Germany

Rising Inequality and the Transformation of Rhine Capitalism

Giacomo Corneo
Sonja Zmerli
Reinhard Pollak

DOI:10.1093/acprof:oso/9780199687428.003.0012

[~] Abstract and Keywords

Germany has displayed a remarkably stable distribution of household net incomes except for the period 2000–2006 when inequality rapidly increased, both at the bottom and the top of the distribution. The rise of income disparities can be attributed to rising unemployment rates, growing inequality in market returns returns, and changing tax legislations. In a short-term perspective, the rise of income inequality was associated with increasing material deprivation, lower happiness, and less mobility out of poverty. In the long run, however, trends in these social indicators do not parallel the development of
income inequality over the past two decades. Political behavioural and attitudinal patterns during the past ten years, which saw lower turnout rates, less trust in other people and political institutions as well as stronger opposing views towards immigrants, particularly amongst the least educated, are more in line with inequality trends.

Keywords: income inequality, unemployment, tax legislation, deprivation, happiness, voter turnout, Germany, social impacts, immigrants, poverty

1. Introduction

In the 1980s, Germany consisted of two separate states with different economic systems: the Federal Republic of Germany (FRG), a member of NATO with a population of almost 62 million; and the German Democratic Republic (GDR), a member of the Warsaw Pact with a population of about 17 million. In the following, we only deal with the FRG during the 1980s and with both the East (the former GDR and West Berlin) and the West (the rest) after reunification—which occurred on 3 October 1990.

The economic system of the FRG during the 1980s can be described as a corporatist variant of capitalism, referred to as Rhine capitalism. It has two distinctive traits. The first is cooperative industrial relations, both at the firm level—with work councils and co-determination in large firms—and at the national level—with comprehensive industry-wide wage agreements struck between employer representatives and trade unions. The second is a highly developed social security system of the Bismarckian variety, strongly relying on the equivalence principle, and strongly determined by the work history and family circumstances of the insured. In conditions close to full employment, as they prevailed (p.272) in Germany during the three decades after World War II, Rhine capitalism was successful in providing insurance against income shocks and restraining long-term income disparities.

Since reunification, the German economic system has undergone far-reaching changes, involving the hybridization of the corporatist model inherited from pre-reunification FRG with elements that are borrowed from the Anglo-Saxon world of capitalism: de-unionization; privatizations; minimum wages in some sectors; a kind of earned income tax credit; declining public pensions; subsidization of private retirement savings; and a stronger emphasis on shareholder value. As we will show in this chapter, this transformation has come with a substantial increase in income inequality that came to the fore during the first half of the last decade. At the same time, political disenchantment, social intolerance and demands for redistributive policies have become more common.

The FRG of the 1980s was one of the most affluent and egalitarian countries in the world. Average income was higher in West Germany than in France or in the Netherlands and only the Scandinavian countries exhibited a more even income distribution. The integration in 1990 of the GDR into the political structure of the more affluent FRG implied that reunified Germany was starting with a lower level of per-capita GDP than West Germany had in 1990. Still, at the beginning of the 1990s, reunified Germany had a higher level of per capita GDP in current prices than France and the Netherlands. Reunification also produced an immediate effect on income inequality: on the one hand, the population
of West Germany was merged with a poorer population, which tended to increase inequality; on the other hand, that poorer population had more evenly distributed incomes, which tended to reduce inequality. As a result, just after reunification, Germany still exhibited an income distribution that was quite egalitarian by international comparison.

After reunification, the macro-economic performance of Germany has been on the whole rather poor until about 2006. German GDP growth has been low, not only as compared with former decades but also by international standards. In terms of GDP per capita in current prices, reunified Germany has been surpassed by Austria, Belgium, and the Netherlands, and it has been caught by France. The disposable income of private households, except for some growth years in the second half of the 1990s, has stagnated most of the time. In real terms, median household equivalent net income in 2008 was only 5 per cent higher than in 1991.\(^2\)

A high unemployment rate accompanied slow economic growth in the fifteen years that followed reunification. The unemployment rate, measured according to the official German definition, increased from 7.3 per cent in 1991 to 13 per cent in 2005.\(^3\) Since then, however, unemployment has substantially declined and reached again the level it had at the time of reunification.

The number of working people in 2005 was about the same as it was in 1991. After 2005, employment grew rapidly. In 2010, there were about 1.6 million working people more compared to 2005,\(^4\) employment in Germany has thus increased by about 4 per cent from 1991 to 2010. However, since average work hours per employed person have substantially decreased, total working hours have actually declined by 4 per cent from 1991 to 2010. The evolution of employment was very different for the employees and the self-employed: while the number of employees increased by only 2 per cent, the number of self-employed persons increased by more than 25 per cent. Moreover, the labour market underwent a dualization process, entailing the rise of a large segment of badly-paid and unstable jobs, most of them in the service sector.

Labour’s share in German national income declined between 1991 and 2010 from 71 per cent to 66.3 per cent, the bulk of the decline occurring in the period 2000–2007. Correspondingly, entrepreneurial and property income increased. In real terms, employees’ compensation increased very modestly between 1991 and 2010. Average gross hourly wages increased in real terms during the 1990s, as employees in the regions of the former GDR reduced the pay gap that separated them from their counterparts in the West. Since 2000, average real hourly wages have stagnated in Germany.

The structure of aggregate demand has changed significantly since the beginning of the 2000s: while consumption and investment, both private and public, have stagnated, the current account has thrived. Since 2004, a trade surplus of the order of 5 to 6 per cent of GDP has been common for Germany. The share of German production that is sold abroad almost doubled during the last two decades: exports represent now about 50
per cent of GDP, while they represented only about 26 per cent of GDP in 1991.

The share of GDP obtained from services has increased, while the shares of agriculture and manufacturing have declined. However, as compared to other countries, the relative decline of manufacturing has been less pronounced in Germany and its share of GDP is high by international standards. Manufacturing is directly responsible for about one quarter of all jobs in Germany, for most of the exports and for Germany’s current account surplus. German manufacturers often specialize in high-technology productions, invest heavily in R&D and benefit from a wide range of government programmes to support scientific research and innovation. Large companies act as multinational enterprises with substantial foreign direct investment (FDI) across the entire globe. Most value added in German manufacturing comes, however, from small and medium-size enterprises. They are often deeply rooted in the territory where they produce and, at the same time, have successfully outsourced part of their production to producers in Eastern Europe and Asia.

Typically, industrial relations in manufacturing firms are peaceful and characterized by a cooperative attitude. In large companies, co-determination is mandated by law. The strong performance of German manufacturing relies upon institutions that favour the rise and durability of a network of long-term relationships based on mutual trust. In particular, the banking sector is characterized by the strong presence of local public and mutual savings banks that support the expansion strategies of small and medium-size enterprises. Furthermore, German manufacturers benefit from a dual system of education that combines schooling with vocational training in firms. This system has proven to be an effective way to foster human capital investment, limit youth unemployment and provide firms with the skilled workforce they need in order to be internationally competitive in post-fordist high-tech industry.

Globalization has affected Germany also in terms of the composition of its resident population. Over the last fifty years, the share of foreigners living in Germany has strongly increased, starting from a very low level. Today, the Turks are the largest group of resident foreign population, its large size going back to the policy of actively recruiting \( \text{(p.274)} \) ‘guest-workers’ in the 1960s. Many immigrants were also recruited from Southern Europe, in particular Italy and Yugoslavia. Contrary to official expectations, most ‘guest-workers’ did not return to their countries but stayed to live in Germany and started their own families. German integration policy began relatively late and has not been very successful yet. After the demise of the Soviet empire, there has also been a large inflow of people from Eastern Europe, in particular ethnic Germans.

A main policy concern during the last two decades has been the convergence of living standards and productivity in the regions of the former GDR to those in West Germany. Starting from less than half of the West German level in 1991, real GDP per employed person in the East has increased to about 80 per cent of the West German level in 2009; the strongest increase took place in the first half of the 1990s. The average gross monthly wage of full-time employees in the East was just 46.5 per cent of the corresponding wage in the West in 1991. Five years later, the East-West ratio had already climbed to 73.2 per
cent. In 2009, it amounted to 76.5 per cent. Convergence was on its way also with respect to average household disposable income: the East-West ratio increased from 59.2 per cent in 1991 to 78.3 per cent in 2008.

Where convergence has failed is with respect to employment. Over time, the unemployment rate in the East has remained at roughly twice the level of the West. The atrophy of Eastern employment as compared to employment in the West is matched by its worse demographic evolution. From 1990 to 2008, the population living in the East declined by 11.7 per cent, while the population of the West grew by 6.5 per cent. The decline of the population in the East went along with a massive increase in the average age of its resident population. This was due to a dramatic decrease of fertility, an increase of longevity, and large outflows of young migrants, especially women.

2. Income Inequality
German income inequality was rather stable during the 1980s. After reunification, the inequality of market incomes and the inequality of earnings at the bottom of the distribution began to increase. The increase of inequality at the level of primary incomes accelerated in the years 2000–2005 and that inequality stayed roughly constant afterwards. By contrast, the distribution of disposable income did not become significantly more unequal during the 1990s. Inequality of disposable income, poverty, and income concentration at the top of the distribution rapidly grew in the years from 2000 to 2005 and has stood at that higher level since.

Inequality among Households
Household income is a key determinant of the standard of living. In order to take household size and composition into account, we make multi-member household income equivalent (p.275) to one-person household income using the modified OECD equivalence scale. The evolution of household income inequality in Germany since 1983 is depicted in Figure 12.1. It shows the Gini coefficients for the distributions of net and gross income, separately in the West and the East of Germany. The evolution of the Gini coefficients for Germany as a whole is very similar to the evolution for West Germany.

Figure 12.1 shows that the Gini coefficient of the cross-sectional distribution of net household income in West Germany was slightly less than 0.25 in the early 1980s and about the same level of inequality prevailed at the end of the century. After 1999, inequality rapidly grew over six years, reached a level of about 0.28 and approximately stayed at that higher level afterwards. In contrast to net incomes, gross incomes are computed before taxes and public transfers and those incomes had already became more unequal during the 1990s. It is apparent from Figure 12.1 that the tax transfer system substantially reduces cross-sectional income inequality in Germany.

The evolution of income inequality in the East has been similar to the one in West Germany, albeit less stable. In particular, the rise in inequality of gross income was more pronounced in the East. In terms of inequality levels, there is a striking difference between the two regions: gross incomes are distributed more unequally in the East but, thanks to general governmental redistribution, net incomes are distributed more evenly...
there. However, during the last few years inequality has become more similar in the two regions.

![Gini coefficients of income distributions for East and West Germany](image)

**Figure 12.1** Gini coefficients of income distributions for East and West Germany  
*Source: SOEP, own calculations; annual incomes, with frequency weights.*

(p.276) The growth of income inequality has affected both households with relatively high incomes and households with relatively low incomes, as indicated by increasing 90/50 and 50/10 percentile ratios.

The evolution of poverty rates has been similar to the evolution of the Gini coefficient. After taxes and transfers, the poverty rate—with the poverty line at 60 per cent of the median net equivalent household income—exhibited no distinguishable trend until the end of the century. The poverty rate rapidly increased during the first half of the 2000s and then hardly changed in the second half.

Among groups, lone mothers and the unemployed often live in poverty. More than half of all households headed by an unemployed person or by a lone mother receive incomes below the poverty line. Especially for the unemployed, the decade of the 2000s substantially increased their poverty risk: it rose from about 41 per cent to more than 56 per cent. Also households headed by a person without a licence from an advanced secondary school (*Abitur*) or by someone younger than thirty are subject to a severe poverty risk. That risk moderately increased for both groups during the 2000s.

Households living in the East face a greater poverty risk than the rest of the population and that difference has increased during the 2000s. This is a contrast with the 1990s, a decade during which the poverty rates in the East and in the West were converging. The incidence of poverty over the last decade was rather stable in the case of foreigners—defined as individuals who were not born in Germany, independently of their ethnic origin. Perhaps surprisingly, in Germany neither blue-collar workers nor the elderly
exhibit a poverty rate that substantially differs from that of the overall population.

Unfortunately, the SOEP data contains too few households with very high incomes to accurately portray the very top of the income distribution. Bach et al. (2013) have merged individual tax returns data from administrative data with the SOEP. Their income concept is household income after taxes and transfers; in contrast to the previous analysis, they do not use an equivalence scale. They show that the share of total income received by households in the top percentile grew from 6.78 per cent in 1992 to 7.91 per cent in 2005. It is noteworthy that the income increase in the top percentile was very unequal, with the very top of the distribution increasing its incomes at a much faster pace than the rest.

In contrast to the U.S., top managers represent in Germany a relatively minor fraction of the very top of the income distribution. The overwhelming majority of the economic elite of Germany—defined as the top 0.001 per cent fractile—consists of individuals whose main income sources are business activity and financial capital (Bach et al., 2009). In line with this finding, the increase in income concentration in Germany has been paralleled by a decline in labour’s share of national income.

An important aspect of the rise of inequality after reunification is the increasing role of the self-employed. Income from self-employment is distributed more unequally than income from dependent employment and the share of the self-employed in the workforce has strongly increased during the last two decades.

Because of data problems, the analysis of German wealth distribution has been hitherto subject to severe limits. However, some interesting facts can be established. First, the ratio of household net wealth to household yearly income is about 3.5 in Germany and that ratio has been increasing over the last three decades. Second, wealth is distributed more unequally than income, and wealth inequality has increased between 2002 and 2007. Third, households in the East own substantially less wealth than households in the West. The inter-regional (p.277) wealth gap is substantially more pronounced than the inter-regional disparity in income levels: household wealth in East Germany is only about 40 per cent of household wealth in West Germany. Fourth, wealth is more unequally distributed in East Germany than in West Germany. As wealth produces income, this contributes to explain why market incomes are distributed more unequally in the East than in the West. Also, in the case of wealth, there is a tendency for the Gini coefficients in the two regions to converge.

Labour Market Inequality

Because of its large relative size, labour income is a major direct determinant of income inequality. The picture of the evolution of labour income inequality in Germany over the last three decades is complex. Using social security records, Dustmann et al. (2009) find that cross-sectional wage inequality was already increasing in West Germany in the 1980s, but only in the top half of the distribution. They also find that in the early 1990s inequality started to rise for the entire wage distribution. Using data from the German Socio-Economic Panel (SOEP) and the German Income and Expenditure Survey (EVS),
Fuchs-Schündeln et al. (2010) confirm the rise of wage inequality in West Germany after reunification, the upward trend of inequality being mainly driven by an increase in inequality after the year 2000. By contrast, they find that inequality did not noticeably increase during the 1980s. Also using the SOEP data, Gernandt and Pfeiffer (2007) find that inequality of wages for prime-age male employees was stable in West Germany between 1984 and 1994 and increased thereafter. In the period of increasing inequality they find a significant positive gap between high-tenure and low-tenure workers in terms of respective wage growth rates. They suggest that the adjustment of wages to worsening labour market conditions mainly concerned entrants into the labour market. For all workers in West Germany, they find that real wage growth at the tenth percentile has been slightly negative since the mid 1990s. Becker (2006) uses the SOEP to compare 1998 and 2003 in terms of inequality of hourly wages. She finds that workers without a full-time job suffered from wage stagnation and that overall inequality increased, with a low-pay sector already developing before the labour-market reforms of the Hartz legislation. By contrast, ‘within group’ wage inequality did not change significantly between 1998 and 2003.

Bach et al. (2009) investigate the distribution of individual market incomes for the entire adult population living in Germany. Market income includes, along with wage income, income from self-employment and from capital. They find a steady increase of the Gini coefficient in the period from 1992 to 2003, from 0.616 to 0.652.

Two remarkable developments in earnings inequality occurred over the last two decades. First, a very rapid decline of earnings inequality at the bottom of the distribution took place just in the wake of reunification. This was mainly due to a partial catching up of wages in the regions of the former GDR. Those wages started from a low level and were raised in a few years to levels close to three-quarters of comparable West German wages. Second, there was a substantial increase in earnings inequality at the bottom of the distribution during the first decade of this century.

Unemployment has been a major crux for the German economy during the last three decades. The unemployment rate trended upwards in Germany until 2005 and started declining afterwards. After reunification, the level of unemployment has systematically been much \( \textbf{(p.278)} \) higher in East Germany. The incidence of unemployment has been especially high for the individuals with low educational attainment.

The rise of unemployment in West Germany from the mid 1970s to the mid 1990s is usually attributed to the institutional rigidity of its labour market, which resisted a downward wage adjustment in spite of competitive pressure resulting from globalization and skill-biased technological change. The rise of unemployment is therefore seen as the price for keeping a low level of wage dispersion—the counter-example being the US, where in the same period the unemployment rate was kept under control at the price of increased wage dispersion.

The exceptionally high unemployment rates in the region of the former GDR mirror several factors, most prominently: mistakes in economic policy that led to accelerated de-
industrialization; the absence of an entrepreneurial class with a network of long-standing relationships; an excessive wage push during the years when Eastern Europe was experiencing an economic breakdown; and a dramatic fall in public employment.

The pool of the unemployed is heterogeneous. Along with people that remain unemployed for a short duration and then find a new job, there is a group of long-term unemployed people. These are often older persons and persons with serious health problems who cannot work longer than a few hours. Since the Hartz reforms, there has existed a large group of people who at the same time have an official job and receive transfers under the same programme as the one for the unemployed. It is estimated that, as of today, about 1.3 million people combine low market wages with such public transfers.

The German labour market shares a secular trend with all other advanced economies: the rising participation of women. The female activity rate has steadily increased over the last three decades and is approaching the rather stable activity rate of men. Part-time employment is much more common among women (45.8 per cent) than among men (9.2 per cent). Overall, the share of workers in part-time employment has increased in Germany from 14 per cent in 1991 to 26.5 per cent in 2009. Some of that increase occurred because of a shortage of full-time jobs. According to EU-LFS, in 2011 some 17.1 per cent of those individuals would have preferred full-time work. SOEP data indicates that the gap between the desired number of working hours and the actual number of hours worked by part-time employees has increased since the second half of the 1990s (Holst and Seifert, 2012). In terms of overall female labour-market participation, Germany takes a middle position among OECD countries.

Labour market inequality is intertwined with the decline of both trade unions and collective bargaining. Trade unions used to play a key role in the wage formation process in the FRG. Industrial relations were characterized by industry-level wage negotiations, typically led by the metal working industry. This system has been weakened after reunification when in many cases firm-level bargaining replaced industry-level bargaining, and opening clauses in collective agreements allowed for plant-level derogation. The unionization rate, which was about 36 per cent at reunification, has steadily declined to about half that level. (p.279) Furthermore, especially in East Germany, many firms have begun to set their wages unilaterally, without any formal agreement with unions or worker representatives.

Another major institutional change has been the rise of fixed-term employment contracts. The share of employees in temporary jobs has risen from about 10 per cent to almost 15 per cent today in the last fifteen years. Temporary workers typically receive low wages and face a high unemployment risk.

Why has Inequality Grown?
In Germany, income inequality was rather stable during the 1980s. After reunification, the inequality of market incomes and the inequality of earnings at the bottom of the distribution began to increase. The increase of inequality at the level of primary incomes
accelerated in the years 2000–2005 and inequality stayed roughly constant afterwards. By contrast with primary incomes, post-fisc incomes did not become significantly more unequal during the 1990s. Inequality of net income rapidly grew in the years from 2000 to 2005 and stood at that higher level afterwards.

There are three prominent features of the evolution of German inequality that need an explanation:

1. The rise in the inequality of primary incomes since reunification
2. The stability of the distribution of net incomes during the 1990s, despite the above element

The rise of inequality of primary incomes since reunification. To a substantial extent, the long-run rise of inequality in the distribution of market incomes in Germany mirrors the growing numbers of the unemployed and pensioners, i.e. individuals with zero or very low market incomes, in the overall population.

In Germany, the earnings distribution and the wage distribution showed a slight increase in inequality after the economic downturn of 1992–1993. This mainly occurred through a relative worsening of the pay received by the new entrants into the labour market (Gernandt and Pfeiffer, 2007; Fuchs-Schündeln et al., 2010). The main drivers behind those changes were: skill-biased technological change in the upper half of the distribution; immigration shocks from Eastern Europe; and the decline of unions in the lower half of the distribution (Dustmann et al., 2010). It is likely that large privatizations and the outsourcing of low-skill tasks by the public sector contributed to the growth of a low-wage sector in Germany.

The long-run rise of inequality in equivalent gross household income was also due to compositional effects, in particular the increased share of pensioner households and the reduced average household size. Between 1991 and 2008, the population of Germany increased by 2.6 per cent, while the number of one-person households increased by 33.2 per cent. According to Peichl et al. (2012), the increased inequality of gross household incomes is strongly related to changes in household structure that have occurred in Germany during that period.

The stability of the distribution of net incomes during the 1990s. The redistributive performance of the German tax transfer system strengthened in the 1990s, as the distribution (p.280) of post-fisc income changed little, despite an increasingly unequal distribution of pre-fisc income. The generosity of unemployment benefits remained relatively high during the 1990s. With respect to old age pensions, the retirees were still benefiting from the reforms introduced in the late 1970s. That expansion was characterized by relatively high replacement rates and generous early retirement provisions (Bönke et al., 2010). Pensioner households in the East benefited from having work histories with no unemployment spells and a high labour-market participation of women.
In the years 1996–98, the burden of personal income tax was reduced for low-income households (Corneo, 2005a). The average income tax rate for individuals with low income fell substantially as compared to 1995, which helped to offset zero or even negative real wage growth in the lowest quartile of the distribution. Furthermore, there were strong increases in the child benefit, starting in 1996, that reduced the poverty risk for families with children.

**The rise of inequality in 2000–2005.** The impressive acceleration of the rise in inequality after 1999 occurred during a period of weak economic growth and high unemployment levels. To a great extent, the rise of inequality was caused by the poor performance of the German labour market. Growing unemployment mainly hit low-skilled workers and exerted a downward pressure on their wages, especially in the case of new entrants into the labour market. In a context of vanishing union power, of firms rejecting industry-wide wage agreements, and of increasingly privatized public services, there were few institutional barriers to resist such a pressure. After 2003, the Hartz-reforms are likely to have contributed to put even more pressure on the low-skilled and to foster low-pay employment. As a result, wage and earnings inequality at the bottom of the distribution increased.

This time, the German tax transfer system did not generate the progressive effects that would have stabilized the distribution of post-fisc incomes. With regard to transfers, current pensioners continued to benefit from relatively generous arrangements stipulated in the past, and their poverty risk hardly changed. By contrast, the poverty risk of the unemployed increased substantially—as one would expect from the substantial increase in earnings inequality even without any change occurring in unemployment benefits. In fact, the Hartz-reforms are likely to have contributed to a higher poverty rate among the unemployed. The increased incidence of poverty among the unemployed in 2000–2005 can also be related to the high unemployment rates that prevailed in Germany from the mid 1990s. In contrast to those who were unemployed in the mid 1990s, the people who were unemployed during the early 2000s had often already been unemployed for a long period and were thus entitled to lower benefits.

Turning to the German tax system, during 2000–2005 it actually became less progressive, especially as a consequence of the income tax reform enacted in various steps by the government of Chancellor Schröder (Social-Democrats and Green Party) from 1998 to 2005 (Corneo, 2005b). The substantial reduction of the top marginal tax rate, along with cuts in corporate taxation and lasting effects from the demise of the personal wealth tax in 1996/7, contributed altogether to increasing the concentration of net income at the top of the distribution. Tax policy is likely to have also spurred the increase in gross incomes at the top of the distribution, e.g. by encouraging top managers to demand pay increases. Fabbri and Marin (2012) document a massive increase in CEO pay in Germany, especially in 2005 and 2006, just after a substantial cut in the top marginal rate of income tax and consistently with theories of compensation bargaining.

**Using a decomposition analysis,** Biewen and Juhasz (2012) have attempted to quantify the strength of various potential drivers of inequality in Germany from 2000 to...
They find that the main drivers were rising unemployment, rising inequality in market returns, and changes in the tax system. Each one of those three factors is found to account for about one quarter of the overall increase in inequality of disposable equivalent household income in Germany in that period.

3. The Impact of Inequality on Social Indicators
Rising income inequality in the early 2000s went along with an increase in poverty rates, at least for some sub-groups of the population. These monetarily defined measures may find their consequences in changing living conditions, in worsening health conditions, in a lack of social interaction, and in an eroding subjective well being. However, these consequences are not deterministic. Some indicators of daily life experiences and conduit may be immune to moderate changes in income inequality; other indicators may be affected after a considerable delay. This section provides a description of the development of social indicators and relates it to income inequality.

Material Deprivation
Households with significant income losses may be able to maintain their material living standard for a certain amount of time by exploiting existing resources, for example using an existing car or TV. Hence, we would expect a gradual increase in material deprivation as a consequence of growing income inequality and unemployment. Using SOEP data from 2001–12.2007, we find an increase in material deprivation for the entire observation period (Figure 12.2). The level of material deprivation is higher in East than in West Germany, and the increase is more pronounced in East than in West Germany as well. Andreß (2006) shows that the amount of material deprivation parallels the development of unemployment rates, with a strong increase in material deprivation after the turn of the century. In the most recent years, material deprivation has been declining (Engels et al., forthcoming). Thus, material deprivation seems to correlate more with developments in unemployment rates than with income inequality.

The increase in material deprivation varied across social groups. Households with tertiary educated members hardly experienced an increase in material deprivation. Households without academic degrees have been increasingly confronted with cuts in the standard of (p.282)
living. For poor people, the rate of materially deprived poor households jumped from about 30 per cent to 40 per cent. The remarkable increase for this group suggests that poor households increasingly suffer from their financial situation.

**Social Interactions**

Growing inequality and poverty rates may result in forms of social deprivation as well. People could be less willing, less inclined or less able to see other people and interact with them on a daily base. Using data from the SOEP, the ISG research institute (forthcoming) summarizes the frequency of contacts with friends, relatives and neighbours. On average, (p.283) between 21.5 and 23.6 per cent of the population do not have contacts with their peers at least once a month. For the first decade of the 2000s, there is no clear trend in these numbers. We find somewhat higher rates of social exclusion for poor people and for less-educated people. The higher numbers for less privileged people raise questions about the capacity of our society to avoid alienation for these groups.

**Subjective Well Being**

In contrast to the previous social indicators, measures of subjective well being are more prone to react instantaneously to changes in income inequality. The SOEP data provide measures of an individual’s satisfaction with life in general, with her or his health and with household income. The long-term trends of these measures exhibit some fluctuations between 1995 and 2009 (Figure 12.3). For the time period between 2000 and 2005—the period of growing income inequality—we find a decline in life satisfaction, health

---

**Figure 12.2** Share of materially deprived households (as %)  
*Source: SOEP, own calculations.*
satisfaction and income satisfaction. However, the variation in these satisfaction measures before and after the rise of income inequality does not speak to a systematic correlation of income inequality and satisfaction.

On average, people in West Germany are more satisfied with aspects of their life than people in East Germany. The difference is about 0.3 and 0.8 points on an 11-point-scale. People with secondary or primary education are less satisfied with their situations than tertiary educated people. Again, a stark contrast exists between poor people and non-poor people. The average difference between these groups ranges between 0.4 points for health and 2.2 points for income satisfaction. Poor people show little tendency for health satisfaction, especially not at the beginning of the millennium. Life satisfaction, however, declined in the first years of the 2000s. Even more pronounced is the development of income satisfaction during that time. Income satisfaction plummeted for this group by about 0.8 points. The drop after 2003, in particular, suggests that this development may be related to the newly introduced labour market reforms and the reforms in social assistance (see Section 5).

Social Mobility
An increase in cross-sectional inequality may be less damaging to the social fabric if it is accompanied by increased mobility. Using SOEP data, Goebel et al. (2011) present income dynamics out of income quintiles within a 4-year period. As shown in Figure 12.4, about 66.5 per cent of people from the highest income quintile in 1985 remained in this quintile at least until 1988. Likewise, about 57.3 per cent of the people from the lowest income quintile in 1985 remained in this quintile at least until 1988. The trends over time show remarkable stability for people in the highest quintile. The finding for the bottom of the distribution is markedly different. After 2000, the proportion of people who were not able to leave low-income conditions rose to 65.2 per cent. Thus, the rise in cross-sectional inequality in Germany was not accompanied by more income mobility but rather by an increased difficulty in escaping poverty.9

(p.284)
Overall, we find little support for correlations between income inequality dynamics and the development of social indicators. For material deprivation and social interactions, there is little evidence of concomitant trends. For life, health and income satisfaction, we find trendless fluctuation in the long run. However, we do find short-term trends of declining satisfaction that parallel the increase in income inequality in the early 2000s. The most prominent findings concern the poor. Material deprivation rises for the poor and the increase in cross-sectional poverty rates at the beginning of the millennium is not matched by an increased likelihood of climbing up the income ladder.

(p.285)
4. Political and Cultural Impacts

Income inequality poses a challenge to social cohesion and political stability. High levels of inequality induce corruption, social distrust, bad governance, and weak political support (Newton and Zmerli, 2011; Rothstein, 2011; Uslaner, 2008, 2011). The latter is a prerequisite upon which the legitimacy of democratic regimes depends. Aspects of social cohesion and institutional settings are intrinsically related to the fabric of social structures. Individual political attitudes are not only shaped by personal experiences but by collective socio-tropic perceptions (Kumlin, 2004). These perceptions relate to macro-level phenomena such as economic performance, unemployment and income inequality. Notwithstanding, some economic theory or philosophical schools of thought would argue in favour of inequality, pointing either to its function as an economic incentive or to the rightfulness of benefiting from one’s own endowments (Roemer, 2011).

The following analysis mainly focuses on behavioural and attitudinal trends in East and West Germany during the previous ten years, the period of time covering the most pronounced increase in inequality.

(p.286) Voting

As the official statistical data on voting depict, turnout in German national elections was high throughout the first three decades after the Second World War and reached its peak at the beginning of the 1980s, with a turnout of nearly 90 per cent at the national election in 1983 (Figure 12.5). Since then, a steady decline in turnout has set in, resulting in a difference in turnouts of nearly twenty percentage points from 1983 to the most recent national election in 2009. The process of German unification does not appear to account for this pronounced downward trend. In both parts of the country, turnout during the most recent national election was at an all-time low, although East Germans have consistently had lower turnout rates than West Germans in preceding elections. Taking the trends of the last twenty years into consideration, the drop in the percentage share of voters which occurred during the most recent election in 2009 is particularly
striking.

An investigation of the five waves of the European Social Survey data (ESS, 2002 to 2010) substantiates the notion of diverging voting behaviour between East and West German citizens. Differentiating by educational degree reveals for both regions that turnout rates of people with a tertiary educational degree have been the highest and most stable over the first decade of the 21st century. While turnout rates for citizens with primary schooling have been lowest and fluctuating over time, the initially high turnout rates of citizens with secondary schooling have declined since 2002. Overall, a widening participatory gap between citizens with tertiary education and citizens with primary and secondary schooling can clearly be discerned.

Figure 12.5 Voting in national elections, in %

(p.287) Trust in Others and Political Institutions

We investigate the trends of political trust using data from the German General Survey (ALLBUS), which covers the period between 1984 and 2008. The empirical results are complemented by the five waves of the ESS.

As shown by ALLBUS, trust in the legal system has been remarkably stable over time with the exception of a decline in the course of the 1980s. The comparison between the former GDR and FRG discloses a pronounced perceptual divide. While nearly fifty per cent of West Germans steadily express trust in the legal system, East Germans are somewhat less inclined to do so.

Inspecting trust attitudes by educational level based on ESS data reveals for both parts of the country a significant decrease amongst people with the lowest educational achievement. The same holds true for secondary degree holders, albeit to a lesser extent. Tertiary education degree holders experience an outstanding boost in trust in the legal system—in particular in the eastern part of the country. Rising levels of inequality, which disproportionately affect lower and middle class households, could be related to these remarkable developments.
Trust in the German national parliament (Bundestag) has been expressed by less than one third of the German population since the beginning of the 1990s, according to data drawn from ALLBUS. The East/West comparison reveals another significant perceptual divide. While a little less than a third of West Germans express trust in the German Bundestag, less than one fifth of East German citizens share the same trustful attitude. In addition, as the West German cross-educational-level analysis of ESS data suggests, the three categories maintain observable ‘between group’ differences, with the primary education degree holders as the least trustful citizens (Figures 12.6 and 12.7). For East Germany, a particularly sharp drop in trust can be observed for the least educated with only approximately one tenth of citizens expressing a trustful attitude. Citizens with a tertiary education degree contrast this consistent trend of declining trust levels. Considering potential sources of this disturbing development, increasing levels of inequality could provide one part of the explanation.

Turning to Germans’ levels of social trust, the ESS data depict how levels and trends of social trust differ across educational degrees (Figures 12.8 and 12.9). In both regions, tertiary degree holders are the most trustful. In addition, East Germans with tertiary
degrees experience the highest percentage share increase over time resulting in a remarkable cross-educational ‘trust gap’. A similar diagnosis also applies to West German citizens despite different underlying trends. While people with tertiary schooling, by and large, maintain their high percentage shares of trust, secondary and primary degree holders become increasingly distrustful over time. A concomitant development with rising levels of inequality could be one potential explanatory factor.

**Political Values and Legitimacy**

With regard to attitudes of social tolerance, a quite small percentage share of Germans strongly opposes immigration of people of different race according to the five surveys of the ESS. Apart from some fluctuations in 2004 and 2006, only a slight increase amongst the entire German adult population can be observed. However, this increasing trend in 2004, and high levels in 2006 coincide with patterns of increasing inequality accompanied by pessimistic (p.289)

![Figure 12.8 Social trust, West Germany, by education](image1)

![Figure 12.9 Social trust, East Germany, by education](image2)

prospects for the unemployed. The observable decrease from 2008 onwards with concomitant decreasing unemployment rates could represent another indicator of this inter-relatedness. The comparison between East and West Germans depicts societal attitudinal differences. While in both parts of the country noteworthy fluctuations can be discerned, only East Germans tend to reject immigrants of different race in 2010 more than they did a decade before.
From a cross-educational-level perspective, remarkable differences between educational categories emerge in both parts of the country (Figures 12.10 and 12.11). In West Germany, a considerable gap exists between citizens with primary education who have rising levels of dismissive attitudes, and the two other educational categories that have declining levels of strongly opposing views. A slightly different pattern prevails in East Germany, where a remarkable gap exists between citizens with primary and secondary education, depicting increasing levels over time, on the one hand, and citizens with tertiary education with decreasing shares of strongly opposing views, on the other. Rising levels of inequality and high rates of unemployment, which disproportionately affect lower and middle class households could be related to these developments.

Values about Social Policy and Welfare State

In line with increasing levels of inequality in Germany, the percentage share of Germans who strongly believe that income differences are too large in their country has doubled from 1987 to 2009, as data derived from different waves of the International Social Survey Programme (ISSP) indicate (Figure 12.12). Nevertheless, there is no steadily increasing trend but considerably fluctuating shares of corresponding responses. The same holds true for the East/West German comparison: in both parts of the country, there are strongly fluctuating percentage shares of strong believers in the presence of too large income differences which ultimately result in a remarkable increase after a time period of more than fifteen years. Particularly noteworthy is another strong perceptual difference between East and West Germans, which varies from twenty to thirty percentage points.

Breaking down these attitudes by levels of educational attainment reveals the strongest increases in percentage shares for citizens with primary and secondary educational degrees (p.291)
Figure 12.11 Don’t allow different race, East Germany, by education

Figure 12.12 Differences in income too large, strongly agree, ISSP

in both parts of the country. East German citizens with a tertiary education degree, by contrast, are the only group category with decreasing shares of strong affirmative respondents.

According to ISSP data, hardly one fifth of the (West) German population in 1987 strongly agreed with the government’s responsibility to reduce income differences (Figure 12.13). Despite some fluctuations over time, the corresponding percentage share of citizens rose to approximately (p.292)

Figure 12.13 Government’s responsibility to reduce differences, strongly agree, ISPP
thirty per cent in 2009. The East/West comparison, however, stresses the persisting intra-societal divide. From the outset of the unification process, East Germans attributed a significantly greater role to the federal government in reducing income differences than West Germans did.

Turning to the interrelatedness between educational degree and one’s assessment of government’s responsibility in West Germany, the ISSP data reveals upward trends during the period of the strongest increase in inequality for all three categories. As expected, people with the lowest educational attainment, and the potentially highest risk of being dependent on redistributive policies, have twice the probability of strongly agreeing with this statement than people holding the highest educational degree. East Germans, by contrast, follow a slightly different pattern. Citizens holding tertiary education degrees appear to be the least affected by the encompassing upward trends. As a result, the corresponding attitudinal gap between the lowest and middle-range educational degree holders and people with the highest level of schooling is increasingly widening.

5. The Role of Policy

The Hartz Reforms

The Hartz-reforms of the labour market were introduced by the second Schröder government in four steps from 2003 to 2005 and mainly followed the approach of ‘negative activation’, with benefit cuts for the unemployed and a tightening of the sanction regime. They also included fiscal inducements for small jobs and self-employment, a deregulation of temporary work and a re-organization of the public agencies in charge of the unemployed.

(p.293) In 2003, the Hartz I and Hartz II laws were passed. In particular, they involved: a tightening of the obligation to work for transfer recipients (obligation to take up a job even if it differs from own profession); the establishment of agencies to place people in temporary employment and deregulation of temporary employment; the broadening of minor employment by means of social security exemptions (Mini- and Midi-Job schemes, a kind of earned income tax credit); a financial support for mini entrepreneurs (so called ‘Me Inc.’).

The Hartz III law of 2004 further tightened the sanction regime for the unemployed and created distinctive public offices of job search for the unemployed (Jobcentre) that concentrated tasks previously dispersed across various institutions. Another law in the same year reduced the maximum duration of unemployment benefits. The duration for which a dismissed worker can receive unemployment benefits reduced remarkably for almost all age groups. Also the time period a person has to have been employed, subject to social security contributions, in order to gain a right to unemployment benefits, was raised: from a minimum of six months to twelve months. Several of these measures either presented formal constitutional deficiencies or produced politically unacceptable results so that they had to be amended or abolished altogether. In part, this also applies to the final and most prominent piece of the labour-market reforms, the Hartz IV reform.
In 2005, with registered unemployment approaching the 5 million bar, the Hartz IV reform was introduced. Prior to that law, the benefit system consisted of three layers: unemployment insurance; unemployment assistance; and social assistance. The second layer implied that unemployed individuals received means-tested earnings-related unemployment assistance after the exhaustion of unemployment-insurance benefits. The duration of unemployment assistance was basically indefinite. Hartz IV abolished unemployment assistance and basically substituted it with social assistance. Those who would have received unemployment assistance in the old system had now to apply for the new, means-tested, unemployment benefit II (Arbeitslosengeld II). In most cases, the resulting transfer income is significantly lower than in the previous system. However, the new system entails stronger incentives for transfer recipients to supplement the transfer by taking up some work, although the implicit marginal tax rates on the earnings after the threshold of disregard remain high.

Overall, the Hartz reforms entailed a significant rejuvenation of active labour market policy in Germany. In terms of participants, the most successful programme has been the public job creation II scheme (1-Euro-Jobs). That programme is mainly targeted at long-term unemployed people who receive means-tested social assistance. In order to reintegrate them into the labour market, they must accept to work for non-profit employers under some conditions. The Federal Employment Agency pays them a small amount, which is not credited against their social assistance.

The consequences of the Hartz legislation for labour market outcomes and income inequality are not yet entirely understood. There is a consensus that they have contributed to the substantial increase in so-called atypical employment (e.g., marginal part-time work partially exempted from social security contributions). By 2011, only two thirds of employees in Germany were subject to social security contributions and, hence, eligible for unemployment benefits (Bundesagentur für Arbeit, 2011). Marginal part-time work is now a major form of employment in the retail, cleaning, and the hospitality sectors. It is likely that the Hartz reforms contributed to increasing the labour supply of low-skilled workers. In turn, that increase in supply is bound to exert a downward pressure on the wages of the low-skilled. Benefit abuse is thought to have become less frequent, while bureaucratic load, heavy controls and legal disputes before the courts have increased. The official unemployment rate has substantially decreased in the wake of the Hartz reforms.

Tax Policy

During the last two decades, German tax policy has often been framed in terms of reaction to mounting international tax competition. The corporate tax rate stood at 56 per cent in the 1980s in the FRG. It was subsequently reduced in several steps, especially during the years of the Schröder government. Since 2008, the corporate tax rate in Germany has been merely 15 per cent.

Corporations, especially banks, strongly benefited from the total abolition of capital gains
taxes on the sales of large share blocks, decided on by the Schröder government in 2000. This occurred at a time when the German company network centred around major banks was already eroding. The exemption of capital gains from taxation accelerated its dissolution, which in turn led top management to assign higher priority to shareholder value. Companies carefully exploited the timing of the tax reform to first deduct capital losses from their tax liabilities and then realize tax-free capital gains. The fiscal losses to the public budget were severe.

Germany had a personal wealth tax until 1996, which, in that year, generated a revenue equivalent to about €4.6 Billion. That tax was declared unconstitutional by the federal constitutional court because different kinds of wealth were being treated too differently. Since 1997, the personal wealth tax has not been levied.

The inheritance tax is a long-standing element of the German tax system. Some items of the bequeathed estate benefit from special exemptions and evaluation methods that lead to a severe erosion of the tax base. This holds true in particular for business wealth, which is almost tax-exempted.

Personal capital income was taxed until 2008 within the progressive tax on personal income. Since 2009 this has no longer been the case, as a kind of dual system of taxation has been introduced. Incomes from interests, dividends, and financial capital gains are now subject to a 25 per cent flat-rate withholding tax and are exempted from personal income tax. By contrast, the top marginal tax rate on remaining personal incomes is 45 per cent. Both taxes entail an additional solidarity surcharge of 5.5 per cent of the tax liability, which enhances the progressivity of taxation.

While regressive tax reforms were often blamed on international tax competition, the German government did not generate much international cooperation to fight tax evasion and avoidance. In contrast to other countries, Germany steadily refuses to provide bank information automatically to foreign tax authorities, if the recipient of interest income is a foreigner.

(p.295) Table 12.1 displays the effect of the income tax reform of the Schröder governments from 1998 to 2005 on the real net incomes of single taxpayers, as calculated from the evolution of statutory tax rates. It shows that for the bulk of taxpayers, the reform directly increased real net incomes by roughly five per cent. The income gains were much higher for taxpayers in the top percentile of the income distribution. By way of an example, somebody with an annual taxable income of €500,000 experienced a net income increase of about twenty per cent.

The reform of 1998–2005 also affected the tax basis of the income tax. While the decrease of effective average tax rates has been across the board, it has been especially pronounced for households with very high incomes. By way of an example, the average tax rate for the top 0.001 per cent group dropped from 43 per cent in 1998 to 31 per cent in 2005 (Bach et al., 2013).
Taxes and transfers substantially reduce cross-sectional income inequality in Germany: the Gini coefficient is reduced by roughly 40 per cent when one shifts from the distribution of gross income to the distribution of net income—see Figure 12.1. The inequality-reducing impact of the tax transfer system increased during the second half of the 1990s, whereas it became slightly weaker during the 1980s and the 2000s. The success of policy in combating inequality during the second part of the 1990s is partly due to two measures that were implemented in 1996: a substantial increase in the basic allowance for the personal income tax and a substantial increase in child benefit. Both measures had been called for by the Federal Constitutional Court.

### Table 12.1 Effect of the income tax reform 1998–2005

<table>
<thead>
<tr>
<th>Taxable income</th>
<th>Real net income growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000</td>
<td>4.94</td>
</tr>
<tr>
<td>20,000</td>
<td>5.27</td>
</tr>
<tr>
<td>30,000</td>
<td>4.77</td>
</tr>
<tr>
<td>40,000</td>
<td>4.34</td>
</tr>
<tr>
<td>50,000</td>
<td>4.44</td>
</tr>
<tr>
<td>60,000</td>
<td>5.15</td>
</tr>
<tr>
<td>70,000</td>
<td>6.78</td>
</tr>
<tr>
<td>80,000</td>
<td>8.36</td>
</tr>
<tr>
<td>90,000</td>
<td>9.65</td>
</tr>
<tr>
<td>100,000</td>
<td>10.72</td>
</tr>
<tr>
<td>200,000</td>
<td>16.41</td>
</tr>
<tr>
<td>300,000</td>
<td>18.43</td>
</tr>
<tr>
<td>400,000</td>
<td>19.69</td>
</tr>
<tr>
<td>500,000</td>
<td>20.4</td>
</tr>
<tr>
<td>1,000,000</td>
<td>21.87</td>
</tr>
</tbody>
</table>

Source: Corneo (2005b).

(p.296) 6. Conclusions

In terms of cross-sectional income inequality, the FRG of today is quite different from the FRG of the 1980s. In the 1980s, the FRG was one of the most egalitarian countries in the world. Inequality of pre-fisc incomes began to rise after the economic downturn of 1992–1993, and kept growing until the mid 2000s. The distribution of post-fisc income changed little during the 1990s. In the period 2000–2005 it became substantially more unequal and the level of inequality did not significantly change in the subsequent period. This overall tendency for inequality to grow was paralleled by a mutation of the German socio-economic compact: its traditional corporatist model imported a number of elements from the Anglo-Saxon one, giving rise to an original hybrid model. By international comparison,
Germany still has a relatively egalitarian income distribution, but during the 2000s inequality has mounted more rapidly than in most other OECD countries.

In the 1980s, the pressure exerted by globalization and skill-biased technological change did not lead to significantly more wage inequality in Germany but rather to increased unemployment. Thanks to the short-lived post-reunification boom, inequality did not rise in the first few years after reunification. In the sequel, equality-preserving institutions like trade unions, industry-level bargaining, regulated labour markets and public ownership were to decline irreversibly, allowing for a gradual increase of wage dispersion. The adjustment of the earnings distribution left core workers relatively unaffected and mainly hit entrants to the labour market. In that respect, the workforce in East Germany constituted a huge group of entrants. Since reunification, collective wage agreements have covered a substantially smaller share of the workforce there than in the West. Since about the mid 1990s, market incomes have been distributed more unequally in the East than in the West of Germany.

Reunification and the worldwide demise of ‘real existing socialism’ also implied a changed tone in the political discourse, which became more receptive to free market ideology. However, in the first years after reunification, no far-reaching neoliberal reforms could be introduced despite a centre-right government. Meanwhile, additional factors were making the distribution of market incomes in Germany more unequal. At the bottom of the distribution, a large inflow of migrants from Eastern Europe into the German labour market put pressure on the wages of low- and medium-skilled workers. At the top of the distribution, the rise of shareholder value, financial markets, and markets for superstars drove an increase in income concentration. Changes in the age structure of the population and the erosion of traditional family arrangements further contributed to generate a more unequal distribution of market incomes.

The resilience of equality in terms of post-fisc income during the 1990s—despite increased pre-fisc inequality—can be traced to the delayed effects of social policy measures, e.g. generous rules for computing pension benefits. Furthermore, the Federal Constitutional Court repeatedly exhorted the government to adjust the tax transfer system so as to guarantee that the disposable income of individuals did not fall short of a minimum threshold. The subsequent hikes in child benefit and in the basic allowance of personal income tax contributed to combat inequality.

The government launched two main waves of reforms: a tax reform starting in 1998 and the Hartz legislation for the labour market in 2003–2005. Empirical studies indicate that the tax reforms strengthened the rise of inequality but the evidence on the effect of the labour market reforms is less clear-cut. In perspective, the pension reform of 2001, which significantly reduced future pension rights, is likely to increase inequality.

Growing income inequality has not gone unnoticed by Germans. Most noticeably, people at the poorer end of the income distribution face increasing difficulties in overcoming their precarious situation. They experience more material deprivation and social exclusion. For the main part of the population, however, social indicators fluctuate over
time without any systematic correlation with trends in income inequality. Political
disenchantment, social intolerance and demands for redistributive policies, however,
show a concomitant trend to the rise of inequality. East Germans’ and less educated
people’s attitudes seem to be especially affected by these developments. In sum, the
repercussions of rising levels of income inequality seem to have already impaired citizens’
relationship with the democratic state.

References

Bibliography references:

Deutschland von 1996’, Vierteljahreshefte zur Wirtschaftsforschung 75/1, 131–149.

Bach, S., Corneo, G. and Steiner, V. (2009), ‘From Bottom To Top: The Entire Income

Bach, S., Corneo, G. and Steiner, V. (2013), ‘Effective Taxation of Top Incomes in
Germany’, German Economic Review 14/2, 115–137.


unter Aspekten der Leistungsgerechtigkeit und besonderer Berücksichtigung des
Niedriglohnsegments’, Arbeitspapier Nr. 2 des Projekts „Soziale Gerechtigkeit”, J. W.
Goethe Universität Frankfurt a. Main.

Biewen, M. and Juhasz, A. (2012), ‘Understanding Rising Inequality in Germany,

Bönke, T., Schröder, C. and Schulte, K. (2010), ‘Incomes and Inequality in the Long Run:

Bundesagentur für Arbeit (2011), Der Arbeits- und Ausbildungsmarkt, Monatsbericht
Mai 2011, Nürnberg.

Objective and Subjective Income Inequality Affect Latin American Democracies’,
conference paper submitted to the (cancelled) Annual Meeting of the American Political

CESifo Economic Studies 51, 159–186.

Jahrbuch 125, 299–314.


Notes:

(1) This chapter is based on the corresponding GINI German country report which encompasses a multitude of further in-depth analyses and can be downloaded at [www.gini-research.org/CR-Germany](http://www.gini-research.org/CR-Germany).

(2) Own calculation based on German SOEP data. Unless stated otherwise, all statistical facts mentioned in this chapter appear in publications of the German Federal Statistical Office.

(3) Unemployment measured according to the harmonized OECD definition is lower, but its evolution is similar.

(4) The entire employment growth occurred in the service sector.

(5) For Germany as a whole, the median age of the resident population increased from 36.4 years in 1980 to the current 44.3 years.

(6) In the East, employment in manufacturing dropped between 1991 and 1993 by 60 per cent and kept declining until 1997. The public agency in charge of privatizing the former GDR firms (Treuhandanstalt) operated until the end of 1994, and then bequeathed the German government a financial loss of about 240 billion German Marks.

(7) From 1991 to 2009, the public administration narrowly defined lost about half of its staff in the East.

(8) The index of material deprivation is based on eleven items: possession of a colour TV; phone; car; replacement of old furniture; good condition of the residential building; good neighbourhood; ability to paying rent/mortgage on time; to put money aside for emergencies; to go on vacation once a year for one week; to invite friends to dinner at least once a month; and the ability to eat a hot meal with meat, fish or poultry at least every other day. Households are considered to be materially deprived if at least four of those items are not affordable.

(9) Bartels and Bönke (2013) have studied income volatility, taking the changes over time in the composition of the SOEP into account. While they do find an increase in earnings volatility at the bottom of the distribution, they do not find much change in the volatility of net household income.
(10) These arguments are derived from Castillo and Zmerli (2012).

(11) In order to better present the expected relationship between inequality and political involvement, most of the subsequent GINI scales on the secondary y-axis are depicted in reversed manner.

(12) The question wording in the ESS reads: ‘How about people of a different race or ethnic group from most of Germany’s people?’ (The previous and related question wording was: ‘Now, using this card, to what extent do you think Germany should allow people of the same race or ethnic group as most of Germany’s people to come and live here?)

(13) There is however a supplementary temporary benefit for up to two years after transiting from unemployment benefits into social assistance.

(14) Currently, about 70 per cent of the unemployed receive that benefit.