

3.3 Germany

3.3.1 Setting the scene: key traits of the country's political economy

Germany's export-led economy was hit hard by the outbreak of the global crisis. Nonetheless, its economic and social performances in the years that followed differed from those of most EU Member States in a number of respects. In terms of GDP development, Germany has experienced fluctuations: a significant fall in the GDP growth rate (from 1.1 per cent in 2008 to -5.6 per cent in 2009) was followed by a remarkable recovery of 9.7 percentage points from 2009 to 2010 and a second collapse in 2012, which nevertheless did not lead the country into recession. Government gross debt rose steadily from 2007 to 2010 – when it registered a peak of 80.5 per cent – and then decreased consistently for the next few years. Also, the government deficit as a percentage of GDP followed a similar V-shaped trend. The budgetary effect of the crisis-related measures im-

Table 11 Germany: selected socio-economic indicators, 2007–2014

| Indicators/years | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|------|------|------|------|------|------|------|------|
| Real GDP growth | 3.3 | 1.1 | -5.6 | 4.1 | 3.6 | 0.4 | 0.1 | 1.6 |
| General government gross debt (EDP concept) (% of GDP) | 63.7 | 65.1 | 72.6 | 80.5 | 77.9 | 79.3 | 77.1 | 74.7 |
| General government deficit/surplus (% of GDP) | 0.3 | 0.0 | -3.0 | -4.1 | -0.9 | 0.1 | 0.1 | 0.7 |
| Employment rate (% 20-64) | 72.9 | 74 | 74.2 | 74.9 | 76.5 | 76.9 | 77.3 | 77.7 |
| Unemployment rate (%) | 8.5 | 7.4 | 7.6 | 7.0 | 5.8 | 5.4 | 5.2 | 5.0 |
| People at risk of poverty or social exclusion (% of total population) | 20.6 | 20.1 | 20.0 | 19.7 | 19.9 | 19.6 | 20.3 | n.a. |

Source: Annex to Agostini and Natali (forthcoming).

plemented and the activation of the automatic stabilisers in the first two years after the outbreak of the crisis is reflected in the low point registered in 2010 (-4.1 per cent). However, the improvements reported subsequently, in terms of both gross debt and deficit/surplus, show the German political authorities' degree of commitment to 'fiscal responsibility'.

Indicators of social conditions – such as labour market or poverty statistics – show substantially diverging trends from the economic and financial indicators previously considered. The employment rate increased steadily in the aftermath of the crisis, rising from 72.9 per cent in 2007 to 77.7 per cent in 2014. This is in marked contrast to the average EU28 performance, which has seen a decrease in the employment rate, particularly in the Southern European economies. Similarly, the German unemployment rate has continuously diminished during the period in question. This peculiar trend of the German labour market must be attributed at least partially to the changes that have occurred in Germany's social model since reunification, combined with important ongoing characteristics limiting the negative influence of the crisis on employment (Carlin *et al.* 2015: 49). Nonetheless, the launch of the so-called 'mini-jobs' strategy through the adoption of the so-called 'Hartz reforms' between 2002 and 2005 (further investigated later in this section) also

produced employment growth, albeit by enlarging the low wage sector of the labour market and increasing market-income inequalities (Carlin *et al.* 2015). In other words, although the labour market reforms – which occurred until the mid-2000s – played a role in reducing the crisis-related effects on employment in Germany, they also increased the number of atypical and ‘flexible’ work contracts. This may partly explain the limited change in the percentage of people at risk of poverty or social exclusion from 2007 to 2014, despite the steady increase in the employment rate during the period.

According to the ‘varieties of capitalism’ approach, as defined by Hall and Soskice in 2001, the German model belongs to the group of ‘coordinated market economies (CME)’, usually based on the principle of collaboration, credible commitments by firms, as well as non-market relations. More specifically, the peculiarities of the continental European economies fit better with the definition of the sectoral-CMEs sub-cluster, characterised by sectoral coordination and weaker social partners than in the national-coordinated Nordic countries (Agostini and Natali forthcoming). Nonetheless, the German model fits poorly into general categories due to its specific features. According to Hall (2015: 45), ‘the German political economy displays some distinctive features constitutive of a German model of economic development’, as it has been shaped by the combination of specific institutional, political and economic elements both at the micro and macro levels of the economy. At the macro level, both institutions and policies have helped to shape a favourable environment for business, combined with a generous welfare state. At the micro level, firm organisation and coordination, as well as the institutional environment in which they operate, are determining factors of the high quality of their production (*ibid.*: 46). The manufacturing sector, which plays a leading role in Germany’s export-led economy, is characterised by numerous medium-sized firms, preference for business strategies focused on high-quality production and a thriving innovation system (Calvo 2015: 336). The whole microeconomic level is supported by a strong system of higher education and vocational training, local banks with specialised business knowledge, a dense and high-quality network of institutions devoted to industrial innovation and consensual collective agreements (*ibid.*).

The industrial relations system constitutes an additional peculiarity of the German model compared with its peer sectoral-CMEs. Indeed, soon after reunification, employers began increasingly to oppose sectoral col-

Table 12 The German social model

| Labour market regime | Welfare regime | Varieties of capitalism |
|--|--------------------------|--|
| Continental European | Conservative-corporatist | Sectoral-coordinated market economy |
| Peculiarities: - Labour market protection relatively high for insiders (even though reduced following implementation of the Hartz reforms), but substantially lower for outsiders - Reduced unemployment benefits and increased ALMP (following adoption of the Hartz IV reform) | | Peculiarities: - Strong reliance on plant-level agreements between management and work councils. - Historically strong trade unions at national level. |

Source: Agostini and Natali (forthcoming).

lective agreements, preferring to adjust pay and working hours according to local needs (Carlin *et al.* 2015: 53). By the late 1990s, plant-level agreements between management and works councils became frequent, and these even started to shape sectoral agreements rather than the other way round (*ibid.*). Nowadays, however, sectoral collective bargaining remains the dominant level of collective bargaining in Germany, although company-level bargaining is increasingly important (EurWORK 2015). With regard to worker representation at national level, trade unions used to be a cornerstone of German social dialogue, with a high level of worker participation, especially in western Germany (Schweiger 2014: 107). However, their position has become increasingly weak, in terms of both union density and their inability to rally support for industrial action (Carlin *et al.* 2015: 55–56).

As for the specificities of the labour market, Germany belongs to the Continental European cluster, characterised by a traditionally high degree of labour market protection, combined with high levels of spending on passive measures and few active labour market policies (Agostini and Natali forthcoming). However, in Germany there is a large gap in the degree of labour protection between insiders and outsiders. This has been partly reduced by the implementation of the ‘Hartz reforms’ in the early 2000s, although more by reducing labour protection for insiders than improving protection for outsiders (Carlin *et al.* 2015: 65). These early ‘austerity’-related labour market reforms were aimed at fostering ‘activation’

of the unemployed by introducing new flexible and part-time contracts. With regard to passive measures – although the unemployment insurance system was one of the basic pillars of Germany’s Bismarckian welfare state – these were reduced and reshaped by the ‘Hartz IV’ reform in order to lower the costs of the welfare system, ostensibly because of high unemployment (Carlin *et al.* 2015). Also, active labour market policies gained momentum during this period, although they were not usually a key element of the Continental European labour market strategies.

Drawing on the index of EU leverage on Member States’ policies outlined by Stamati and Baeten (2014), Germany can be included in the group of countries subject to moderate leverage from the EU system of economic governance. The country is indeed a member of the euro zone and subject to the Fiscal Compact. It underwent an Excessive Deficit Procedure (EDP) from 2009 to 2012, but has never been subject to a Macroeconomic Imbalances Procedure (MIP). However, it is worth mentioning that the country managed to close its EDP well ahead of the deadline set for 2013, reducing its deficit to 1 per cent as early as 2011 (Council 2012). The improved budgetary situation was driven by favourable cyclical conditions, a robust labour market, fiscal consolidation efforts and the phasing-out of economic stimulus and financial sector stabilisation measures (*ibid.*). Within the European Semester and on publication of the European Commission’s in-depth reviews on macroeconomic imbalances, causes for concern were highlighted, mainly with regard to the large and recurrent German current account surplus, as this restricts the neighbouring Member States’ possibilities to compete internationally with the German export-led economy. For the same reason, pressure to increase public investment in order to support domestic demand has been a recurrent theme in the Council’s CSRs addressed to Germany.

Angela Merkel has dominated German politics for the past 10 years. Due to the narrow victory of the Christian Democrats over the Social Democrats in the 2005 general election a Grand Coalition government of the two largest German political parties was formed. This limited to a certain extent the government’s ability to carry out controversial ‘reforms’ (Funk 2013: 202), although it still managed to implement several crisis-related measures during the 2008–2009 emergency period. These were mainly measures to support the financial sector, boost domestic demand and strengthen active labour market policies with a view to reducing the shock produced by the considerably worsened export prospects and the financial instability related to the crisis (*ibid.*) Nonetheless, the resulting

Table 13 German governments, 2005–present

| Years | Prime Minister | Position in the political spectrum | Coalition forces | Reform programme |
|---------------------|----------------|------------------------------------|--|---|
| 2005–2009 (October) | Angela Merkel | Grand coalition | - Christian Democratic Union (CDU)/Christian Social Union (CSU) - Social Democratic Party (SPD) | Selective investment; Crisis-related stimulus measures |
| 2009–2013 | Angela Merkel | Centre-right | - Christian Democratic Union (CDU)/Christian Social Union (CSU) - Free Democratic Party (FDP) | Selective investment; Fiscal consolidation package |
| 2013– | Angela Merkel | Grand coalition | - Christian Democratic Party (CDU)/Christian Social Union (CSU) - Social Democratic Party (SPD) | Some social standards improvements; 'Fiscal responsibility'; Growth-enhancing and social investment |

Source: Funk 2013, Federal Government of Germany.

surge in general government debt has been taken by the following Merkel government as a cue to pursue more restrictive economic policies. In 2009, the Christian Democratic Union (CDU) formed a new coalition government with the Free Democratic Party (FDP), its former partner in government from 1982 to 1998. The reforms implemented between 2009 and 2013 were heavily influenced by these parties' perception of the economic crisis and the increasing public debt levels affecting EU Member States. Therefore, the so-called 'debt brake' and, more generally, the government's commitment to 'fiscal sustainability and responsibility' became the dominant policy tools of German economic and financial policy.

The federal election held in 2013 resulted in a clear victory for the Christian Democrats (The Economist, 2013), but the CDU did not gain enough seats to form a one-party government. Nevertheless, due to the poor results obtained by the CDU's previous coalition partner, which even failed to get into Parliament at all (the FDP), Chancellor Merkel agreed to form a new coalition with the SPD (Spiegel Online International 2013; Federal Government 2013). The new government's programme includes measures new to labour market developments in Germany (EurWORK 2014a), including the establishment of a national minimum wage aimed

at tackling pay gaps and reducing the share of low-wage earners. It is just as committed to fiscal consolidation as the previous Merkel government, but fiscal restraints will seemingly not be applied to growth-enhancing policy sectors, such as education and research (a strategy of selective investment).

3.3.2 Structural reforms sector by sector

Pensions

Public expenditure on pensions in Germany was above average in comparison with other Continental economies until 2005, when an important reform of the pension system was adopted. After starting to decrease in 2006, federal government expenditure on pensions remained fairly stable during the crisis-related years and even increased between 2008 and 2009 (Annex to Agostini and Natali forthcoming). Indeed, pension reforms implemented in Germany in the wake of the crisis have not followed the same retrenchment trend typical of several other countries in the EU. Germany is part of the group of Member States – also including Austria and the Netherlands – that have adopted a rather mixed set of reforms, resulting in a longer term reduction, but also some benefit improvements (Natali and Zaidi 2015). In other words, pensioners in Germany did not suffer a reduction of pension payments, but rather improvements in adequacy (*ibid.*). Specifically, pensions increased by 2.41 per cent in 2009 (rather than 1.76 per cent as set out in the 2005 rules), although there was no increase in 2010 (–2.1 per cent) (OECD 2013d: 30).

As for the retirement age, the legislation adopted in 2007 increased the pension age from 65 to 67 (OECD 2013d: 30). However, the pension reform adopted in 2014 by the new CDU–SPD coalition government has again provided more generous pension entitlements. The reform, particularly sought by the Social Democrats, has come with no pressure from the European institutions and has been widely criticised in economic terms, including by the European Commission in its 2015 Country Report. The new regulation accounts for most of the planned federal government's higher spending. It provides for pension increases to women who gave birth before 1992, while workers with more than 45 years of contribution records can retire on a full pension at 63 years, rising to 65 years, in line with the increase in the standard legal pension age from 65 to 67 years (OECD 2014c: 107). According to the EC, the measure

puts additional strain on the sustainability of the pension system and affects intergenerational income distribution, especially given the projected strong decline in Germany's working-age population and a possible shortage of skilled workers in the medium term (European Commission 2015:59). Moreover, despite the CSR issued in 2014 on the necessity to improve the sustainability of the pension system, no major actions have been taken in this direction during the year.

To sum up, pension payments remained stable in the wake of the crisis, with some improvements in adequacy. Nonetheless, the reform path was less generous with regard to the changes of the retirement age (2007) professedly adopted to cope with an ageing population and lack of skilled workers in the country. However, the reform path initiated by the new 'grand coalition' government is deviating from this fairly mixed set of reforms towards a strategy involving increased investment in pensions.

Labour market

As already mentioned, the German labour market was subjected to many structural reforms during the early 2000s. However, in the period that followed the outbreak of the economic and financial crisis, several measures were implemented and, combined with a flexible collective bargaining system, this allowed the labour market to adjust to the new crisis situation. As for the results of collective agreements with regard to wage setting and working time provisions, the mainstream trend during the recession has been to flexibilise working time, as well as to reduce wage increases in exchange for job security. Specifically, the average wage increase fell from 2.9 per cent in 2008 to 2.6 per cent in 2009 and 1.8 per cent in 2010 (Reisenbichler and Morgan 2015: 70). It finally began to rise again in 2012 and 2013 (+2.7 per cent) (*ibid.*: 73).

The economic stimulus packages adopted in 2008 and 2009 – the so-called ESP I and ESP II – introduced market measures, including the extension of the entitlement period for short-time working benefits to 18 (ESP I) and 24 (ESP II) months by the end of 2010 (Funk 2013: 211). In 2011, entitlement to short-time allowances was reduced to six months by the second Merkel government, but it was later (temporarily) extended to 12 months one year later (Bandau and Dümig 2014: 340). The overall trend in labour market policies between 2009 and 2013 – in other words during the mandate of the centre-right CDU–FDP government – was limited mainly to readjustments of existing policy measures. Nonetheless, these readjustments were aimed primarily at fiscal consolidation.

The austerity package approved in 2010 led to a series of cuts to the basic social security scheme for job-seekers – also known as Hartz IV – only partially mitigated by the intervention of the Federal Constitutional Court (FCC) (ibid.: 342–343). As for active labour market policies, the government had recourse mainly to cuts and mergers of single measures (ibid.: 344). Nonetheless, the relative scarcity of reforms during the period compared with under previous governments was probably due to the good economic environment at the time.

In 2015, the second Grand Coalition government of the CDU/CSU and the SPD introduced a national minimum wage set at 8.5 euros per hour for all workers in order to reduce the gap between insiders and employees in insecure employment (OECD 2014c). Some important exceptions included those sectors already covered by minimum wages stipulated in the Posted Workers Act. Moreover, sectoral collective agreements between social partners can be exempted from applying the fixed minimum wage until the end of 2016, after which time all sectors will have to comply with the new regulation (EurWORK 2014a). The measure aims at counteracting the dualisation of the German labour market, extensively criticised by European institutions as well as benchmarking organisations. Therefore, after increasing employment rates, often to the detriment of outsider workers' conditions, the path of reform seems aimed at reducing the gap between core workers and those with atypical, low-income jobs. That said, there is the risk that the introduction of a statutory minimum wage could actually bring about job losses and reduced opportunities for low-skilled workers to enter the labour markets. In order to prevent negative effects from the new measure, a commission composed of representatives of the employers' associations and trade unions will review the level of the minimum wage, with a first review set for June 2017 (EurWORK 2014a).

To sum up, three major trends can be identified in the labour market policies promoted by the authorities in 2008–2015: (i) introduction of stimulus measures and use of automatic stabilisers during the 2008–2009 crisis period (Funk 2013); (ii) the implementation of restrictive, though minor, measures devoted to fiscal consolidation between 2010 and 2013 (Bandau and Dümig 2014); and (iii) de-dualisation of the labour market by improving the conditions of the low-wage sector earners in 2014 and 2015 (Reisenbichler and Morgan 2015). Therefore, the reform path undertaken has been fairly irregular. However, this has helped the labour market to adjust in timely fashion to the various economic shocks.

Education

Public expenditure on education in Germany increased slightly, but steadily in the first years following the outbreak of the crisis,²⁴ both in terms of percentage of GDP and as a percentage of total public spending (Annex to Agostini and Natali forthcoming). According to the EC country report, these increases are not sufficient, as the level of expenditure on education is below the EU average (European Commission 2015d). However, expenditure per student is well above the EU average, as the country has a ranking of eighth among the EU27 (European Commission 2014c: 3). Additionally, Germany spends below the EU average on primary education, but above average on upper secondary and tertiary education (*ibid.*), a policy in line with the need for a highly-skilled and specialised labour force for its innovation-driven economy.

Nonetheless, early childhood education and care is the policy field in which the greatest improvements have been made in the past decade (Hanesch *et al.* 2015), through the provision of new facilities, regulation and funding. Specifically, since the Day Care Development Act (*Tagesbetreuungsausbaugesetz*) came into force in 2005 and the Childcare Funding Act (*Kinderförderungsgesetz, KiföG*) in 2008, important changes have occurred in terms of the range of childhood services offered, especially to children under three years of age (International Centre Early Childhood Education and Care 2015). These included funding from the federal government and the *Länder* for the expansion of facilities, which occurred until 2013. Moreover, in August 2013 the Childcare Funding Act introduced a statutory right for children to attend centre-based early childhood services or family day care from the age of one onwards (*ibid.*). The crisis seems to have brought about little or no change in the national priorities for early childhood education and care policy, or in the field of education in general.

In 2009, additional funding was made available for all levels of education under the Investing in the Future Act, which provided 8.7 billion euros between 2009 and 2011 for early childhood education, school and university infrastructure, local facilities for further education and for research. Also, in recent years policymakers have devoted some attention to improving the quality of teaching, an objective pursued in various stages through the adoption of the Quality Pact for Teaching in 2010 (OECD

24. Data available until 2011.

Education Reform Finder) and afterwards with the introduction of a new federal government/*Länder* programme (*Qualitätsoffensive Lehrerbildung*) concluded in 2013 in support of teacher training through the introduction of innovative concepts (European Commission, 2015d: 65, Federal Ministry for Economic Affairs and Energy, 2014: 42). Although these measures had differing objectives (the former concerns only public higher education institutions) both involve significant public investment in the education system. Specifically, the first provides for investment of 2 billion euros in the timeframe 2011–2020 and the second involves 500 million euros (OECD 2015b; European Commission 2015d: 65).

Vocational Education and Training (VET) has always been an important element of both the German education system and the labour market, as it is one of the reasons for the country's low youth unemployment rate (European Commission 2014c). Therefore, the VET system has been regularly updated to meet labour market needs in recent years (OECD 2014c: 44). By contrast, according to the recurrent CSRs received by the country on the theme of education, still more should be done in terms of raising the educational level of disadvantaged people and providing greater opportunities for entry into the education system. Action has been taken by some *Länder* with a view to reducing the stratification of the school system by combining different school tracks in one school type (OECD 2014c: 43). Moreover, several other measures were implemented in the *Länder* between 2013 and 2015 with the purpose of raising the level of education of disadvantaged people, as underlined in the National Reform Programme (NRP) for 2014. This shows some degree of concern to comply with recommendations issued by the Council on the topic.

Overall, the policies implemented in the field of education, in terms of both expenditure and programmes aimed at improving the quality and fairness of the system, have been fairly consistent during the whole period with expansionary reform activity. In this regard, neither the economic and budgetary situation of the country, nor the different colours of governments in power have seemed to produce substantial changes in this pro-growth reform path.

Public sector

Since 2008, there have been no special adjustment programmes or structural reforms in the German public sector (Bosch *et al.* 2012). Pay reductions and wage freezes have been less common in Germany than in other Member States (Eurofound 2015: 8). From 2009 onwards, this

singular trend could also be seen in the area of job losses, as the number of employees in the public sector slightly increased. However, this was the result of the increase in employment in the education and child-care subcategories (Keller 2014: 389), while the number of employees in public administration, defence and compulsory social security²⁵ remained fairly stable in 2008–2013, with an average change of 0.2 per cent (Annex to Agostini and Natali forthcoming). Nonetheless, it is worth mentioning that the lack of major reforms and restrictive measures since the outbreak of the crisis is at least partially the result of significant job losses and early austerity measures in the 1990s and 2000s, which also produced important cumulative effects in the following years (Bosch *et al.* 2012: 7; Keller 2014: 388). Overall employment in the sector dropped from 6.7 million in 1991 to 4.5 million in 2009 – later increasing to 4.6 million – thus contributing to the development of a ‘lean’ public sector (Keller 2014: 389).

The structure of German public services is characterised by three levels of government: the Federal level, the *Länder* and the municipalities. Moreover, public employees are divided into salaried employees and civil servants (*Beamte*). The latter category has a unique status regulated by the Constitution, including life-long employment. Both these distinctions are of particular importance for understanding the early austerity measures implemented from the 1990s. Indeed, the measures affected employees mainly at municipal level – especially in eastern Germany after reunification – and non-civil servants, whose status was less well protected by law than that of the *Beamte*.

With regard to pressure from European institutions to reform the public sector in Germany – more specifically the public administration – the only cause for concern (also expressed in the Country Report published by the EC in 2015) is the need to reduce the administrative burden on businesses and to improve e-government services. Indeed, Germany is among the Member States with the least online interaction between public authorities and citizens (23rd out of 28 Member States – European Commission 2015d: 72). However, no specific mention of the need to improve the public administration can be found in the CSRs addressed to the country in recent years.

25. Classified according to the NACE Rev. 2.

It follows that, when it comes to reform of the public sector – besides the cutbacks of the years preceding the outbreak of the crisis – there is no important reform trend to underline. Nonetheless, a slight increase in the number of employees in the public sector, as a result of increased employment in education – especially the early childhood education and care sub-category – might suggest the presence of a lean expansionary trend.

Research and development

In the field of innovation, Germany is close to achieving its Europe 2020 expenditure target of 3 per cent of GDP. The country performs above average also in terms of outcomes, as it is the best performer in the EU according to the European Innovation Output Indicator (European Commission 2015d: 71). Nonetheless, in recent years, pressure to increase public investment in R&D has come regularly from the CSR addressed to Germany. The level of investment in Germany is indeed lower than in other innovation-driven economies in Europe, such as Denmark, Finland and Sweden (Annex to Agostini and Natali forthcoming). Moreover, R&D activities and expenditure remain mainly supported by the private sector in the country, as industry accounts for well over half of all spending on R&D (Federal Ministry for Economic Affairs and Energy, 2014: 27). Nevertheless, the federal government has made consistent efforts to improve national competitiveness in terms of research and innovation, as shown by the additional funding included in the 2014 stability programme, providing 3 billion euros for research, combined with increased expenditure of 6 billion euros for financing childcare facilities, schools and higher education institutions (European Commission 2015d: 31).

The expansionary trend in R&D expenditure has not changed in the aftermath of the crisis. This can be partly shown by the extension – in terms of both timing and funding – of the programme ‘Research at Universities of Applied Sciences’, fostering application-related research in the fields of engineering, natural sciences, social sciences and economics in collaboration with business enterprises (especially SMEs) and university-based and non-university research institutions. The joint programme between the federal government and the *Länder* was launched in 2005 and since then its funding has quadrupled from 10.5 million euros in the first year to roughly 41.5 million euros in 2013 (Federal Ministry for Economic Affairs and Energy 2014: 61). Moreover, the new coalition government has taken further steps to improve national business capacity by adopting the new Digital Agenda 2014–2017, approved in August 2014. This will expand high-speed data lines, boost internet security and foster

cyber-related entrepreneurship. It will also provide fast broadband (50 Megabits per second) internet to rural and urban areas by 2018 (European Commission, 2015d: 71). Additionally, the update of the High tech strategy in 2014 is aimed at strengthening economic growth by means of a coherent innovation policy, supporting knowledge transfer and innovation in future markets (ibid.).

To conclude, the reform trend with regard to R&D policies has been fairly consistent over the years with the investment strategy typical of highly innovation-driven economies, although the level of public expenditure is still below the average performance of similar economies within the EU. However, different digital strategies and the focus on increased cooperation between academic and non-academic research institutes and businesses prove the level of commitment of public authorities to constantly improving economic competitiveness.

3.3.3 Preliminary remarks on structural reforms in Germany and their determinants

In the wake of the crisis, the restrictive measures implemented in Germany have spared the sectors of education and innovation, especially with regard to R&D activities, tertiary education and VET. Thus, the variety of capitalism pursued in the German innovation-driven economy has played a role in defining the reform path taken, also at a time of financial and economic constraints.

However, the country's welfare model and labour market underwent significant restrictive changes in the years before the crisis and continued to undergo adjustments in its aftermath. The reforms ultimately led to the shrinking of the welfare state and dualisation of the labour market, despite an above-average level of employment, also among young people and women. Nonetheless, the policies implemented and planned by the new CDU–SPD coalition government will supposedly reduce the labour market gap between insiders and outsiders and increase social investment, while remaining committed to the principle of 'fiscal responsibility'. As regards pensions, the federal government has been relatively independent in pursuing its programmed reform path, also in the presence of opposing recommendations from the European institutions. Indeed, the EU's influence on the path of reform in Germany was fairly substantial at the time of the launch of the EDP, but shrank after its closure.

Table 14 Summary table: drivers of reform and major reform trends in Germany, 2008–2014

| | 2008–2009 | 2010–2012 | 2013–2014 |
|--|--|--|--|
| Drivers of reform | | | |
| Economic crisis | Deep recession; Surge of general government deficit | Economic recovery; High general public deficit (2010) | Slight economic growth; Slight general government surplus |
| Coalition governments | Grand coalition (CDU/CSU-SPD) | Centre-right (CDU/CSU-FDP) | Grand coalition (CDU/CSU-SPD) |
| EU influence | EDP (from December 2009) | EDP (until June 2012) European Semester | European Semester |
| Structural reforms | | | |
| Reform path (for the five policies under scrutiny) | Selective investment | Selective investment | Social standards improvements |
| <i>Main reforms in each policy field</i> | | | |
| Pensions | - Improvement in adequacy ratio - Increased retirement age (2007) | | - Reform of pensions 2014 |
| Labour market | - Automatic stabilisers - ESP I and ESP II | - Downward readjustment of existing policies | - National minimum wage |
| Education | - Childcare funding act - Investing in the future act (2009–2011) | - Quality pact for teaching - Investing in the future act (2009–2011) | - Steps to increase the fairness of the system (some Länder) |
| Public sector | Minor reforms (early austerity measures adopted before the outbreak of the crisis) | | |
| Research and development | - Research at universities of applied sciences (from 2005, ongoing) | | - Digital agenda - High tech strategy |

Source: Authors' elaboration.

Overall, the reform trend has reflected, to a great extent, a *selective investment strategy*. Substantial investments in those policy sectors defined as growth-enhancing were combined with a shrinking level of workers' protection and a fairly mixed set of pension reforms. However, more generous measures were implemented horizontally among policy sectors in 2008 and 2009, in reaction to the recession, while fiscal consolidation measures were implemented soon afterwards with a view to improving the federal budgetary condition. In 2014 and 2015, a new tendency towards social standards improvements was launched through the adoption of the pension reform and the establishment of a national minimum wage.