filled financial and working time buffers in the establishments (compare also Burda and Hunt 2011 for the role of the pre-crisis boom). Obviously, when judging the role of institutions, interactions with the general state of the economy must be taken into account.

4 Labour Market Reforms

Besides crisis-related measures, reforms initially unrelated to the crisis explain Germany's performance in the Great Recession. In 2003–2005, fundamental labour market reforms, called Hartz reforms, were put into practice in Germany. The reforms consisted of three pillars: They increased the effectiveness of labour market services, e.g. by reorganisation of the public labour market service and the choice of instruments. They put more weight on activation and required higher self-responsibility. Subsidies for (self-) employment were provided, social benefits reduced and stronger search efforts claimed. Moreover, the labour market was deregulated, above all with regard to temporary agency work, fixed-term contracts, employment protection and minijobs.

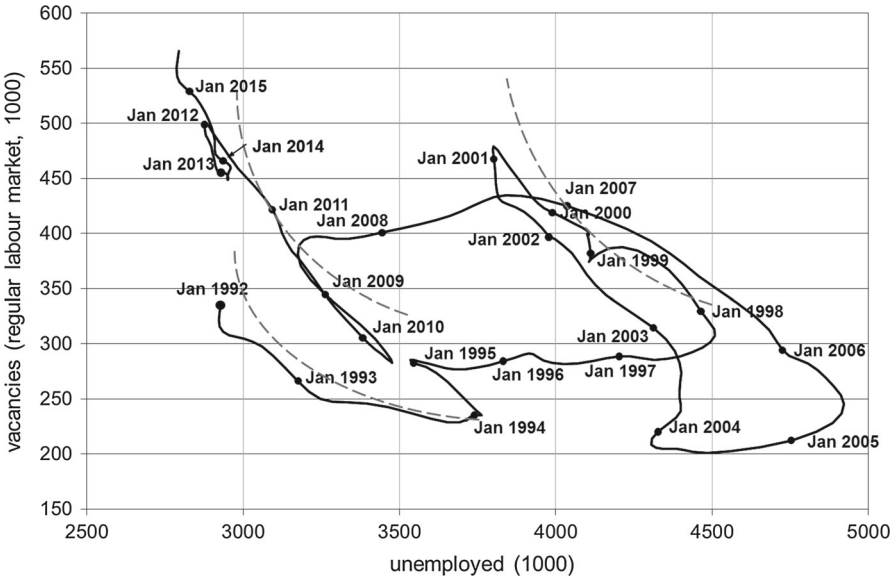

Fig. 5 Beveridge curve. *Source*: Statistics of the Federal Employment Agency, own calculations

The reforms affected both labour demand and supply as well as the matching process. Obviously, this bears the potential for triggering large-scale effects. Indeed, the reforms were followed by strong reactions on a macro basis (compare Fig. 1). These can be addressed in more depth using the concept of the Beveridge curve. In the unemployment-vacancies space a typical Beveridge curve is downward sloping. Movements along the curve are usually interpreted as related to business cycles, which increase vacancies and decrease unemployment. In contrast, shifts of the curve point at changes in the functioning of the labour market; for instance, unemployment can be reduced without rising unsatisfied labour demand.

Figure 5 shows that the reunification was followed by a substantial right shift as unemployment rose in the course of the transition process of Eastern Germany. The outward shift kept on for several years and thus cannot only be attributed to direct effects of the transition. Moreover, not being limited to East Germany, the effect must also be rationalised by structural and institutional reasons related to labour market sclerosis. However, the figure also reveals a pronounced inward shift of the Beveridge curve after 2005, which underlines that the German labour market upswing has a structural character. By the same token, the position on the Beveridge curve has persistently moved into the direction of higher labour market tightness (the upper left corner).

Several studies such as Fahr and Sunde (2009), Hertweck and Sigrist (2013), Klinger and Weber (2014) as well as Stops (2015) show that the efficiency of the matching process in the labour market strongly increased in the aftermath of the reforms. Klinger and Rothe (2012) demonstrate that long-term unemployment benefited from this development even more than proportionately. In a trend-cycle decomposition of the Beveridge curve, Klinger and Weber (2014) find a crucial role of the permanent component of matching efficiency (while e.g. the effects of the previous upswing in

1999/2000 were only cyclical). This cannot be explained by rising labour demand (following a strong business cycle and wage moderation), but is in line with institutional improvements in labour market functioning. By the same token, search intensity and concessions increased (e.g. Rebien and Kettner 2011). In contrast, GDP growth since the beginning of the German labour market upswing in 2005 was not more than mediocre in total. This stands against explaining the employment upswing by (especially export-boosted) output growth.

The strong reduction of unemployment was temporarily interrupted by the Great Recession and for the time being ended in 2011. On a much lower level, structural problems have become more visible since then. In contrast, employment continued rising even since 2012 in years with weak economic activity. At first glance, this seems to suggest a higher elasticity of employment with regard to GDP growth. Instead, Klinger and Weber (2015b) find a pronounced decrease of this elasticity from about 0.4 before 2008 to 0.2. Such a decrease is rather unsurprising in the Great Recession, since it reflects labour hoarding behaviour: a strong drop in GDP translates only weakly into the labour market. However, the decrease was not made up afterwards and even continued further. This implies that factors other than GDP must play a crucial role for employment. Indeed, Klinger and Weber (2015b) identify a component autonomous of GDP with large contributions to employment growth since 2007. This positive component was also present in the Great Recession and made up a large part of employment losses that normally would have resulted from the business cycle slump. Actually, the much discussed immunity of the German labour market to the crisis was not only due to labour hoarding (low GDP elasticity), but also due to GDP-independent upward trends that began before and continued through the recession. In fact, internationally, substantial reductions of working time in 2009 were not at all unique to Germany. However, while many other European countries went through a second dip in 2012/2013, Germany could avoid that, further profiting from its employment uptrend.

For these trends several factors can be seen as crucial, as further analysis in Klinger and Weber (2015b) underlines: Higher matching efficiency strengthened the capability of the labour market to fill vacancies and reduce unemployment, the service sector expands largely independently of business cycles, labour market tightness leads employers to hoard labour and increase employment even in situations where this would normally not be required by current production development, part time jobs steadily extend new segments in the labour market, immigration and rising participation still increase the labour force potential despite demographic change, and the wage moderation (Fig. 6) boosted labour demand. Regarding the latter point, Dustmann et al. (2014) stress the importance of German labour market institutions for restoring competitiveness.

5 Critical Developments

While the German labour market upswing tremendously improved the economic stance of the country, it was also accompanied by critical developments. Wage growth remained weak for nearly a decade (Fig. 6). The labour share was steadily trending downwards. In real terms, only the highly qualified were able to realise positive wage

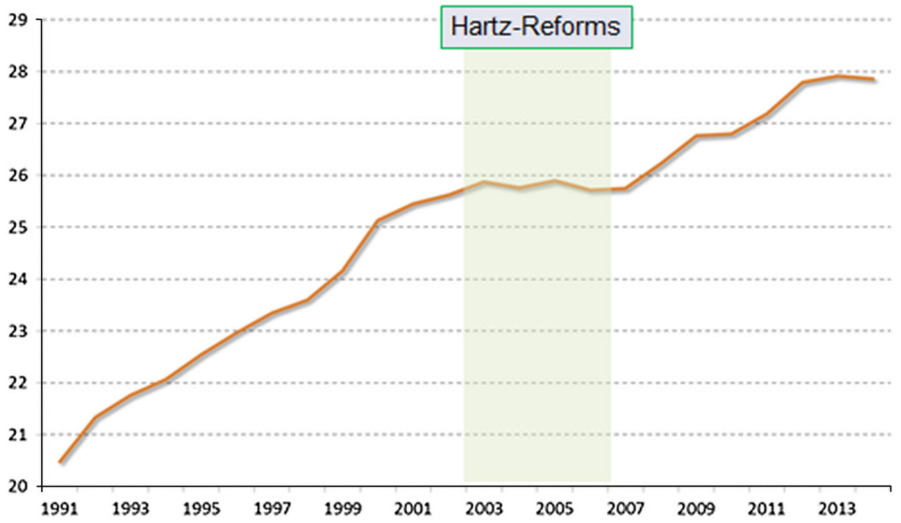

Fig. 6 Real wage per hour (€, 2010 prices). *Source*: destatis, IAB Working Time Accounts

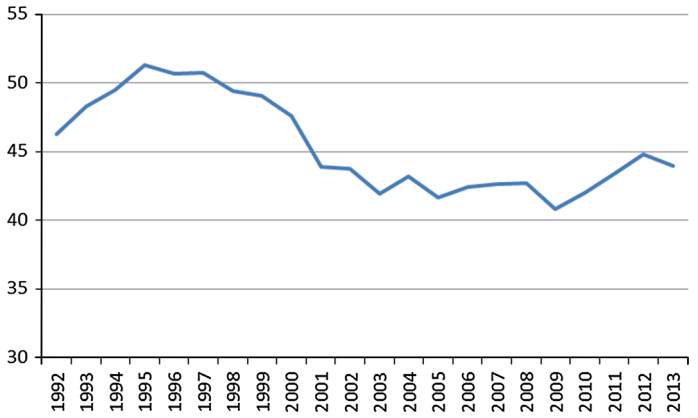

Fig. 7 Relation of first percentile and median hourly gross wage (in percent). *Source*: Socio-economic Panel, own calculations. *Note* Hourly gross wages were calculated by dividing the gross wage of the last month by the regular working time including paid overtime (with a surcharge of 25 %) from the last month

growth since the mid-1990s, while especially low qualified workers faced substantial losses. Wage inequality considerably increased, as it is revealed by the declining relation of the lowest percentile and the median wage in Fig. 7.

Several reasons have contributed to this development: High unemployment and shrinking coverage of collective wage bargaining impeded the bargaining power of employees. The German reunification with an inflow of low qualified workers after the opening of the Eastern borders and the breakdown of the Eastern German industry represents a special factor for both labour demand and supply. Besides, lower-paid service and part-time jobs have expanded. For wage inequality the afore-mentioned trends of globalisation and technological change are likely to have played a role. The

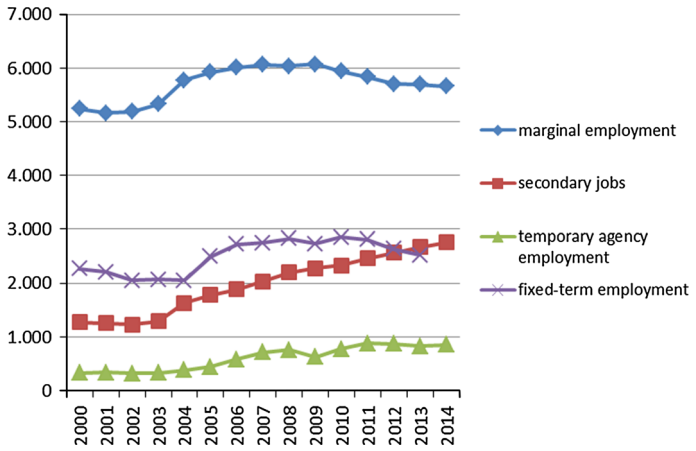

Fig. 8 Atypical employment (in millions). *Source*: destatis, IAB Working Time Accounts, Statistics of the Federal Employment Agency

period of the weakest wage development was clearly connected to the Hartz reforms, which increased pressure on the employees' side and worsened outside options of the unemployed (compare Krebs and Scheffel 2013 for a welfare discussion).

Furthermore, the level of atypical employment nowadays lies far higher than before the labour market upswing (Fig. 8). Of course, the term "atypical" covers very diverse employment forms. While part time mostly represents a fundamental trend due to rising female labour market participation, other developments are likely to be driven—or at least reinforced—by deregulation mainly in the Hartz reforms. For instance, fixed-term contracts, minijobs and temporary agency employment strongly increased. Still, it is important to note that the labour market upswing is not solely based on atypical employment, but also substantially increased "typical" jobs (i.e., full-time, tenured, subject to social security).

In sum, labour market reforms ended the period of mass unemployment in Germany. Nonetheless, they reinforced trends of lowering employment quality, which is a major subject of political debate in Germany today. For example, the introduction of the general minimum wage in January 2015 can be seen in this context. Notably, trends started to reverse in the recent years with stronger wage growth (despite weak productivity) and decreasing numbers of minijobs and fixed-term contracts.

6 Conclusion

During the last 10 years, Germany has overcome the era of mass unemployment. This is the more recognisable as during the same period international labour markets were severely hit by the US subprime crisis and the European debt crisis. Key factors were the strong labour market uptrend following the Hartz reforms and the increased flexibility on the establishment level. Nonetheless, Germany faces several crucial challenges regarding its social and economic development.

While unemployment could be substantially reduced, the structure of employment gives rise to concerns. Deterioration of overall employment quality makes it necessary to avoid permanently establishing a two-tier labour market while not compromising the success regarding the employment situation. At the same time, problems of structural unemployment and long-term benefit dependence remain. In fact, on a lower absolute level of unemployment, the share of persons who are difficult to match in the first labour market has clearly increased.

As a third issue in the aftermath of the mass unemployment era in Germany, demographic change ranks high on the agenda. Currently, high immigration—mostly as a consequence of the European crisis and recently the stream of refugees—prevents the labour force from shrinking. However, negative demographic effects will strengthen over the next decade and underline that the German labour market will experience a fundamental shift of premises.

Germany passed through a widely recognised development from labour market slack to labour market boom. Notwithstanding, long-term benefit dependence, employment quality and demographic change are major challenges for labour market policy. Logically, sustainable integration of workers in instable employment not assuring a livehood, improving labour market participation, attracting migration as well as integrating migrants and refugees into the labour market, further reducing unemployment[1] and especially approaching its persistent core are key tasks on the agenda (compare Weber 2014).

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[1] The prospects of future unemployment are signalled by the IAB labour market barometer, a leading indicator with monthly updates: http://www.iab.de/en/daten/arbeitsmarktbarometer.aspx.

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