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DOSSIER: LABOUR MARKET

## The development of the German labour market after World War II

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### Abstract

Labour market developments in Germany witnessed two shocks: German reunification in the early 1990s; and the Hartz reforms in the early 2000s. They separated the German labour market into two segments: the traditional rather corporatist labour market segment, characterised by a high degree of coordination, and the new less regulated labour market segment. The latter is characterised by low wages and precarious working conditions. A precariat living under conditions of high uncertainty developed. All these developments are mainly the result of legal changes in Germany. With respect to employment creation these changes were unneeded.

**Keywords:** Germany; Labour market; Collective bargaining.

**JEL:** J2, J3, J5, J6, J8.

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## O desenvolvimento do mercado de trabalho alemão após a Segunda Guerra Mundial

### Resumo

A evolução do mercado de trabalho na Alemanha foi marcada por dois choques: a reunificação alemã no início dos anos 90; e as reformas de Hartz no início dos anos 2000. O mercado de trabalho alemão se dividiu em dois segmentos: o tradicional mercado de trabalho corporativista, caracterizado por um alto grau de coordenação, e o novo segmento do mercado de trabalho, menos regulamentado. Este último é caracterizado por baixos salários e más condições de trabalho. Um precariado vivendo sob condições de alta incerteza se desenvolveu. Todos esses desdobramentos são principalmente o resultado de mudanças no ordenamento legal na Alemanha. No que se refere à criação de empregos, essas mudanças foram ineficazes.

**Palavras-chave:** Alemanha; Mercado de trabalho; Negociação coletiva.

## El desarrollo del mercado laboral alemán después de la Segunda Guerra Mundial

### Resumen

La evolución del mercado laboral en Alemania estuvo marcada por dos rupturas: la reunificación alemana a principios de la década de 1990; y las reformas de Hartz a principios de la década de 2000. Separaron el mercado laboral alemán en el segmento del mercado laboral tradicional más bien corporativo, caracterizado por un alto grado de coordinación y el nuevo segmento del mercado laboral menos regulado. Este último se caracteriza por bajos salarios y precarias condiciones de trabajo. Se desarrolló un precariado que vivía en condiciones de alta incertidumbre. Todos estos desarrollos son principalmente el resultado de cambios legales en Alemania. Con respecto a la creación de empleo, estos cambios no fueron efectivos.

**Palabras clave:** Alemania, Mercado laboral, Negociación colectiva.

## Le développement du marché du travail allemand après la Seconde Guerre mondiale

### Résumé

L'évolution du marché du travail en Allemagne a été marquée par deux chocs: la réunification allemande au début des années 1990; et les réformes Hartz au début des années 2000. Le marché du travail allemand a été séparé en deux segments: un segment plutôt corporatiste caractérisé par un degré élevé de coordination et un second segment moins réglementé. Ce dernier est caractérisé par de bas salaires et des conditions de travail précaires. Un précaire vivant dans des conditions de grande incertitude. Tous ces développements résultent principalement des modifications légales en Allemagne. En ce qui concerne la création d'emplois, ces changements n'ont pas été efficaces.

**Mots clés:** Allemagne; Marché du travail; Négociation collective.

## Introduction

After World War II, Germany became known as the role model of a social market economy. The concept of a social market economy was among others developed by Alfred Müller-Armack (1947/1982) and Walter Eucken (1948). Its origin can be found in a version of liberal thinking, the so-called *ordo liberalism* or social liberalism, which understood itself as an alternative to the Anglo-Saxon type of liberalism and capitalism in general. The social market economy was deeply rooted in the conservative Christian Democratic Party (CDU), which was able to appoint the head of government from the foundation of the Federal Republic of Germany (FRG) in 1949 until 1969 when the Social Democratic Party (SPD) for the first time after World War II was able to appoint the chancellor. Before in 1959, the Social Democratic Party had introduced the idea of the social market economy in its party program. This shows that the idea of the social market economy in Germany was embedded in all relevant political streams.

In substance, the social market economy presented a compromise between capital and labour after the disaster of fascism and the influence of the New Deal in the United States. It combined free markets with the idea of the welfare state and a strong voice of labour in the development of big companies and of the country as a whole. The German model established after World War II, also named "Rhine Capital" (Albert, 1993), remained stable until the crisis in the 1970s and started to transform slowly without changing its fundamentals. However, two "shocks" led to a partial erosion of the model established in the 1950s. First, the German unification in 1990 and its effects, and second, the labour market reforms in the 2000s. It is the aim of this contribution to show and explain the changes in the German labour market as part of the overall German model.

After describing the traditional co-determination and wage bargaining model in Germany from the 1950s to the 1980s in section two, in section three two major shocks for the German labour market are discussed, the German reunification in 1990 and labour market reforms, so called Hartz reforms, in the 2000s. Section four, five and six discuss the three major effects of the changes in the labour market, the erosion of the wage bargaining system, the development of a large low-wage sector, and the increasing number of precarious jobs. The last section draws conclusions.

### 1. The traditional German model after World War II

In Germany, in companies there is a certain degree of workers co-determination. The co-determination system consists of works councils and workers' representatives in the supervisory board of big stock companies and other corporate enterprises.

Works councils represent employees of a company and can by law be elected if a firm has five or more employees. With the size of the company the number of works councils increases; in big companies there are full time works councils. Most works councils are union members, but also non-union members can be elected. Works councils have the right of co-determination in areas like daily working time, overtime, performance based pay and bonuses or leave schedules; they have the right of consultation, for example in human resource management issues, such as cases of dismissals; and they have information rights in all important developments of the company and management decisions (Gerlach & Meyer, 2010). In 2017 in firms with more than 500 employees over 85% work in firms with work councils, in firms below 50 employees only 9% work in firms with work councils (Ellguth, 2018).<sup>1</sup>

In German corporate enterprises with more than 2000 employees the board of managing directors is appointed by the supervisory board. In the supervisory board 50% of members are elected by the owners and 50% by the employees including trade union representatives from outside the company. The supervisory board appoints an additional member as a chairperson; in case of a standoff the chairperson is appointed only by the representatives of the owners. In the metal sector a labour director as equal member of the group of managing directors cannot be appointed against the will of the majority of the employee representatives in the supervisory board.

The German co-determination model in spite of some attacks did not experience major legal changes and still is in place. Its establishment after World War II indicates to which extent capital was weakened and all relevant political streams in Germany wanted to strengthen also democracy in firms and create a regulated type of capitalism at that time.

Let us come to trade unions. German trade unions are organized on a sectoral level and jointly form the German Trade Union Federation. As a rule, sectoral unions organize all employees in a sector. However, during the last decades some professions created own unions and tried to get better results for their members than the sectoral unions. The best example is the Trade Union of German Train Drivers which started independent bargaining processes shortly after the German reunification. But also trade unions of other professions like doctors or pilots became more powerful.

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<sup>1</sup> In 1993 51% of employees in West Germany worked in firms with work councils, this percentage shrank to 40% in 2017. In East Germany in 1996 43% of employees worked in firms with work councils, in 2017 it was only 30% (Ellguth, 2018).

Also after World War II, employers established powerful associations. They are as well organized on a sectoral level, for example the Federation of German Employers' Associations in the Metal and Electrical Engineering Industries (ME Metall). The head organization is the Confederation of German Employers' Associations.

Wage bargaining took and still takes place on a sectoral level between employers' associations and trade unions. In almost all years the wage round starts in the metal industry in the German state of Baden-Württemberg, an important hub for the German car industry. The outcome of the negotiations between the ME Metall and the IG Metall, the biggest German union, has a strong signalling effect for the whole metal industry in Germany and for all other industries as well. This means Germany is characterized by pattern bargaining starting on a sectoral level usually in the metal industry. National wage bargaining which existed for example in the past partly in Austria or Sweden never took place in Germany. Also, firm level bargaining played no role. There is some exception, for example the Volkswagen company has a firm level wage contract, but these also follow the logic of pattern bargaining.

In many countries changes of minimum wages give an orientation for wage development (Caju *et al.*, 2008). In Germany statutory minimum wages were only introduced in 2015. This underlines the importance of the wage bargaining process between unions and employers' association and pattern bargaining in Germany.

Formally negotiated sectoral wages are only binding for companies belonging to employers' association and trade unions members working in companies which joined employers' associations. There is no legal obligation of firms to join employers' association, as for example in Austria.<sup>2</sup> Legal extension mechanisms of sectoral bargaining to all companies in a sector, which are for example very common in France, are theoretically possible in Germany, but are judicially difficult to achieve and are almost not used. Despite the lack of legal mechanisms, the collective bargaining coverage of employees was high in Germany. From 1960 to 1990 collective bargaining coverage in West Germany was 85% (Visser, 2015).<sup>3</sup> In the decades after World War II employees were directly or indirectly covered by collective bargaining. Two mechanisms were responsible for the second effect. First, firms which belonged to employers' organizations paid negotiated wages more or less automatically also to non-union members. The motivation was to prevent not unionized employees in these firms to join unions. Second, a large part of the firms which did not belong to employers' associations voluntarily followed negotiated wages. It was a kind of unwritten law that firms would follow the negotiated wage development. Despite a lack of formal mechanisms, the German wage

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<sup>2</sup> Firms are obliged to join chambers of commerce. These do not negotiate wages.

<sup>3</sup> Other estimation came from the 1960s until 1990 to 90% collective bargaining coverage in Germany (Ochel, 2001).

bargaining system in the decades after World War II was to a large extent coordinated (Soskice, 1990).

Lars Calmfors and John Driffill (1988) argued that wage bargaining on firm level and on national level both lead to moderate wage increases as firm level negotiations must consider the competitive position of the firm and on national level the macroeconomic effects of wage increases. In the latter case, especially the effects of wage increase on inflation, competitiveness and employment must be considered. Wage bargaining systems in the middle were considered to lead to destabilizing wage increases, for example in Great Britain in the 1970s. David Soskice (1990) correctly argues that Germany in spite of sectoral bargaining very much belongs to the group of countries in which macroeconomic considerations plays a role in the strategies of unions and employers' organizations.

Immediately after the foundation of the Federal Republic of Germany productivity-oriented wage development became very popular in German trade unions. Pushed was this idea by Viktor Agartz (1953/2008), from 1948 until 1955 director of the Institute of Economic and Social Research, run by trade unions. Important is that according to this idea macroeconomic productivity development should become the guideline for wage demands in all sectors and firms. Nominal wage increases in line with macroeconomic productivity developments are indeed of great importance for overall economic stability. It became very popular in Germany that wages should at least increase according to macroeconomic productivity increases plus a compensation for the expected inflation trend. This rule became known as the so called Meinhold-formula named after Helmut Meinhold (1965) acting in the early 1960s as arbitrator in wage bargaining conflicts in the metal industry.

The IG Metal has been in almost all years following macroeconomic considerations in its wage policy. As the wage rounds usually started in the metal industry it was clear that wage bargaining in this sector was of key importance. In substance, all key unions and employers' associations implicitly influenced the negotiations in the metal sector. In addition, the IG Metal always cared about the competitiveness of the German metal industry for employment reasons, for example in the car industry, which is very important for Germany.

Last but not least tacitly the German central bank, the Bundesbank, was a third partner in wage negotiations. Too high wage increases, which lead to an inflation rate above the norm of the Bundesbank, were feared to cause restrictive monetary policy. This was not a theoretical fear, the Bundesbank never hesitated to create a so-called stabilization crisis with unemployment when wage increases were too high (Soskice, 1990). The fear of anti-inflationary monetary policy prevented that the Meinhold-formula led to an inflationary wage price spiral in case an external shock pushes up the inflation rate. To make nominal wage development to an anchor of the price level nominal wage levels should increase according to

medium-term productivity developments plus the implicit or explicit target inflation rate of the central bank (Herr, 2009). Usually wage development in Germany followed this rule, however not always. For example, in 1974 this rule was violated when, as an exception, the public sector started the wage round and negotiated wage increase of 11%. Days later, the Bundesbank increased interest rates and triggered a sharp recession which added to the problems of the oil-price shock in 1973 (Scharpf, 1987).

The analysed structure of co-determination and wage bargaining in this section was only moderately modified in the 1970s and 1980s. Pattern bargaining characterised wage determination and the resulting high level of coordination held wage dispersion on a low level. With the German reunification and the Hartz reforms the landscape changed drastically.

## **2. Two shocks: the German reunification in 1990 and Hartz reforms in early 2000s**

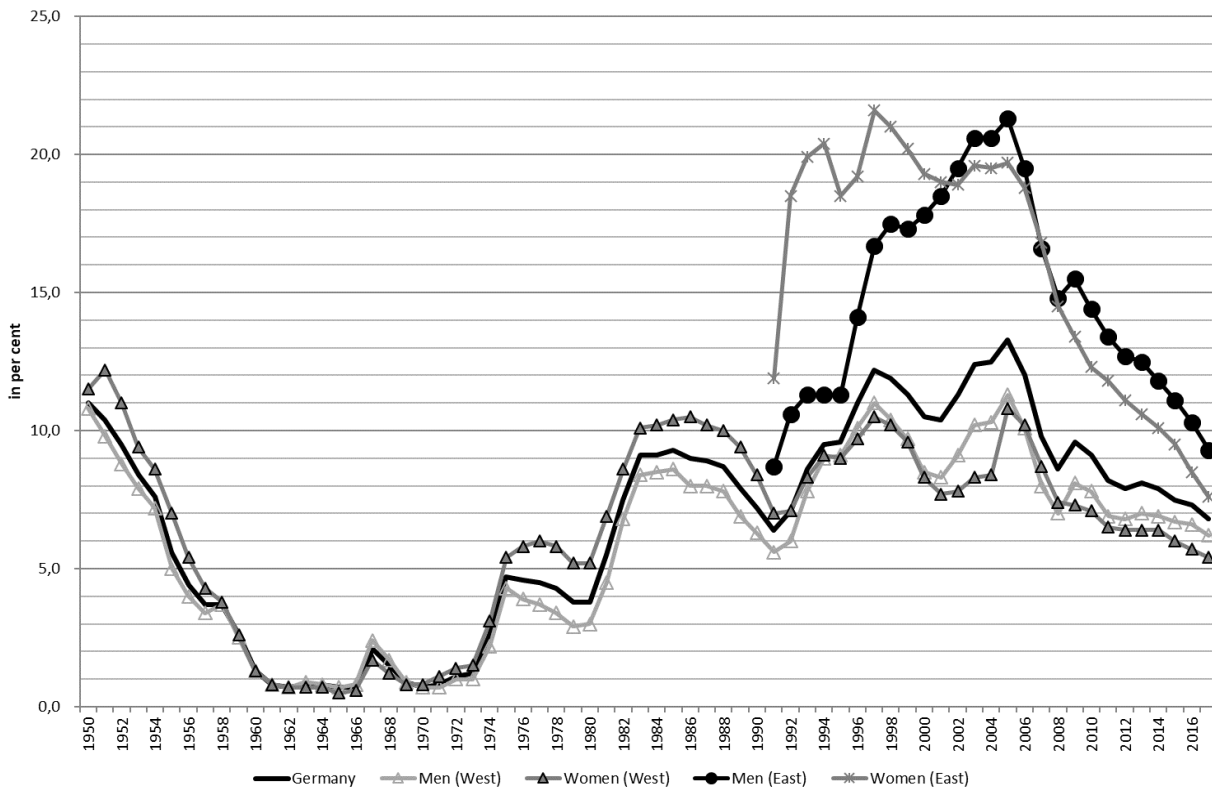
### **2.1. The German reunification in the early 1990s**

After forty-one years of separation East and West Germany finally got reunified on October 3rd of 1990, shortly after the introduction of the D-Mark in East Germany in the same year. At the time of reunification, the Federal Republic of Germany had 63.7 million residents, the German Democratic Republic (GDR) 16 million (German Statistical Federal Office, 2018c). In 1989 labour market participation in East Germany by women was 90.9% and 93.3% for men (Pierenkemper, 2006) compared to 54.6% for women in West Germany in 1991 and 78.4% in the same year for men. In 2016 labour market participation rates in East Germany were 72.1% of women and 76.1 for man, in West Germany the numbers in 2016 were 70.3% and 78.5% (WSI, 2018). The transformation from a command economy to a market economy was an extraordinary challenge for both parts of Germany.

In the GDR unemployment did almost not exist. In East Germany working was seen as an obligation of honour. In fact, high emigration to West Germany led to a lack of labour supply. The reunification and the beginning of the reconstruction of East Germany resulted in a short but strong cyclical upturn in West Germany with decreasing unemployment rates in West Germany and increasing inflation rates. Mainly due to restrictive monetary policy, Germany in 1993 fell into a recession and only could realise moderate GDP growth rates the following years. In East Germany unemployment exploded due to massive deindustrialisation. Compared with 1988 over 80% of employment in the industrial sector was lost in East Germany and did later not recover. This reduction has been much bigger than in countries like Poland or Hungary. Until today, there is a lack of big companies and there are almost no headquarters of internationally relevant firms in East Germany (Pohlmann, 2005).

In November 1989 in East Germany there were 9.3 million persons employed; in November 1991 this number shrank to 6.7 million (Bielenski, Magvas & Parmentier, 1992). Due to a lower productivity level in East Germany compared to West Germany, lack of sales canals and unfashionable brand names most of the East German industry in a monetary union with West Germany had no chance. The relatively quick privatisation of East German firms mainly to West German firms in the same industry did prevent the development of own big firms in East Germany.

**Figure 1: Unemployment rates (%) in East and West Germany from 1950 to 2017**



Note: Data until 1990 only show unemployment rates in West Germany, percentage of civilian labour force. Figures include wage earners paying social security contributions (Abhängige zivile Erwerbspersonen), soldiers are excluded.

Source: German Federal Statistical Office (2018a), Tables 1.1 and 2.2.1.

Looking at the long-term development of unemployment rates (see Figure 1) it becomes clear that the German miracle in the 1950s and 1960s brought unemployment rates quickly down. However, starting in the 1970s unemployment rates increases in every cyclical downturn sharply and could not be reduced to old levels in the following upswing. After the German reunification in 1990 unemployment rates increased further to over 12% for whole Germany. Also in West Germany unemployment rates jumped over 10%, in East Germany



over 20%. What West and East Germany had in common was that low-skilled workers, older employees, and women were more at risk to become unemployed. Long-term unemployment persists as a problem in both parts of Germany. But after the Great Recession in 2008/09 unemployment rates in both parts of Germany decreased sharply and fell in 2018 to a level for whole Germany around 3.5%. Since 2008 unemployment of women is below the rate of men in both East and West Germany (Ruoff, 2016).

Figure 2: Real GDP growth rates (%) in Germany, 1950-2017



Note: Adjusted for inflation, chained. Due to conceptual and definitional differences, the results from 1950 to 1970 (former federal territory) are not fully comparable with the results from 1970 to 1991 (former federal territory) and the data from 1991 (Germany). The price-adjusted results from 1950 to 1970 are calculated in 1991 prices. The results from 1970 to 1991 as well as the data from 1991 (Germany) are shown in prices of the respective previous year as a chain index. Moreover, in the 2014 revision of the National Accounts, only the results for Germany were recalculated up to 1991. Figures before 1991 have remained unchanged.

Source: German Statistical Federal Office (2018b).

Figure 2 shows real GDP growth rates in Germany have a long-term decreasing trend. In the 2000s until the Great Recession German growth performance compared to other countries in the European Monetary Union (EMU), founded in 1999, was one of the poorest. Then, in 2009 the Great Recession hit Germany hard. Germany recovered quickly, but only achieved relatively low GDP growth rates. However, compared to other EMU countries Germany became now one of the best performing countries in the EMU (Herr, 2017).

Labour productivity increased continuously with some cyclical variations. With 2010 equal to 100 the index value of real GDP per hour by persons in employment increased from 92.3 in 2001 to 107.6 in 2017 (German Statistical Federal Office, 2018d). As a consequence of relatively low real GDP growth and continuous increases in productivity the working volume did not change much. With 2010 equal to 100 the volume of annual total number of hours worked in 2001 was 102.1. This remained more or less stable and only in 2013 the 2001 level was reached. Then the volume of hours worked increased to 107.9 (German Statistical Federal Office, 2018d). The question is: How is such a reduction of the unemployment rates possible in spite of relatively low GDP growth rates? These figures suggest that working time per employee dropped. Indeed annual working time per employee dropped substantially. In 2001, the annual average working time per employee was 1360 hours; this number dropped to 1291 hours in 2017, more the 12 normal working days per year less (German Statistical Federal Office, 2018d).

This reduction of working time per employee does not show a kind of solidarity in form of cutting general working time or extending holidays. It reflects the development of a sector of precarious employment, which among other things is characterized by part-time jobs and instable employment.

An additional factor is the development of the labour force potential, which is defined as the sum of employed and unemployed persons and the hidden reserve and covers the age span from 15 years to 74 years and gives more or less the maximum of the available labour supply. The labour force potential in Germany increased from 43 million in 1990 to 45 million in 2007 and then started to stagnate until today. The reason is the aging of the German population. Without the wave of migration of several million people the labour force potential would have decreased (Fuchs *et al.*, 2015).

### **3. Deregulation of the labour markets: the Hartz reforms under the Red-Green-Coalition in the early 2000s**

Since the mid-1990s, compared to other European countries, Germany performed “poorly” in terms of GDP growth and unemployment rates and was considered the “sick man” of Europe – an image which adhered to Germany until the Great Recession in 2009. In the mainstream debate the sluggish German economic development was believed to be explained by too rigid labour market regulations and an overly generous welfare state (Rinne & Zimmermann, 2011, p. 3). This line of argument is highly controversial however, since – as it is argued later in this paper – a generous welfare state reduces inequality.

Following this line of argument, the Red-Green coalition under chancellor Gerhard Schröder, who came to power in 1998, introduced an ambitious labour market reform package between 2003 and 2005 – the so-called consecutive four Hartz reforms.<sup>4</sup> Officially with the Hartz reforms the concept of “challenge and promote” found its way into active labour market policies in Germany (Caliendo & Steiner, 2005). The Hartz reforms were very much influenced by the policy of Toni Blair (Prime Minister of the United Kingdom from 1997 to 2007) which together with Gerhard Schröder wrote “The Third Way” (Blair & Schröder, 1999) which is a synthesis of centre-right economic and centre-left social policies and marks a fundamental change of the SPD parties towards more liberal economic and social ideas.

In Hartz I (for details of the reforms see Jacobi & Kluve, 2007) the upper limit of duration of temporary work (or labour leasing work) was lifted. Restrictions on fixed-term contracts were eliminated and regulations of dismissals were simplified. Exceptions from dismissal protection were extended, especially for smaller companies. In addition, drastic cuts in unemployment benefits were enacted. Also, the income of spouses played a bigger role of unemployment benefits. Sanctions were introduced like the reduction of benefits if unemployed did not report their dismissal immediately. Finally, the organisational structure of the employment agencies was reformed, and a bigger role of private employment services allowed.

Central to Hartz II and III was the concept of “rights and duties” of job seeker. One example for the activation strategy is the so-called “Me Corporation” as a programme to support the start of new micro firm. Mini-jobs as well as midi-jobs were extended which implies that for these jobs no pension contributions have to be paid. In addition, it was decided to pay wage subsidies to employers if they hire workers who are difficult to place. More sanctions were introduced if, e.g. the job seeker does not accept offered jobs.

Hartz IV fundamentally reformed unemployment benefits. Benefits used to be dependent on the level social security contributions paid before becoming unemployed and were paid in principle until retirement. Now such payments were paid for a maximum of one year. With the unemployment benefit that is paid after one year of unemployment, so-called ALG II, in 2018 a single receives 416 € per month (11.0% of average wage and 27.8% of minimum wage) plus financial aid for health care and housing (which can amount several hundred euro). ALG II for children until the age of six get paid 240 € per month (Bundesagentur für Arbeit, 2018). These payments are based not on former earnings but on the inquiry of needs of the individual. They fall down to the level of social welfare benefits

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<sup>4</sup> Hartz reforms are named after Peter Hartz, a top human resource manager of Volkswagen. He was head of a committee appointed in 2002 by Chancellor Gerhard Schröder from the SPD who was at that had of government.

which are based on a basket of goods which are considered to be the minimum a person needs in Germany. Benefits for ALG II and social welfare benefits are only paid if spouses have low income and assets of the unemployed until a minimum are used up. Also in Hartz IV, the employment agency was further restructured.

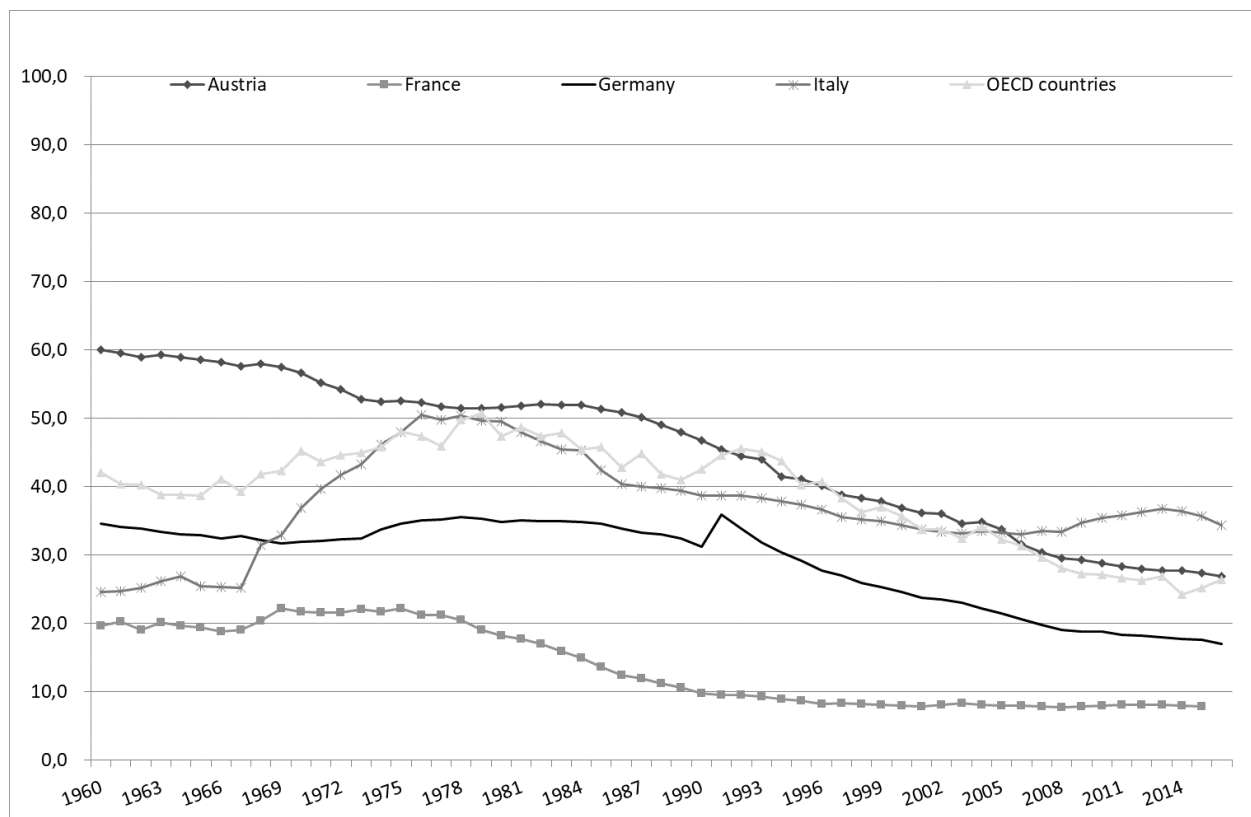
#### 4. The erosion of the German wage bargaining model

The traditional German pattern bargaining system did not work in East Germany. Unions and employers' associations were too weak. And the institutional backing was too weak to preserve the signalling effect of negotiated wages to non-unionised firms. In the large majority of firms in East Germany wages became decoupled from the wage bargaining system and even started to fall. This had repercussion also for the West German wage bargaining model. A dual German labour market started to develop.

In 1991 the German Trade Unions Federation (DGB) got more than 4.1 million new members from East Germany, making up 35% of overall DGB membership. The share of women in the DGB rose from 24.4% in 1990 in West Germany to nearly 33% in unified Germany. In 1992 union membership in East Germany started to shrink sharply. In 1995 the DGB had lost 40% of the new East German members. The extensive member loss is linked to the deindustrialisation in East Germany after the reunification and rise of the service sector in East Germany with traditionally low union density (Fichter, 1997). Also union membership in West Germany began to fall moderately but continuously. Figure 3 shows that union density in Germany was stable around 35% until the early 1990s and then started to decline to below 20% in 2014. Development in Germany followed the general trend in OECD countries. On average across OECD countries, 30% of workers were members of a union in 1985. This number dropped to 17% in 2017 (Cazes, Garnero & Martin, 2017, July 10).

The general fall in trade union density has a number of reasons. First, sectors with traditional high union density (especially manufacturing) were shrinking and in growing sectors (especially the service sector) employees or more difficult to organise. Part of this tendency is that many tasks in manufacturing firms were outsourced to non-unionised sectors from cleaning to security services or to developing countries. Second, there have been partly hostile policies against trade unions. Third, the neoliberal ideology which dominated in many countries public discourse made it less attractive to join trade unions. Last not least in many countries state-owned enterprises were privatised with the result of union-hostile management, restructuring or decreasing employment (see Fitzenberger *et al.*, 2011; Fichter, 1997).

**Figure 3: Union density in selected OECD member countries**  
 Union members in percent of all employees. Austria, France, Germany, Italy: 1960-2014.



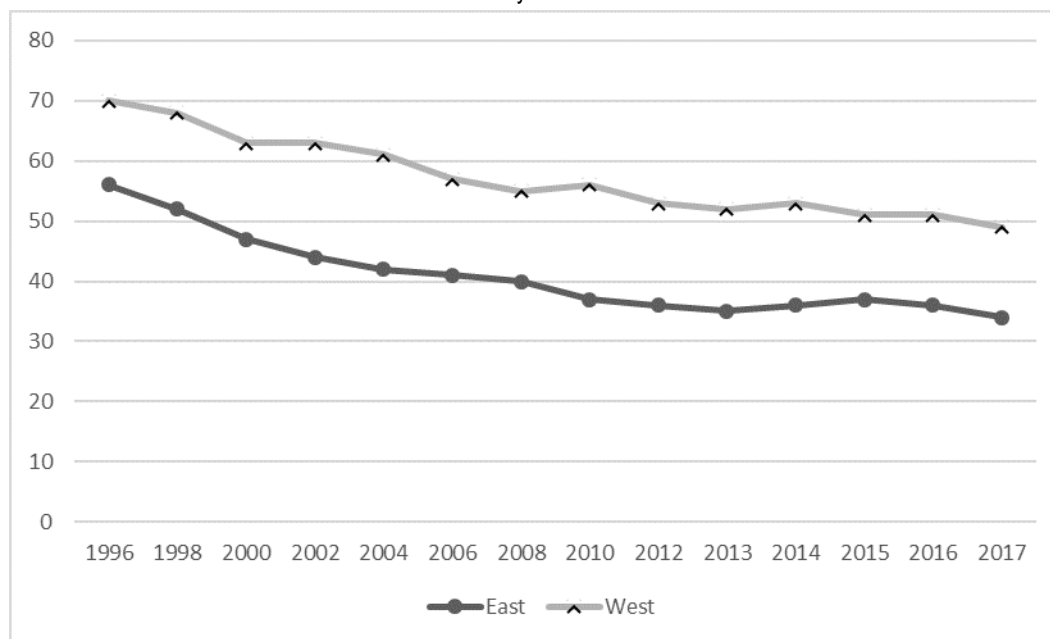
Source: Visser (2015), ICTWSS database.

Collective wage bargaining coverage is an indicator showing the extent to which employees are covered by collective bargaining outcomes. Before German unification collective bargaining coverage was 85% or even 90%. In the old West German model firms taking part in sectoral negotiations paid wages also to non-union employees. And most firms including small firms not belonging to employers' organisations would follow wage negotiations in the sector which had a strong signalling effect. Collective bargaining coverage started to erode in the 1990s (see Figure 4). Collective bargaining coverage in former West Germany dropped from 70% in 1996 to 50% in 2017. In former East Germany collective bargaining coverage was after German reunification always lower and dropped to 32% in 2017. Looking at this indicator the German development fits to the international trend. On average across OECD countries wage bargaining coverage shrank from 45% in 1985 to 33% in 2013. However, Germany used to have a very high collective bargaining coverage comparable with Scandinavian countries, which still have high coverages (Cazes *et al.*, 2017).

**Figure 4: Collective bargaining coverage**

Percent of employees covered by collective bargaining agreements (in % of all employees)

Germany: 1996-2017

Source: IAB-Betriebspanel 2018, URL: [https://www.boeckler.de/wsi-tarifarchiv\\_2257.htm](https://www.boeckler.de/wsi-tarifarchiv_2257.htm)

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There are several explanations for the erosion of wage bargaining coverage. First, the shrinking union density has a direct effect for wage bargaining coverage.

Second, in Germany also employers' organisations in charge of collective bargaining lost massively members. There are no good statistics about how many employees are covered by firms organised in employers' organisations in Germany. But statistics about the metal industry are available. In 1970 almost 80% of West German employees in the metal industry worked in firms which belonged to employers' organisations. In 1990 the number decreased to 70% and in 2002 to around 60%. In East Germany membership dropped from the early 1990s from above 60% below 20% of employees working in firms belonging to employers' organisations (Schnabel, 2005).<sup>5</sup> In a relatively new publication the OECD estimates that in Germany in 2005 overall around 60% of employees worked in firms belonging to employers' organisations (OECD, 2017). These figures show that the

<sup>5</sup> To stop decreasing membership employers' organisations allowed membership without wage negotiation obligation. Such members are not allowed to decide in matters concerning wage bargaining but can benefit from other services of employer organisation like training, information and lobbying. So-called "without-bargaining memberships" increased from the mid-1990s substantially in Germany (Behrens & Helfen, 2018).

establishment of the West German wage bargaining model in East Germany largely failed and had negative consequences also wage bargaining in West Germany.<sup>6</sup>

Third, in many countries and also in Germany governments did not sufficiently support a high wage bargaining coverage. For example, during the last decades in Germany the instrument of legal extension of sectoral wage bargaining outcomes, which was never extensively used, lost further importance. In the early 1990s 5.4% of collective bargaining agreements in Germany were legally extended, in 2012 the percentage shrank to 1.5%. The main reason for this is that the head organisations of employers' organisations have a veto right to block extension and that this is more intensively used (Bispinck & Schulten, 2012).

Fourth, liberalisation and privatisation of public services also added to the erosion of collective bargaining coverage (Brandt & Schulten, 2008).

## 5. The development of a low-wage sector and the need of a minimum wage

What happened in Germany from the early 1990s on is the working of the market process. An increasing number of employees were not protected directly or indirectly by collective bargaining agreements, and at the same time a statutory minimum wage did not exist. Unemployment which was especially high in the group of employees belonging to low-wage earners led to relative or even absolute wage cuts. Wages in this sector decreased to a large extent to the level of basic security payments which became a kind of soft and fussy minimum of wages.

One major effect of the Hartz reforms has been a sharp increase of the low wage sector (Herr, 2002; Giannelli *et al.*, 2016). This sector is defined as employees earning less than two thirds of the median wage. In Germany the low-wage sector increased from 16.6% in 1995 to 24.1% in 2011. Then it stabilised and reached 22.7% in 2016. In East Germany the level of the low-wage sector between 1996 and 2005 fluctuates between 36% and 40.6%. Generally affected by low wages are especially low-skilled workers, women, young workers, employees with fixed-term contracts and foreign employees (Kalina & Weinkopf, 2017).

In the European Union (EU) Germany belonged in 2014 to the group of countries with the highest low-wage sector (22.5%). Only Estonia, Poland, Lithuania, Romania and

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<sup>6</sup> In the OECD more or less the same development can be observed. On average, in 2013 employer organisation density in the 26 OECD countries for which data is available was 51% (Cazes *et al.* 2017). But it should be kept in mind that in many countries there is no sectoral bargaining and employer organisation in these cases have different functions than for example in Germany (Caju *et al.*, 2008).

Latvia with the highest value of 25.5% had higher values. The smallest low-wage sectors had in 2014 Sweden (2.6%) followed by Belgium (3.8%), Finland (5.6%) and Denmark (8.6%) (Kalina & Weinkopf, 2016).

There is no doubt the Hartz reforms severely reduced unemployment benefits, changed income distribution especially within the working class and caused negative welfare effects for short- and long-term unemployed (Krebs & Scheffel, 2013).

Wage dispersion in Germany increases substantially. Taking 1992 as 100 real wages of the 20<sup>th</sup> percentile of wage earners dropped until 2010 to a value of 98.2; median real wages increased over the whole period to 100.6; the 80<sup>th</sup> percentile could increase real wages to 102.5 (Felbermayr, Baumgarten & Lehwald, 2014). According to the same study, the erosion of the wage coverage is the main factor to explain the development. During the last decades, the real wage level for the majority of employees did not increase very much as most of the increasing productivity gains increased the wages of the top earners and the profit share on income. Wage dispersion in Germany mainly increased because of the increasing low-wage sector, a so called collapsing floor, in comparison to the USA with a more polarisation of the wage structure on the bottom and the top (Herr & Ruoff, 2014).

It should not be a surprise that inequality in Germany increases substantially over the last decades. The Gini coefficient for market income distribution increases in Germany from 0.35 to 0.43 in 2005, stagnated at this level but remained until 2014 (the last available data) above 0.4. The Gini coefficient for disposable income was 1990 below 0.25 and increases until 2014 to above 3.9 (Sachverständigenrat, 2018). The difference between market and disposable Gini coefficient shows the extent of government redistribution policy via tax system, social security system, welfare transfers, etc. Redistribution is relatively high in Germany. Looking at the market Gini coefficient Germany belongs to one of the unequal countries in the OECD; taking the disposable Gini coefficient Germany is compared to the average of OECD countries with a value of around 3.14 in 2014 close to the average (OECD, 2018).

The sharp increase of the segment in the German labour market which was not covered by wage bargaining and the explosion of a low-wage sector made it unavoidable to implement a statutory minimum wage in Germany in 2015. The German trade union movement was first in disagreement about the introduction of statutory minimum wages. For example, the metal sector union was against the introduction of minimum wages with the argument that trade unions could set a minimum via collective bargaining – as for example in Austria, Denmark, Finland or Sweden where union density is very high or there are other powerful mechanisms to extent collective bargaining. In contrast the public sector union was pushing for statutory minimum wages. Finally, the whole German trade union movement



campaigns for statutory minimum wages and under the great coalition between the CDU and the SPD a statutory minimum wage of 8.50 Euro for all sectors and all employees was introduced at beginning of 2015. Exceptions are made for youth below 18 years old, certain internships, apprentices, and for long-term unemployed for their first six month in employment. For some sectors the introduction of minimum wages had substantial effects. For example, in 2014 the percentage of employees earning below 8.50 Euro was 69.6% in the taxi sector, 51.5% in gastronomy, 40.1% in courier services, 33.2% in lodging, 32.0% in security services, 30.8% in bakery products sector or 22.1% in the retail sector. In the metal sector, the construction sector, machine building sector, finance sector or public sector wages were above 8.50 Euro per hour (Mindestlohnkommission, 2016, p. 42f.).

In early 2018 compared with other countries in the EMU minimum wages in Germany were 8.84 Euro<sup>7</sup>, 9.88 Euro in France, 9.68 Euro in the Netherlands, 9.55 Euro in Ireland and 9.47 Euro in Belgium. Minimum wages in countries like Spain, Portugal and Greece were below 5 Euro. In comparison to the productivity level minimum wages in Germany are low. Also, in comparison to median wages German minimum wages are not very high. The level of minimum wage as share of median wages (the so called Kaitz-Index) in Germany in 2016 was 0.46. In France, for example, it was 0.61, in Great Britain 0.49, in the USA 0.35 or in Portugal 0.58 (OECD, 2018).

## 6. The development of a sector with precarious jobs

The Hartz reforms allowed the development of so called atypical or precarious jobs, not in an informal sector as in many developing countries, but within the existing legal framework. Precarious working conditions affected a group of employees also with higher income<sup>8</sup>, but the mostly affected employees were low-wage earners. Thus, the increasing low-wage sector in Germany was not only characterised by low wages but also by precarious working conditions as many employees in this sector had fixed-term working contracts, worked part time, worked as temporary workers, etc. In addition, legal loopholes were used to use the legal instrument of contracts of work labour to reconvert the employee status of workers in freelancer. For example, in slaughterhouses a large proportion of the workforce works on the basis of contracts of work labour without any social protection or membership of

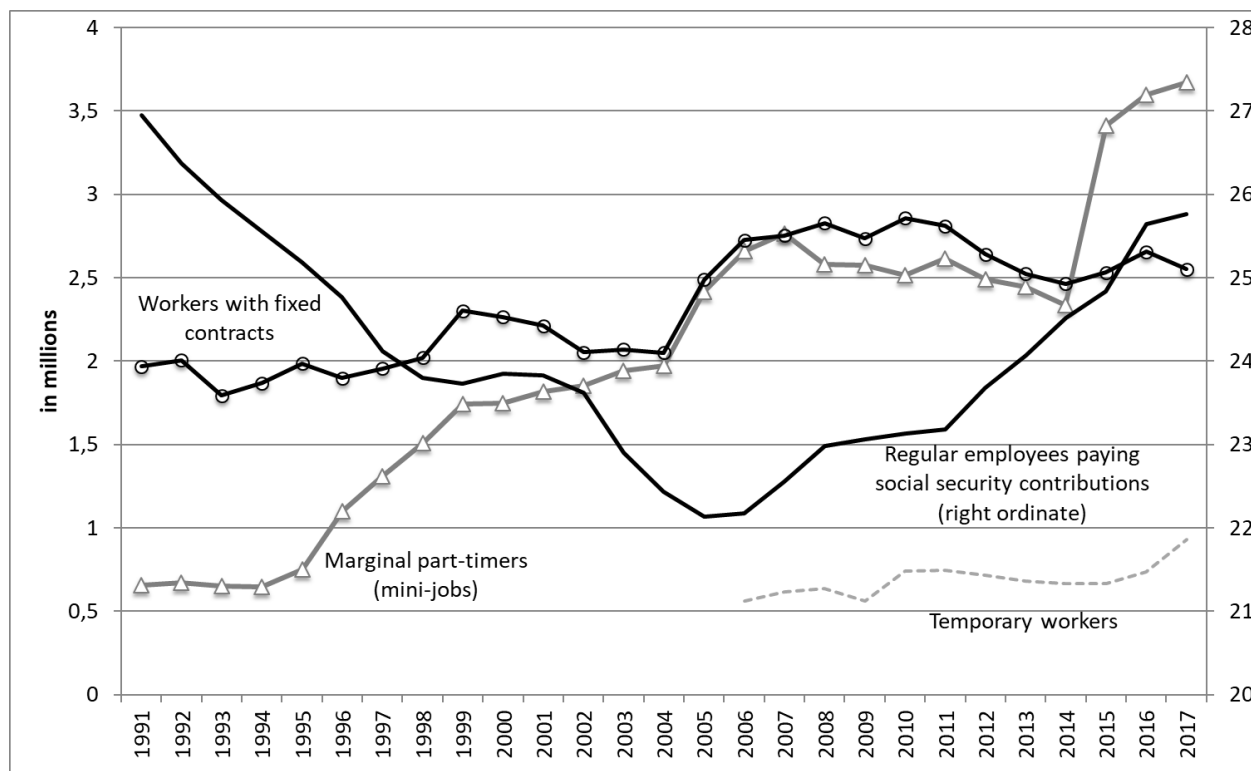
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<sup>7</sup> From 1<sup>st</sup> of January 2019 until 31<sup>st</sup> of December 2019 minimum wages will be 9.19 Euro, in 2020 it will be 9.35 Euro (DGB, 2019).

<sup>8</sup> For example in universities young lecturer in many cases work on the basis of fixed-term working contracts which are renewed or on the basis of contracts of work labour without any social protection.

social security systems. Last not least part of the precarious jobs were not covered by the German social security system, for example pension system (Oschmiansky, 2007).

**Figure 5: Typical and atypical employment in Germany, 1991-2017**



Note: Atypical employment of workers between the age of 15 and 64, pupils, students, apprentices, and soldiers are excluded. Regular employees are defined as working more than 20 hours per week and paying social security contributions (right ordinate). All other data refers to the left ordinate.

Source: German Statistical Federal Office (2018a).

Figure 5 illustrates the development of atypical jobs in Germany since the early 1990s in millions. The ordinate on the right side of the graph shows that the number of employees paying social security contributions and are working more than 20 hours per week decreased steadily but rose again since 2006. This reflects the relatively good economic development in Germany after the Great Recession. But many of the new created jobs are in the normal low-wage sector. The development of atypical employment, such as mini-jobs, fixed-term contracts, and temporary work is shown on the left ordinate. Overall, these types of work have been increasing continuously since the 1990s. The growing atypical employment shows that not only in the field of wage bargaining a dual labour market developed, but also in the field of precarious jobs. Eichhorst and Tobsch (2015) argue that this duality does not undercut but complement regular employment and increasing atypical employment is not

necessarily precarious. However, it has to be seen that firms only are able to use precarious jobs because it was legally allowed to do so. Also part of atypical employment might not be precarious, but a large part is.

The development of a low-wage labour market segment with often precarious conditions had repercussions for the traditional labour market segment. First, it stimulated outsourcing from sectors which were covered by wage bargaining and pay relatively good wages to sectors with low wages and/or precarious jobs. Second, competition from the low-wage sector created pressure in sectors covered by wage bargaining to have a more flexible wage policy. This pressure led to an increase of firm level collective agreements which until the 1980s almost did not exist. Such a development was made possible as on sectoral level so called opt-out clauses were negotiated. Trade unions had to accept this as otherwise even more companies would have left employer organisation or would have become members without collective bargaining commitment. In 2017 in West Germany 8% of employees are covered by specific firm level agreements, in East Germany the percentage is 10% (Ellguth, 2018).

According to a recent survey by the Hans-Böckler foundation, in Germany a precariat of around 12% of the economically active population developed. It has to exist under conditions of high uncertainty and usually with low and non-regular jobs (Allmendinger *et al.*, 2018). The rise of popular right-wing political parties also in Germany has to be seen with regard to these developments.

## 7. Development of a dual labour market in Germany

Germany used to have a highly coordinated pattern bargaining system based on sectoral wage negotiations usually starting in the metal sector. The signalling effect of the pattern bargaining system was so strong that statutory minimum wages were not necessary. Even firms not belonging to employers' organisations would follow the general wage trend as a kind of unwritten law. Precarious employment contracts were rare and to a large extent forbidden by law. This system came under massive pressure after German reunification in 1990 and labour market deregulation in the early 2000s. The West German labour market model could not be transferred to East Germany; the deregulation of labour markets under the Hartz reforms allowed a great variety of precarious employment contracts. Looking at income distribution Germany became more unequal, but still belongs to the group of average inequality in the OECD.

We can agree when the (OECD, 2004, p. 154) already 2004 wrote about the German wage bargaining system that “an erosion of the German model is already underway”. In a weakened form, the old German wage bargaining system still exists in the core industrial sector and public sector. A dual labour market developed in Germany with one segment covered by wage bargaining and relatively stable and protected employment contracts and one sector with precarious employment and usually low wages.

Several studies stress positive effects of the Hartz labour market reforms and the development of a low-wage labour market segment with many precarious jobs. The argument is that increasing flexibility of labour markets paid off before and during the subprime-crisis in terms of declining unemployment, especially long-term unemployment rates (see for example Jacoby & Kluge, 2007; Rinne & Zimmermann, 2011; Hüfner & Klein, 2012). Arguments in favour of positive employment effects of the Hartz reforms are explained by improved “matching efficiency” (Krebs & Scheffel, 2013; Fahr & Sunde, 2009) an increasing number of low-wage jobs which were taken by unemployed (Krause & Uhlig, 2011).

We disagree that more labour market flexibility substantially reduced unemployment rates.<sup>9</sup> There might be that the Hartz reforms improved the bureaucratic structures of the employment agency and cut some unjustifiable high unemployment benefits, but it would be misled to explain German economic performance by the effects of the deregulation of the labour market (Herr, 2002; Hein & Truger, 2014; Detzer *et al.*, 2017, chapter 16). Employment, first of all, depends on aggregate demand which determines output and employment. Demand development in Germany before the Great Recession was poor and only after 2005 investment and consumption picked-up a bit. Consumption demand was sluggish last not least because of the Hartz reforms with their distribution effects and the high uncertainty they created. Investment demand also was poor. And before the Great Recession in Germany there was no real estate bubble and no construction boom as in many other countries. Also, fiscal policy did not substantially contribute to GDP growth. German GDP growth much depended on export demand. After the Great Recession, German exports exploded and after 2015 tendencies of a real estate bubble in German developed leading to a construction boom. These developments further stimulated consumption demand. All these developments led to a moderate increase of the volume of hours worked in Germany. This implies that the increase of part-time and precarious jobs explain a large part of the reduction of unemployment rates.

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<sup>9</sup> To a small extent the fall of statistically measured unemployment rates was also caused by changing statistical definitions of employed and unemployed. For example, the federal volunteer services (Bundesfreiwilligendienst) with around 40 000 persons are treated as jobs subject to social security contributions since 2014 (Frank & Grimm, 2014, p. 12).

There is a link between Hartz reforms and export performance. The reforms led to a low-wage sector mainly in the non-tradable sector, but this also reduced the costs in the tradable sector as the latter outsourced many tasks to the low-wage sector. Also, the reforms weakened the German trade unions and added to the very low wage increases also in the sector covered by traditional wage bargaining. From the mid-1990s the inflation rate in Germany became very low with even deflationary dangers after the Great Recession. The low inflation rate in Germany reflects too low nominal wage increases, which violated macroeconomic needs.<sup>10</sup> As in 1999 the EMU was established and other EMU countries could not any longer depreciate against the D-Mark the stagnating wage development in Germany increased German price competitiveness and added to the high and increasing German current account surpluses (Herr, 2017).

Without government help the German wage bargaining model will further erode. Statutory minimum wages introduced in 2015 have been preventing a further uncoupling of wages in the low-wage sector from general wage development, but it is likely that without legal changes the sector without collective bargaining coverage and precarious jobs will expand further in the long-term. Government interventions would be needed to establish again broad collective bargaining coverage. Widespread extension mechanisms of collective bargaining would be a suitable instrument or a mandatory membership of firms in employers' organisations negotiating sectoral wages. Also, a regulation of certain working contracts would be needed, for example the limitation of contract labour and strict regulation of contract for work labour, to reduce the sector of precarious employment. For a mature industrial country reduction in working time are possible and preferable. But this should be done in a solidary way, for example increasing holidays or cuts of weekly working time for all, and not in a sharp increase of part-time jobs and precarious self-employment.

## References

Agartz, V. (1953/2008). Expansive Lohnpolitik. In R. Bispinck, T. Schulten, & P. Raane (Ed.) *Wirtschaftsdemokratie und expansive Lohnpolitik. Zur Aktualität von Viktor Agartz* (pp. 151-157). Hamburg: Verlag.

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<sup>10</sup> Nominal unit-labour costs in Germany between the mid-1990s and the Great Recession remained almost at the same level reflecting that nominal wage increase were at the same level as productivity increases. A macroeconomic stabilising wage development would follow the rule that the nominal wage level should increase according to trend productivity increases plus the target inflation rate of the central bank. Then the inflation target of the central bank would be supported by wage development. This rule was violated in Germany (Herr, 2009).

Albert, M. (1993). *Capitalism vs. capitalism: How America's obsession with individual achievement and short-term profit has led it to the brink of collapse*. New York: Four Walls Eight Windows.

Allmendinger, J., Jahn, K., Promberger, M., Schels, B., & Stuth, S. (2018). Prekäre Beschäftigung und unsichere Haushaltslagen im Lebensverlauf: Gibt es in Deutschland ein verfestigtes Prekariat? *WSI-Mitteilungen*, 71(4), 259-269. doi: 10.5771/0342-300X-2018-4-259

Behrens, M., & Helfen, M. (2018). Small change, big impact? Organisational membership rules and the exit of employers' associations from multiemployer bargaining in Germany. *Human Resource Management Journal*, 29(1), 51-66. doi: 10.1111/1748-8583.12210

Berthold, N., & Coban, M. (2013). Ordnungspolitische Beurteilung geringfügig entlohnter Beschäftigung (Minijobs). Institute for Employment Research. Retrieved from: <https://www.insm.de/fileadmin/insm-dms/text/arbeit/studie-minijobs-prof-berthold-2013.pdf>

Bielenski, H., Magvas, E., & Parmentier, K. (1992). Arbeitsmarkt-Monitor für die neuen Bundesländer. *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, 25(2), 136-157. Retrieved from: [http://doku.iab.de/mittab/1992/1992\\_2\\_MittAB\\_Bielenski\\_Magvas\\_Parmentier.pdf](http://doku.iab.de/mittab/1992/1992_2_MittAB_Bielenski_Magvas_Parmentier.pdf)

Bispinck, R., & Schulten, T. (2012). Erosion der Tarifvertragssysteme stoppen – Sicherung der Allgemeinverbindlichkeitsregelung von Tarifverträgen. [Bundestag-Drucksache 17/8459].

Blair, T., & Schröder, G. (1999). *Europe: The third way / Die neue mitte*. London: Labour Party.

Brandt, T., & Schulten, T. (2008). Liberalisierung und Privatisierung öffentlicher Dienstleistungen und die Erosion des flächentarifvertrags. *WSI Mitteilungen*, 61(10), 570-576. Retrieved from: <https://www.ssoar.info/ssoar/handle/document/41347>

Bundesagentur für Arbeit (2018). Arbeitslosengeld II und Sozialgeld. SGB II. Retrieved from: [https://con.arbeitsagentur.de/prod/apok/ct/dam/download/documents/Merkblatt-ALGII\\_ba015397.pdf](https://con.arbeitsagentur.de/prod/apok/ct/dam/download/documents/Merkblatt-ALGII_ba015397.pdf)

Caliendo, M., & Steiner, V. (2005). Aktive Arbeitsmarktpolitik in Deutschland: Bestandsaufnahme und Bewertung der mikroökonomischen Evaluationsergebnisse. [DIW Discussion Paper, n. 515], German Institute for Economic Research, Berlin. Retrieved from: <https://ideas.repec.org/p/diw/diwwpp/dp515.html>

Caju, P. Du, Gautier, E., Momferatou, D., & Ward-Warmedinger, M. (2008). Institutional features of wage bargaining in 23 European countries, the US and Japan. [ECB Working Paper Series, n. 974], European Central Bank, Frankfurt am Main, Germany. Retrieved from: <https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp974.pdf>

Calmfors, L., & Driffill, J. (1988). Bargaining structure, corporatism and macroeconomic performance. *Economic Policy*, 3(6), 13-61. doi: 10.2307/1344503

Cazes, S., Garneró, A., & Martin, S. (2017, July 10). The state of trade unions, employer organisations, and collective bargaining in OECD countries. *Vox CEPR Policy Portal*. Retrieved from: <https://voxeu.org/article/trade-unions-employer-organisations-and-collective-bargaining-oecd-countries>

Detzer, D., Dodig, N., Evans, T., Hein, E., Herr, H., & Prante, F. J. (2017). *The German financial system and the financial and economic crisis*. New York: Springer International.

DGB (Deutscher Gewerkschaftsbund) (2019). Gesetzlicher Mindestlohn und Branchenmindestlöhne. Was ändert sich 2019 beim Mindestlohn? GDB, 02.01.2019. Retrieved from: <http://www.dgb.de/schwerpunkt/mindestlohn/mindestlohn-2019-was-aendert-sich-in-2019>

Eichhorst, W., & Tobsch, V. (2015). Not so standard anymore? Employment duality in Germany. *Journal of Labour Market Research*, 48(2), 81-95. doi: 10.1007/s12651-015-0176-7.

Ellguth, P. (2018, Mai 24). Die betriebliche Mitbestimmung verliert an Boden. IAB-Forum. Retrieved from: <https://www.iab-forum.de/die-betriebliche-mitbestimmung-verliert-an-boden/>

Eucken, W. (1982). The social question. In H. Wünsche (Ed.) *Standard texts on the social market economy: Two centuries of discussion* (pp. 267-276). Stuttgart: Gustav Fischer Verlag. (Original work published 1948)

Fahr, R., & Sunde, U. (2009). Did the Hartz reforms speed-up the matching process? A macro-evaluation using empirical matching functions. *German Economic Review*, 10(8), 284-313. doi: 10.1111/j.1468-0475.2008.00457.x

Felbermayr, G., Baumgarten, D., & Lehwald, S. (2014). *Increasing wage inequality in Germany: What role does global trade play?* Gütersloh: Bertelsmann Stiftung. Retrieved from: [https://ged-project.de/wp-content/uploads/2015/03/IncreasingWageInequality\\_final-EN-GED.pdf](https://ged-project.de/wp-content/uploads/2015/03/IncreasingWageInequality_final-EN-GED.pdf)

Fichter, M. (1997). Trade union members: A vanishing species in post-unification Germany? *German Studies Review*, 20(1), 83-104. Retrieved from: <https://www.jstor.org/stable/pdf/1432331.pdf>

Fitzenberger, B., Kohn, K., & Wang, Q. (2011). The erosion of union membership in Germany: determinants, densities, decompositions. *Journal of Population Economics*, 24(1), 141-165. doi: 10.1007/s00148-009-0299-7

Flassbeck, H., & Lapavistas, C. (2013). The systemic crisis of the Euro: True causes and effective therapies. [Studien], Rosa-Luxemburg-Stiftung, Berlin. Retrieved from: [https://www.rosalux.de/fileadmin/rls\\_uploads/pdfs/Studien/Studien\\_The\\_systemic\\_crisis\\_web.pdf](https://www.rosalux.de/fileadmin/rls_uploads/pdfs/Studien/Studien_The_systemic_crisis_web.pdf)

Frank, T., & Grimm, C. (2014). Beschäftigungsstatistik: Revision 2014. [Methodenbericht, zweite überarbeitete fassung], Bundesagentur für Arbeit, Statistik, Nürnberg. Retrieved from: <https://statistik.arbeitsagentur.de/Statistischer-Content/Grundlagen/Methodik-Qualitaet/Methodenberichte/Beschaeftigungsstatistik/Generische-Publikationen/Methodenbericht-Beschaeftigungsstatistik-Revision-2014.pdf>

Fuchs, J., Kubis, A., & Schneider, L. (2015). Szenarien für ein konstantes Erwerbspersonenpotenzial: unter Berücksichtigung der zukünftigen inländischen Erwerbsbeteiligung und der EU-binnenmobilität. Johann Fuchs Institut für Arbeitsmarkt- und Berufsforschung (IAB), Nürnberg.

Gerlach, K., & Meyer, W. (2010). Wage effects of works councils and collective agreements in Germany. In C. Brown, B. Eichengreen, & M. Reich (Eds.). *Labor in the era of globalization* (pp. 295-316). Cambridge: Cambridge University Press.

German Statistical Federal Office (2018a). Mikrozensus. Statistisches Bundesamt (Destatis). Retrieved from: <https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Arbeitsmarkt/Erwerbstaetigkeit/TabellenArbeitskraefteerhebung/AtypKernerwerbErwerbsformZR.html>

German Statistical Federal Office (2018b). Verdienste und arbeitskosten, reallohnindex und nominallohnindex. Statistisches Bundesamt (Destatis). Retrieved from: [https://www.destatis.de/DE/Publikationen/Thematisch/VerdiensteArbeitskosten/ReallohnNetto/ReallohnindexPDF\\_5623209.pdf?\\_\\_blob=publicationFile](https://www.destatis.de/DE/Publikationen/Thematisch/VerdiensteArbeitskosten/ReallohnNetto/ReallohnindexPDF_5623209.pdf?__blob=publicationFile)

German Statistical Federal Office (2018c). Bevölkerungsstand. Statistisches Bundesamt (Destatis). Retrieved from: [https://www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Bevoelkerung/Bevoelkerungsstand/Tabellen\\_/lrbev03.html](https://www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Bevoelkerung/Bevoelkerungsstand/Tabellen_/lrbev03.html)

German Statistical Federal Office (2018d). Statistisches Bundesamt. Retrieved from: <https://www.statistik-bw.de>

Giannelli, G. C., Jaenichen, U., & Rothe, T. (2016). The evolution of job stability and wages after the implementation of the Hartz reforms. *Journal of Labour Market Research*, 49(3), 269-294. doi: 10.1007/s12651-016-0209-x

Hein, E., & Truger, A. (2014). Future fiscal and debt policies: Germany in the context of the European Monetary Union. In P. Arestis & M. Sawyer (Eds.). *Fiscal and debt policies in the future*. Basingstoke: Palgrave Macmillan.

Herr, H. (2002). Arbeitsmarktreformen und beschäftigung – über die ökonomietheoretischen grundlagen der vorschläge der Hartz-Kommission. *Prokla. Zeitschrift für kritische Sozialwissenschaft*, 32(129), 515-536. doi: 10.32387/prokla.v32i129.684

Herr, H. (2009). The labour market in a Keynesian economic regime: Theoretical debate and empirical findings. *Cambridge Journal of Economics*, 33(5), 949-965. Retrieved from: <http://hdl.handle.net/10.1093/cje/ben044>

Herr, H. (2017). A history of the crises of the European Monetary Union. In H. Herr, J. Priewe & A. Watt (Eds.). *Saving the Euro: Redesigning Euro Area economic governance* (pp. 13-40). Social Europe Publishing.

Herr, H., & Ruoff, B. (2014). Wage dispersion as key factor for changing personal income distribution. *Journal of Self-Governance and Management Economics*, 2(3), 28-71. Retrieved from: [https://www.boeckler.de/pdf/v\\_2014\\_10\\_30\\_herr\\_ruoff.pdf](https://www.boeckler.de/pdf/v_2014_10_30_herr_ruoff.pdf)

Hüfner, F., & Klein, C. (2012). The German labour market: Preparing for the future. [OECD Economics Department Working Paper, n. 983]. doi: 10.1787/5k92sn01tzzv-en

IAB (Institut für Arbeitsmarkt- und Berufsforschung). (2018) IAB-Betriebspanel 2018. Tarifbindung. Retrieved from: [https://www.boeckler.de/wsi-tarifarchiv\\_2257.htm](https://www.boeckler.de/wsi-tarifarchiv_2257.htm)

Jacobi, L., & Kluve, J. (2007). Before and after the Hartz Reforms: The performance of active labour market policy in Germany. *Journal for Labour Market Research* (Zeitschrift für Arbeitsmarktforschung), 40(1), 45-64.

Kalina, T., & Weinkopf, C. (2012). Niedriglohnbeschäftigung 2010: Fast jed/r vierte arbeitet für niedriglohn. [IAQ-Report, 2012/01]. Institut für Arbeit und Qualifikation, Universität Duisburg-Essen. Retrieved from: <https://www.iaq.uni-due.de/iaq-report/2012/report2012-01.pdf>

Kalina, T., & Weinkopf, C. (2016). Niedriglohnbeschäftigung 2016: Beachtliche lohnzuwächse im unteren lohnsegment, aber weiterhin hoher anteil von beschäftigten mit niedriglöhnen.



[IAQ-Report, 2018/06]. Institut für Arbeit und Qualifikation, Universität Duisburg-Essen. Retrieved from: <https://www.iaq.uni-due.de/iaq-report/2018/report2018-06.pdf>

Krebs, T., & Scheffel, M. (2013). Macroeconomic evaluation of labor market reform in Germany. [IMF Working Paper, n. 13/42], International Monetary Fund. Retrieved from: <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Macroeconomic-Evaluation-of-Labor-Market-Reform-in-Germany-40318>

Krause, M., & Uhlig, H. (2011). Transitions in the German labor market: structure and crisis. [German Bundesbank Discussion Paper Series 1: Economic Studies, n. 34/2011]. Retrieved from: <https://ideas.repec.org/p/zbw/bubdp1/201134.html>

Meinhold, H. (1965). Das dilemma unserer lohnpolitik. *Die Zeit*, 17(51), 16. Retrieved from: <https://www.zeit.de/1965/51/das-dilemma-unsere-lohn-politik>

Mindestlohnkommission (2016). Erster bericht zu den auswirkungen des gesetzlichen mindestlohns. Berlin. Retrieved from: [https://www.mindestlohn-kommission.de/DE/Bericht/pdf/Bericht2016.pdf?\\_\\_blob=publicationFile&v=4](https://www.mindestlohn-kommission.de/DE/Bericht/pdf/Bericht2016.pdf?__blob=publicationFile&v=4)

Müller-Armack, A. (1982). The social aspect of the economic system. In H. Wünsche (Ed.) *Standard texts on the social market economy: Two centuries of discussion* (pp. 9-22). Stuttgart: Gustav Fischer Verlag. (Original work published 1947).

Ochel, W. (2001). Collective bargaining coverage in the OECD from the 1960s to the 1990s. *CESifo Forum*, 2(4), 62-65. Retrieved from: <https://www.econstor.eu/bitstream/10419/166106/1/cesifo-forum-v02-y2001-i4-p62-65.pdf>

OECD (Organisation for Economic Co-operation and Development) (2004). *OECD Employment Outlook 2004*. Paris.

OECD (Organisation for Economic Co-operation and Development) (2017). *OECD Employment Outlook 2017*. Paris.

OECD (Organisation for Economic Co-operation and Development) (2018). *OECD Employment Outlook 2018*, issue 1. Paris. doi: 10.1787/eco\_outlook-v2018-1-en

Oschmiansky, H. (2007). Der wandel der erwerbsformen und der beitrage der Hartz-Reformen: Berlin und die Bundesrepublik Deutschland im vergleich. [WZB Discussion Paper 2007-104], Wissenschaftszentrum Berlin für Sozialforschung (WZB), Berlin. Retrieved from: <https://www.econstor.eu/bitstream/10419/43961/1/534569463.pdf>

Pierenkemper, T. (2006). Vierzig jahre vergebliches mühen – die beschäftigungs- und arbeitsmarktpolitik. In A. Steiner (ed.) *Überholen ohne einzuholen: Die DDR-wirtschaft als fußnote der deutschen geschichte?* (pp. 45-66). Berlin: Christoph Links.

Pohlmann, M. (2005). Die industriekrise in Ostdeutschland. Zur rolle ökonomischer eliten und ihrer unternehmenspolitiken. *Deutschland Archiv*, 38(3), 417-424. doi: 10.11588/heidok.00008631

Rinne, U., Zimmermann, K. F. (2011). Another economic miracle? The German labor market and the Great Recession. [IZA Discussion Paper, n. 6250]. Institute for the Study of Labor, Bonn. Retrieved from: <http://ftp.iza.org/dp6250.pdf>

Ruoff, B. (2016). Labour market developments in Germany: tales of decency and stability. [GLU Working Paper, n. 39], Global Labour University, Geneva. Retrieved from: [https://www.global-labour-university.org/fileadmin/GLU\\_Working\\_Papers/GLU\\_WP\\_No.39.pdf](https://www.global-labour-university.org/fileadmin/GLU_Working_Papers/GLU_WP_No.39.pdf)

Sachverständigenrat (2018). Gutachten des sachverständigenrates, 2018/19. Berlin.

Scharpf, F. (1987). *Sozialdemokratische Krisenpolitik in Europa*. Frankfurt: Campus.

Schnabel, C. (2005). Gewerkschaften und arbeitgeberverbände: Organisationsgrade, tarifbindung und einflüsse auf Löhne und Beschäftigung. [Diskussionspapiere n. 34], Friedrich-Alexander-Universität Erlangen-Nürnberg, Lehrstuhl für Arbeitsmarkt- und Regionalpolitik, Nürnberg, Germany. Retrieved from: <https://www.econstor.eu/bitstream/10419/23776/1/dp34.pdf>

Schnabel, C., Wagner, J. (2003). Trade union membership in Eastern and Western Germany: Convergence or divergence? [IZA Discussion Paper n. 707], Institute for the Study of Labor (IZA), Bonn, Germany. Retrieved from: <http://ftp.iza.org/dp707.pdf>

Soskice, D. (1990). Wage determination: The changing role of institutions in advanced industrialized countries. *Oxford Review of Economic Policy*, 6(4), 36-61. doi: 10.1093/oxrep/6.4.36

Visser, J. Data base on institutional characteristics of trade unions, wage setting, state intervention and social pacts, 1960-2014 (ICTWSS), version 5.0. AIAS, University of Amsterdam. Retrieved from: [http://archive.uva-aias.net/uploaded\\_files/regular/ICTWSScodebook50-2.pdf](http://archive.uva-aias.net/uploaded_files/regular/ICTWSScodebook50-2.pdf)

Wirtschafts- und Sozialwissenschaftliche Institut (WSI) (2018). Erwerbstätigkeit. Retrieved from: <https://www.boeckler.de/53509.htm>

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