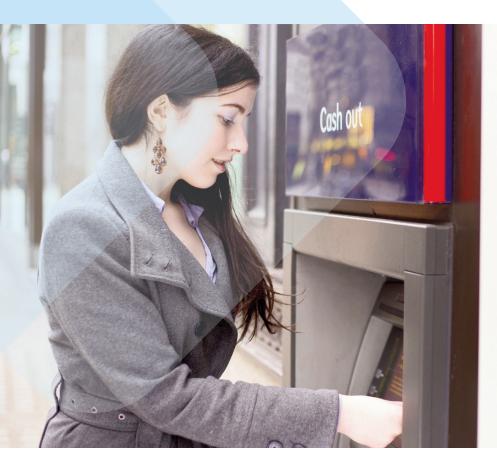


Industrial relations

Developments in collectively agreed pay 2000–2017





Developments in collectively agreed pay 2000–2017



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Country codes EU28

AT	Austria	FI	Finland	NL	Netherlands
BE	Belgium	FR	France	PL	Poland
BG	Bulgaria	HR	Croatia	PT	Portugal
CY	Cyprus	HU	Hungary	RO	Romania
CZ	Czech Republic	IE	Ireland	SE	Sweden
DE	Germany	IT	Italy	SI	Slovenia
DK	Denmark	LT	Lithuania	SK	Slovakia
EE	Estonia	LU	Luxembourg	UK	United Kingdom
EL	Greece	LV	Latvia		
ES	Spain	МТ	Malta		

Introduction

This report is part of a series of Eurofound reports on developments relating to collectively agreed pay in Europe. Chapter 1 provides an overview of developments in real wages, productivity and collectively agreed pay in Europe between 2000 and 2017. By drawing on different price indices to calculate developments in real terms, it aims to present both employer and employee perspectives.

Chapter 2 summarises the most recent developments in collective wage bargaining, relating mainly to 2016 and 2017. Only 14 Member States have regular, yet

non-harmonised statistics on collectively agreed wage changes. While this report is not limited solely to these countries, they do form a core part of it. More partial evidence is presented for the remaining countries, stemming mainly from the Network of Eurofound Correspondents.

Chapter 3 provides a short insight into recent developments in public sector wage bargaining and concerning the restoration of public sector pay.

Chapter 4 provides a summary of the findings and presents some conclusions.

1 Medium- and longer-term wage and productivity developments

This chapter begins with a brief summary of developments regarding wages in nominal terms across Europe since the early 2000s, providing a snapshot of recent policy research and analysis concerning wage developments. It then proceeds to relate the development of real actual and negotiated wages to developments in labour productivity, both at EU level and also at country level for those Member States with available statistics on collectively agreed pay.

Nominal wage developments

On average across the 28 EU Member States (EU28), employees received €23.10 for each hour worked as compensation in 2017.¹ This compensation, or 'wages', ranged from €9,700 per annum in Bulgaria up to €71,500 per annum in Luxembourg (see Figure 1). By and large, nominal compensation in euro terms² has grown in most Member States – outstripping the pre-crisis level – albeit with some exceptions: it remains below the pre-crisis level in the United Kingdom and Greece, is below its 2012 value in Cyprus and has stagnated over the past five years in Hungary, Croatia, Spain, Italy and Sweden.

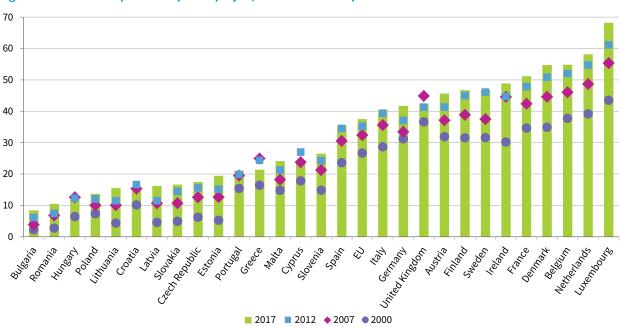


Figure 1: Nominal compensation per employee, in thousand euro per annum

Source: The annual macro-economic database of the European Commission's Directorate General for Economic and Financial Affairs (AMECO), HWCDW, downloaded 26 June 2018.

Data on compensation per employee stem from national accounts, where compensation includes wages and salaries and compensation in kind together with employer social security contributions. In this report, the terms 'wages', 'actual wages' or 'actual compensation' are used interchangeably. The development of nominal 'wages' in terms of compensation per hour worked is also part of the Social Scoreboard.

Movements in exchange rates are pertinent in this context. For instance, in the case of Hungary, much of the virtual stagnation of compensation is due to a depreciation of the exchange rate. In national currency terms, nominal compensation per employee grew by 13.5% between 2012 and 2017, while real compensation per employee grew by 8.6% during the same period.

The recently observed slower nominal wage growth can be attributed to low actual inflation up to about 2016 and, consequently, lower expectations of future inflation. Some possible explanations for the divergence between economic and productivity growth and sluggish wage growth are outlined below.

In its 2018 outlook report, the Organisation for Economic Co-operation and Development (OECD) referred to the state of the labour market, with persistent high levels of unemployment and underemployment and growth in less productive employment. Also, according to analysis from the European Commission (2017), wages reacted

less to changes in unemployment in the post-crisis period than before. The European Central Bank suggested that lower wage growth might reflect nominal rigidities prevailing from the past: downward nominal rigidities could have prevented wages from adjusting sufficiently to the amount of slack during the downturn, thereby preventing a stronger wage increase in the upturn (ECB, 2016). Furthermore, while trade union bargaining power tends to be stronger when business prospects are good, Lübker and Schulten (2017) argue that trade union bargaining power is still weaker than the current level of unemployment would suggest, because of hidden underemployment.

Box 1: Recent evidence on the role of wage bargaining systems for wage and employment outcomes

The role played by wage bargaining institutions in determining wage growth and employment outcomes continues to remain the focus of policy debate and academic analysis, years after the research-led debate over Calmfors and Driffill's hump-shaped hypothesis.³

In a survey investigating company-level reactions to changes in demand and prices during the core crisis years (2010–2013), researchers from the ECB's Wage Dynamics Network suggest that wage bargaining did contribute to nominal wage rigidities, and thereby 'may have exacerbated employment losses during recessions' (Marotzke et al, 2017). Those companies with more workers covered by collective pay agreements were more likely to not decrease or freeze wages than others, thereby making redundancies a more likely option. Along the same lines, the ECB (2017) praised the effects of collective bargaining reforms in the aftermath of the crisis, which often left more room for company-level bargaining: 'Accordingly, further reforms in this direction may be beneficial for euro area countries and could have the potential to reduce job losses in any future downturns.'

On the other hand, the OECD (2018) devoted Chapter 3 of its 2018 outlook to the role of collective bargaining systems for good labour market outcomes and applied a differentiated approach towards different features of the bargaining regimes. Analysing trends from Structure of Earnings Surveys, they point to the existence of wage premia for workers covered by company-level collective agreements as compared to those not covered or those covered by sectoral agreements. They also find that coordinated bargaining systems, including those that have decentralised wage setting, can be associated with optimal labour market outcomes in terms of higher employment and lower unemployment. From the trade union perspective, these findings were warmly welcomed (Janssen, 2018).

The European Commission (2018a) recently highlighted the importance of well-functioning bargaining systems for resilient economies and emphasised that 'the trust between social partners might be more important than any particular bargaining structure' (p. 11).

³ See Eurofound (2014), p. 28 for a discussion of this hypothesis and subsequent research debate.

⁴ Along with collective bargaining, they also provide information on the bargaining levels, the type of wage coordination and the degree of flexibility for firms to modify the terms of higher-level agreements.

Developments of real actual and negotiated wages and productivity

The idea that wages should grow in line with productivity continues to be on the radar of policy actors. In the framework of the European Semester process, in the years immediately following the crisis, the country-specific recommendations exhorted some Member States to 'ensure that wages grow in line with productivity'; also, nominal unit labour costs⁵ are one of the indicators which are closely monitored via the macroeconomic imbalance procedure (MIP) scoreboard. Given that in recent times this indicator has been by and large within the scoreboard's thresholds with the exception of some of the central and eastern European Member States, the Baltic countries and Bulgaria and Romania for some years, all of which are departing from lower wages and wage shares 6 – the focus has recently shifted more to the development of real wages and the wage share. For instance, in the country-specific recommendation for 2017, Germany and the Netherlands have been advised to 'create conditions to promote higher real wage growth, respecting the role of the social partners'.

If real wages grew in line with real productivity developments, wage and capital shares would remain constant. It has been emphasised recently that real wage growth has remained behind productivity developments (for example, OECD, 2017a, 2018 for their Member States over the past two decades; European Commission, 2018a; Schneemelcher and Ständer, 2018). However, the findings are sensitive to the method of measurement, as explained by the OECD (2017a) and Lübker and Schulten (2017).

For the EU28, between the early 2000s and 2017, the findings depend to a large extent on the choice of variables and any conclusions drawn are therefore a matter of perspective. Figure 2 depicts three cases, in each of which labour productivity is measured in terms of gross domestic product (GDP) per hour worked and wages are proxied as 'compensation per employee',

while the applied price deflator, to convert both variables from nominal into real figures, varies.

The first case (dark red lines) deploys the 'employer perspective', by using the GDP deflator for both variables, as compensation for employees represent a cost for the employer and real changes are calculated from a producer perspective. From the 'employee perspective', however, the development of actual consumer prices matters more than production prices, so two measures for consumer prices are used here: national ones (dark green lines) and harmonised indices (light green lines) which are considered more appropriate for international comparisons.

From the employer perspective, the labour compensation paid has grown in line with labour productivity developments in the period, with a more countercyclical growth of wages. From the perspective of the employee, and using the Harmonised Index of Consumer Prices (HICP), it seems that real wages per employee grew less than hourly labour productivity in recent years. More recently (2015–2017), the growth gap appears to have widened, a phenomenon which has also been observed in the years of economic boom up to 2007. The gap is even wider when comparing real HICP-deflated wages per employee (consumer perspective) with GDP-deflated labour productivity (employer perspective) - a gap which the trade-unionbased German Institute of Economic and Social Research (WSI) argues would give some room for further pay increases (Lübker and Schulten, 2017). However, the gap narrows considerably when looking at hourly wages. The divergence in growth between real hourly wages and real wage per employee could be due to an increase in the number of employees matching the reduced number of hours worked or due to an increase in the number of low-paid jobs.

Using national consumer prices ⁸ as deflators to calculate real changes of both variables also shows a decoupling of wages per employee from productivity, which widens in boom years and narrows in recession, but only when the same deflator is applied to both.

Nominal unit labour costs represent the proportion of nominal compensation in relation to real labour productivity and are used as a measure of 'wage-related' competitiveness. Within the macroeconomic imbalance procedure scoreboard, their three-year percentage change is monitored, with thresholds of +9% for eurozone countries and +12% for non-eurozone countries.

Galgóczi (2017) stresses the importance of considering the levels of productivity and actual shares of wages rather than focusing solely on their development, as the latter would imply that they had departed from some kind of initial 'equilibrium', effectively disregarding the fact that decoupled developments could also imply some movement towards equilibrium.

⁷ However, the OECD (2017a), following Feldstein (2008), argues that, for the decoupling question, the same deflator should be used.

National consumer prices may differ from the HICP specifically in relation to their treatment of owner-occupied housing (excluded from the HICP), but also in how taxes and services such as health and social protection are included. In this context, the OECD (2017a), while using the GDP deflator, finds that 'Excluding sectors for which labour shares are driven by changes in commodity and asset prices or for which labour shares are driven by imputation choices (primary, housing and non-market sectors) lessens the contribution of labour shares to decoupling' (p.5).

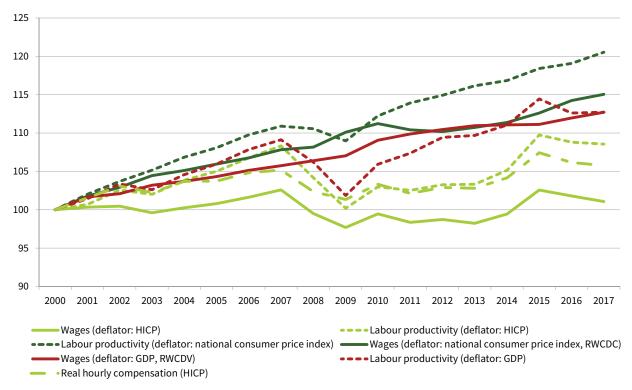


Figure 2: Developments in real compensation per employee and real hourly labour productivity, EU28, 2000–2017, index: 2000 = 100

Source: Own calculations, based on AMECO (HVGDH and RWCDC, both deflated with Eurostat HICP), and Eurostat (real hourly labour productivity and AMECO – RWCDC – deflated with national private consumption).

The technicalities and difficulties associated with measuring this wage–productivity gap and the labour income share are extensively discussed by the OECD (2017b), Chapter 1. And while the European Commission (2018a) acknowledges that 'the empirical evidence on this decoupling is not yet conclusive as it may contain a cyclical component and be subject to measurement issues' (p. 10), it attributes the decoupling to either a reduction in the labour income share – with more capital-intensive production – or to greater wage inequality between workers (or a combination of both).

Developments in collectively agreed pay

It is in this overall context that bargaining on wage increases takes place every year. Despite the continued decline of collective bargaining coverage reported in recent years, it remains an important cornerstone of wage setting in Europe; it is estimated that more than 6 out of 10 European workers are covered by collective wage agreements (the precise number is unknown). For more information about the background on wage bargaining, see p. 7.

Nevertheless, data on collectively agreed wages are scarce and are not harmonised across countries. Only half of the EU Member States compile a regular series of statistics on changes in collectively agreed pay. They are used here to indicate collective wage bargaining developments within countries over time by simply reporting the median observation of each respective year. As this indicator only refers to collectively agreed pay in 14 countries, it is not indicative for the whole EU28. However, it can be argued that it includes the main countries and employees that are covered by bargaining agreements and effectively excludes those countries in which bargaining takes place at company level and where coverage is low.

Paralleling the development of actual wages, the growth of collectively agreed pay in nominal terms also slowed down after 2009 as compared to the years before the financial and economic crisis. The most recent data – based on national statistics from 14 countries – suggest a continuation of moderate growth (see Table 1). With consumer prices increasing in 2017, this resulted in a slowdown of growth in real terms (0.1%) in 2017.

Table 1: Developments in collectively agreed pay (2000-2017) - Eurofound's indicator of collectively agreed wages

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Nominal	% change on previous year	3.1	3.5	3.6	2.9	2.4	2.7	2.8	2.6	3.3
Real (HICP)	% change on previous year	0.8	0.6	0.6	0.8	0.4	0.9	0.7	0.6	0.0
Nominal	Index – 2000 = 100	100	103	107	110	113	116	119	122	126
Real (HICP)	Index – 2000 = 100	100	101	101	102	103	103	104	105	105
		2009	2010	2011	2012	2013	2014	2015	2016	2017
Nominal	% change on previous year	2.8	2.0	2.0	2.7	1.7	1.5	1.3	1.6	1.8
Real (HICP)	% change on previous year	2.4	0.2	-0.9	-0.5	0.6	0.8	1.2	1.0	0.1
Nominal	Index – 2000 = 100	130	132	135	138	141	143	145	147	150
Real (HICP)	Index – 2000 = 100	107	107	106	106	107	107	109	110	110

Note: Eurofound's figures refer to the median collectively agreed pay increase in 14 countries with available statistics. See Eurofound (2018) – EurWORK database 2.0, variable WACR and codebook for metadata on the sources (pp. 53–69).

Source: Eurofound's indicator on collectively agreed wages; author's calculations based on Eurofound (2018), variable WACR.

Background on wage bargaining

Usually, the actual wage of any individual worker derives from a combination of three elements: employers have to adhere to legal minima, as stipulated in statutory minimum wages; they might have to adhere to collectively agreed minima, negotiated at sectoral level, or have their own company agreement; and they may also grant individual payments beyond those minima.⁹ The interplay of these three elements is different in each Member State and varies across companies and sectors. A comprehensive description of how wages are determined collectively in each EU Member State is available in Eurofound's working life country profiles under the section 'Collective bargaining', 10 in EurWORK's database of pay, working time and collective disputes (Eurofound, 2018), and Eurofound's annual report on statutory minimum wages also contains a description of how statutory minimum wages are set every year in those Member States that have them.

This report looks into the outcomes of collectively agreed pay, that is, pay which results from negotiations between trade unions and employer organisations. The impact of collective bargaining on the development of

actual wages in the economy as a whole is to a great extent influenced by the number of employees who are covered by collective wage bargaining. Because of historical traditions and differences in collective bargaining regimes, 11 there is great variation in collective bargaining coverage between the EU countries. Nordic and Western continental countries have in general the highest coverage rates, often above 80%, not least due to a predominance of sector-level bargaining. In the Nordic countries (Denmark, Sweden, Finland), this is due to very high trade union densities (70-80%) while in other countries - which often have lower union densities - high coverage can also be achieved by extending agreements to whole sectors and unaffiliated companies. Such extensions are widespread or even 'virtually automatic' in a number of Member States (including, for instance, France, Belgium or Spain – see Figure 3) or are, as in the case of Austria with its almost total coverage, due to the 'functional equivalent' of compulsory membership of private employers in the federal employer organisation, the Austrian Economic Chambers (WKO). In several Member States, such as Greece, Romania, Portugal and Slovakia, extension mechanisms were abolished or modified during the crisis with a resulting decline in coverage.

⁹ Beyond basic wages, individuals might receive other components of pay, such as additional allowances or performance-related bonuses, which could potentially also be part of collective agreements or be paid in line with legislation.

¹⁰ See, for instance, Eurofound, 2017a.

Such differences include the level at which agreements are negotiated. For example, at sectoral or company level; whether the agreements made also apply to non-members of employers or employee representations; where they do not, if they can be, and actually are, extended to non-affiliated members (ILO, 2018); the extent to which companies can derogate from higher-level agreements or how much leeway is there for negotiations at lower levels; and, ultimately, that part of the economy (workers and companies) which is not covered by any form of collective agreement.

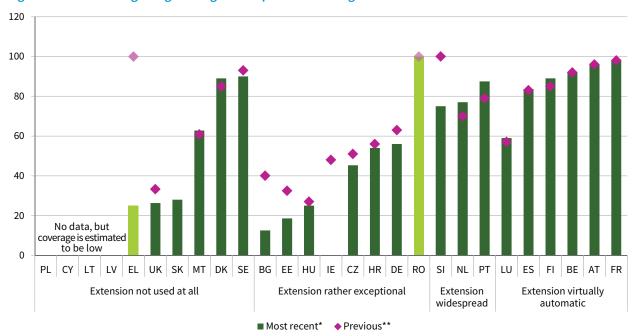


Figure 3: Collective bargaining coverage developments and usage of extension mechanisms

Note: *Most recent: Mainly 2016–2017 or most recent figures available. ** Previous: 2006–2007 or closest concrete figure available. A description of the national sources and exact years to which the data refer can be found in Table A1 in the annex. Time series are available in the EurWORK database. Dark green bars indicate calculated data, based on identified sources. Light green bars relate to 'correspondents' estimates' in the absence of concrete figures.

Source: EurWORK database on wages, working time and collective disputes 2.0, variable CACalc and CAEStim and ExtSTAT.

More recently, in 2017, Romania 'rejoined' the club of countries with a reported collective bargaining coverage of 100% as the government obliged all companies to enter into collective wage negotiations, accompanying their policy of shifting the transfer of social security contributions from employers to employees. ¹² Conversely, the lowest coverage was reported in Bulgaria and Estonia, where less than one-fifth of employees is covered, and coverage is also known to be very low in Latvia, even in the absence of concrete figures.

Looking at country-specific developments in collectively agreed pay in real terms, a broad range of outcomes are found (see Figure 4), with the highest increases observed in the Czech Republic and Slovakia (+33% between 2000 and 2017, or 2004 and 2017), followed by France (+19%) in the same period. The United Kingdom, which experienced strong increases in real collectively agreed pay before the recession, saw a prolonged decline afterwards, but has since regained some ground. Real negotiated wages were relatively stagnant over the whole period of observation in the Netherlands and in Malta. More detailed figures are available in Table A2 in the annex.

This figure should be interpreted with caution: while all companies were obliged to enter into wage negotiations, they were not obliged to reach outcomes. The actual degree of bargaining coverage at company level therefore remains unknown. Moreover, the obligation was confined to 2017. Sectoral collective agreements, which are extended to non-affiliated employers, continue to be exceptional, as in previous years.

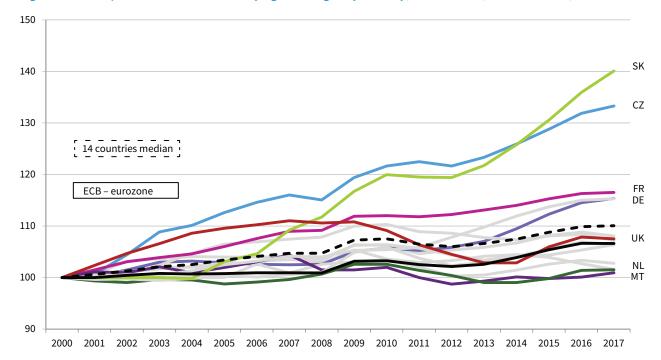


Figure 4: Developments in real collectively agreed wages by country, index: 2000 (or most recent) = 100

Note: Eurofound's figures refer to the median collectively agreed pay increase in 14 countries with available statistics. See Eurofound (2018), EurWORK database 2.0, variable WACR and codebook for metadata on the sources (pp. 53–69). Index: 2000 = 100; for SK, 2004 = 100. **Source:** Eurofound's indicator on collectively agreed wages, ¹³ authors' calculations based on Eurofound (2018), variable WACR; ECB – eurozone = ECB's indicator of negotiated wages.

Country-specific developments in wages, productivity and collectively agreed pay, 2000–2017

When considering only the aggregate, the various country-specific developments tend to be hidden. This section presents more detailed results for those Member States having available secondary statistics on collectively agreed pay, comparing their development in labour productivity, actual and negotiated wages, all in real terms (and deflated, using the HICP).

As labour productivity is measured in terms of hours worked, here it is also related to hourly wages.
Collectively agreed pay increases also implicitly refer to

hourly rates, so the wage drift is best illustrated by looking at the hourly figures. However, data on the development of real wages per employee is also included as, due to changes in average working hours, they might develop differently from hourly wages; ultimately, real wages are a better indicator of changes in people's purchasing power.

Figure 5 depicts how the wage–productivity gap has developed for all EU28 countries between 2000 and 2017, in terms of hourly wages and productivity. There is a balanced mix of developments, with about one-third of the Member States having had a significantly higher real wage than productivity growth, one-third where real wages grew less than productivity and, in the last third, both were growing 'roughly' (±5%) in line with other.

¹³ The indicator only refers to collectively agreed pay in 14 countries and hence is not indicative for the whole EU28. However, it can be argued that it includes the main countries in which employees are to a greater extent covered by bargaining agreements and excludes mainly those countries in which bargaining takes place at company level and where coverage is low.

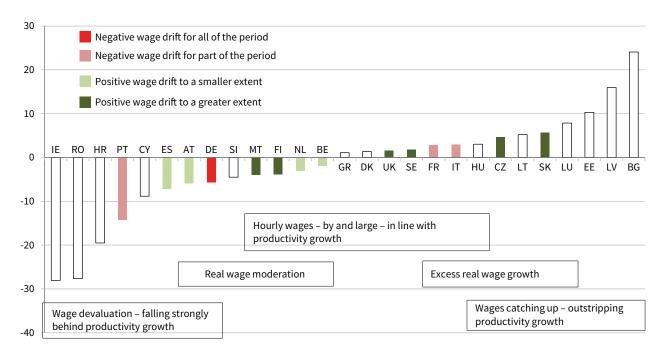


Figure 5: Difference between wage and productivity growth, 2001–2017

Note: The figures refer to the difference in growth of real hourly wages and real productivity between 2000 and 2017, expressed as a percentage relative to productivity in 2017. Reading example: Between 2000 and 2017, real hourly wages in Ireland grew 28% less than real labour productivity per hour. No data for Poland.

Source: Own calculation based on AMECO, nominal hourly compensation and hourly labour productivity, both in real terms, deflated by the HICP.

The question to be addressed here is how does collectively agreed pay relate to actual wage developments, and what role has it played, or could have played, in aligning wages with productivity developments.

The findings reveal a **negative wage drift** ¹⁴ in only a small number of Member States with available data, that is, actual hourly wages grew less than collectively agreed pay. This was the case in Germany and France over the full period of observation since the early 2000s, and in Italy and Portugal mainly in the post-crisis period after 2010. For all other countries with available data, a **positive wage drift** was observed as actual real hourly wage growth exceeded that of collectively agreed pay.

Real wage devaluation or stronger moderation

In **Germany**, negotiated wages appeared to be strongly aligned with developments in labour productivity over the whole period, whereas actual wage growth was largely decoupled, particularly between 2003 and 2008. This wage devaluation coincided with a decline in collective bargaining coverage and attempts to reduce unemployment via the creation of a low-paid sector ¹⁵ with lower hourly pay, and it was paralleled by a strong reduction of working hours per employee. ¹⁶

In the years after 2009, the growth of actual wages appeared to be more aligned with productivity developments than before, yet the gap that opened up has persisted. In the 2018 country report, the European Commission finds Germany to have made only 'limited

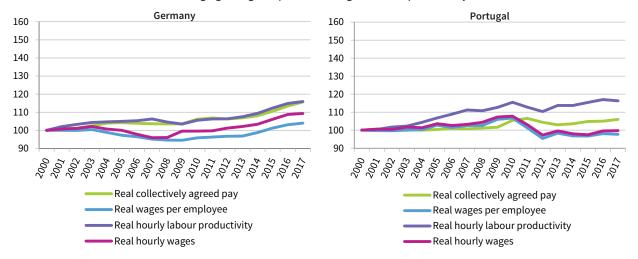
^{14 &#}x27;Wage drift' is defined here accumulatively, that is, by summing up the annual difference in change of collectively agreed pay versus actual pay, over time.

Felbermayr, Baumgarten and Lehwald (2015) show that this decline in collective bargaining coverage, together with widespread use of opening clauses and other measures for company-level wage flexibility, was a driver for growing wage inequality, accompanying the process of growing international interdependence. Lübker and Schulten (2018) also point to relatively high wage inequality in Germany due to the proportional effect of the low-paid sector. See also Eurofound (2017a), p. 16, for similar findings based on income data.

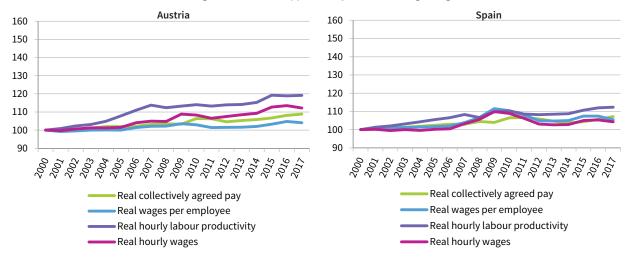
¹⁶ According to Destatis (2017), the average annual number of working hours per employee declined from 1,452 in 2000 to 1,356 in 2017 (-6.6%).

Figure 6: Actual wages, negotiated wages and labour productivity in real terms, selected countries, 2001-2017

Countries with a negative wage drift – wage moderation – collective bargaining 'not strong or not wide-ranging enough' to pull actual wages towards productivity increases



Countries with a positive wage drift and wages growing less than labour productivity (recently) – wage moderation 'supported' by collective bargaining



Sources: Own calculations based on AMECO and Eurostat (Nominal hourly labour productivity – HVGDH; Nominal compensation per employee – HWCDW). Collectively agreed pay from national statistics: DE: WSI Collective Agreement Archive by the Institute of Economic and Social Research (the Hans Boeckler Foundation); PT: Variação Média Ponderada Intertabelas by the General Directorate for Employment and Industrial Relations (DGERT); AT: Tariflohnindex TLI by Statistics Austria; ES: Estadística de Convenios Colectivos de Trabajo by the Ministry of Labour, Migration and Social Security. All nominal figures were deflated using the Harmonised Index of Consumer Prices (HICP).

progress' in increasing real wages and partially attributes this to continuously low collective bargaining coverage, in particular in low-paid services sectors – despite acknowledging government efforts to promote the same and the effect of the introduction of a statutory minimum wage – and a stronger role of non-wage components in collective bargaining (European Commission, 2018b).

In **Portugal**, the stronger real wage devaluation in response to the financial and economic crisis was not accompanied by a decrease in collectively agreed pay

increases of the same magnitude (see Figure 6). This can be explained by the fact that, due to the collapse of bargaining in many sectors, the collectively agreed wage increases benefited only a relatively small proportion of the workforce. The decrease in the number of workers covered by the annual revision of collective agreements since 2011 resulted in the stagnation of collectively agreed wages for a large part of the workforce, thereby limiting the capacity of collective bargaining to raise wages for all salaried workers (Campos Lima, 2014; Schmid-Druener and Dessimirova, 2016; Távora and González, 2016).

In Austria, the gap between wages and productivity developments appeared to be widening already in the early 2000s: more in terms of wages per employee than hourly wages, and due to a growing difference between real hourly pay and real compensation per employee. Similar to Germany, the growth of real wages per employee lagged behind the negotiated increases in the post-crisis period in particular. In contrast to Germany, however, there was a positive drift between hourly wages and negotiated pay, and collective bargaining coverage remained high and stable. Moderate collectively agreed increases over time – particularly following the years of recession, combined with growing unemployment and increased competition in lower paid parts of the economy - appeared to be driving continuing non-alignment.

Starting in 2011, the salary devaluation in **Spain** below the growth of labour productivity was brought into effect via a combination of bargaining reforms (including a reversal of the favourability principle giving more leeway for company-level bargaining, combined with modest, sectorally agreed and centrally recommended maximum increases). According to a report from the Trade Union Confederation of Workers' Commissions (CCOO), however, the devaluation of actual wages was mainly a result of changes in the labour market – including employment losses, increasing precariousness and labour market reforms – rather than less favourable terms within collective agreements (see Durán and Corral, 2016 for an English summary).

More or less stable wage-productivity gap with recent wage moderation

Relatively closely aligned wage and productivity developments were observed between 2000 and 2017 in Finland, Belgium, the Netherlands and Malta, with a comparatively 'small' shortfall of real wage growth more recently.

Each of these countries had applied implicit or explicit wage moderation policies as a reaction to the economic crisis. The **Finnish** wage moderation was recently reinforced by the government during negotiations on the 2016 Competitiveness Pact, but was also accompanied by a further promotion of local bargaining.¹⁷ In **Belgium**, the long-standing practice of wage indexation, which linked wage changes to increases in the cost of living, was temporarily suspended in the context of the economic crisis and subsequently modified,¹⁸ and there has been an increasing trend of centralisation from the sectoral to

the inter-professional level. The latter sets the 'wage norm', an indicative range of wage increases to which sectoral bargaining actors have to adhere. Recently, this wage norm has become more imperative in nature (see box 2 on maximum wage increases in Belgium on p. 2). In Malta, on the other hand, while there was no explicit wage moderation policy introduced, the continuation of the indexation mechanism has kept real wages constant, so minimum wages in real terms have not increased for some time.

In the Netherlands, policies of wage moderation have been pursued historically since the 1982 Wassenaar Agreement and have featured in the Dutch polder model as a remedy to high unemployment. In 2018, the International Monetary Fund (IMF) looked into Dutch wage moderation over the long term and found that, beside cyclical variations such as lower productivity growth and lower inflation expectations (which are also observed in other countries), 'the rising share of temporary and self-employed workers may have lowered the responsiveness of the real wage to trend productivity and unemployment over the long run perhaps due to reduced bargaining power of the more flexible employees'. And, they further suggest (p.12):

Reforms to harmonize labor market employment contracts in a manner that increases flexibility but also allows greater bargaining power for the more 'flexible' employees might allow both greater flexibility and higher wages.

In contrast to the other countries in this group, though, wages per employee remained closely aligned with hourly pay, so developments in the Netherlands also showed some similarities with Sweden and the United Kingdom. Also, real wage growth – in both hourly terms and per employee – between 2000 and 2017 was closely aligned with developments in hourly labour productivity, while increases in negotiated wages lagged far behind.

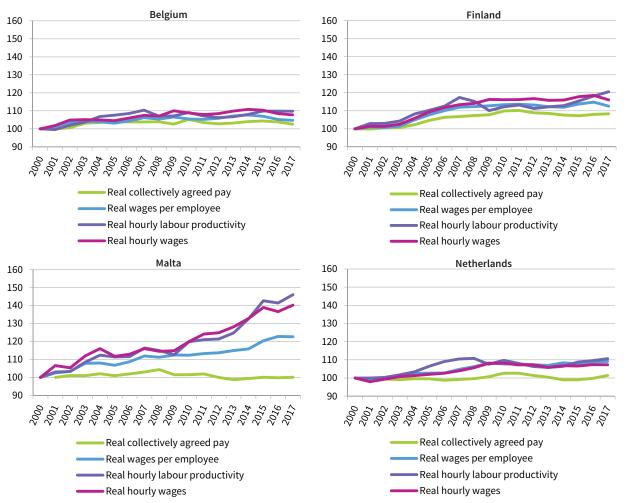
For **Sweden**, in the context of high collective bargaining coverage, the increasing trend to 'numberless' collective agreements has been well documented (see, for instance, Kullander and Danielsson, 2015) and could be one possible explanation for observed positive wage drift. In the **United Kingdom**, where collective bargaining coverage is low and predominantly takes place in the public sector, substantial wage drift equally portrays a story of wage moderation policies pursued by the government in the public sector and weak union bargaining power in the private sector. However, this has not apparently affected actual wages throughout the economy uniformly.

¹⁷ This tripartite pact included wage freezes for 2017, reduced pay for public sector employees, transfer of part of the liability for social security contributions from employers to employees and an extension of annual working time without further compensation. See Savolainen (2016, 2017).

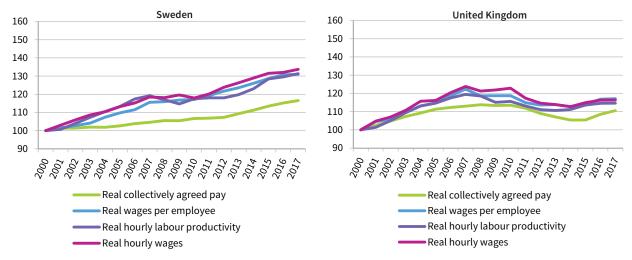
¹⁸ See Vermandere (2014) and Vermandere and van Gyes (2015).

Figure 7: Actual wages, negotiated wages and labour productivity in real terms, selected countries 2001–2017

Countries with a positive wage drift, hourly wages growing in line with labour productivity, but wage per employee growing more moderately recently – wage moderation 'supported' by collective bargaining



Countries with a positive wage drift and closer alignment of actual hourly wages and productivity developments – collectively agreed pay lagging behind



Source: Own calculations based on AMECO and Eurostat (nominal hourly labour productivity – HVGDH; nominal compensation per employee – HWCDW). Collectively agreed pay from national statistics: BE: Statbel by Statbel; FI: Index of negotiated wages by Statistics Finland; MT: Economic Survey by the Economic Policy Department in the Ministry for Finance; NL: StatLine by CBS; SE: The National Mediation Office's data on wage increases in central agreements; UK: The Payline database by the Labour Research Department. All nominal figures were deflated using the HICP.

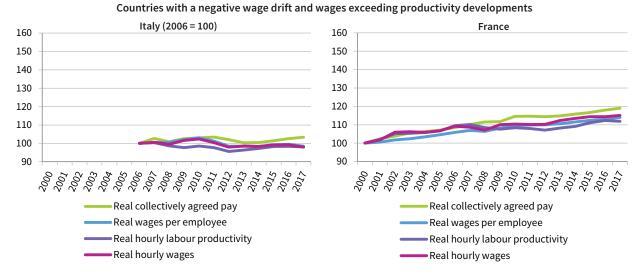
Wage growth exceeding productivity developments

France and Italy are also among the countries where hourly real wage growth was broadly in line with productivity developments, although already at the high end of the spectrum, so slightly exceeding productivity growth (see Figure 8).

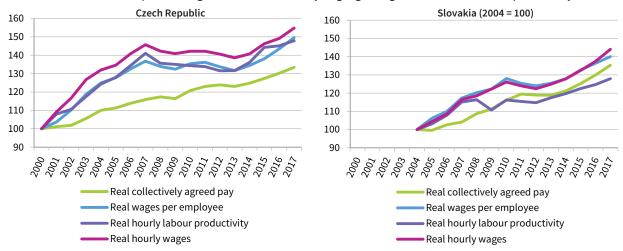
In France, collectively agreed pay was very closely aligned with labour productivity developments until 2007, before the financial crisis, while actual wages lagged behind during this period. Collectively agreed pay then continued its growth, while labour productivity declined and stagnated for a number of years, so that over the full period 2000–2017 and over the two observed business cycles, growth of actual wages was closely in line with labour productivity developments. In Italy (for which data on collectively

agreed pay are only available from 2006 onwards), the pattern resembled that of France: that is, both negotiated and actual increases exceeded labour productivity developments, with the gap widening in the post-crisis period. For Italy, wage bargaining reforms promoted more decentralised wage setting, in particular by granting tax relief on performance-related pay in company agreements (Faioli, 2014; Iudicone, 2016). Recent (non-representative) evidence from a sample of 100 decentralised collective bargaining agreements and secondary analysis of data from unions' observatories carried out by the tripartite National Economic and Labour Council (CNEL) showed that performance pay and company-level welfare measures are used increasingly. Yet, they are jeopardised across sectors and regions, running the risk of increasing inequalities among workers and between genders (Iudicone, 2018).

Figure 8: Actual wages, negotiated wages and labour productivity, in real terms, selected countries, 2001–2017



Countries with a positive wage drift and actual hourly wages growing more more than labour productivity



Source: Own calculations based on AMECO and Eurostat (Nominal hourly labour productivity – HVGDH, Nominal compensation per employee – HWCDW). Collectively agreed pay from national statistics: CZ: Informační systém o pracovních podmínkách by Trexima s. r. o.; FR: National expert's own calculation based on branch-level wage agreements by DARES; IT: Contractual wages and salaries by the National Institute of Statistics; SK: Informačný systém o pracovných podmienkach by Trexima s.r.o. Bratislava and the Ministry of Labour, Social Affairs and Family All nominal figures were deflated using the Harmonised Index of Consumer Prices (HICP).

In another set of countries – all of them part of the central and eastern European Member States – actual wage growth outstripped productivity developments (it should be noted that data on collectively agreed pay are only available for the Czech Republic and Slovakia). In Slovakia, up until the recession, the growth of collectively agreed pay lagged behind the growth of labour productivity, but in the intervening period to 2017 it has caught up, while hourly wages have been aligned with labour productivity. For both countries,

having a very low wage share and low actual wages, together with a large 'productivity reserve' in the manufacturing sector (Galgóczi, 2017, pp. 19–20), can be considered an attempt to move out of a low-wage environment, not least in the context of considerable labour shortages. In both countries, collective wage bargaining coverage is low, so wide wage drift and lower negotiated increases only affect a small proportion of workers and, in this regard, have only a limited impact on actual wage developments.

2 Wage bargaining outcomes: Short-term developments 2016 and 2017

Chapter 2 reviews the most recent changes affecting wage setting in Europe in 2017, before going on to summarise the short-term developments of collectively agreed pay based on national statistics. It complements this picture by providing some more partial evidence from those Member States that do not have regular collective wage bargaining statistics. A final section is then devoted to recent developments in the setting of public sector pay.

Recent changes affecting wage setting

In the majority of EU Member States, the collective wage bargaining framework reportedly did not undergo any major changes in 2017.¹⁹ Changes in wage setting were debated in only a few countries, potentially affecting future wage bargaining outcomes. These are outlined in this section.

Coverage of collective bargaining can be influenced by national legislation. Important changes relating to this aspect – beyond the case of Romania, as described above on p. 8 - took place in two countries in 2017. In **Lithuania**, according to the new Labour Code, which came into effect in July 2017, trade unions represent only their members. Therefore, collective agreements signed after this date would be applicable only to trade union members. In practice, this norm is still not fully implemented and the majority of agreements continue to apply to all employees of the company. This ambiguity impedes collective bargaining processes at the company level. Conversely, in Latvia, the new law aimed to promote collective bargaining - currently non-existent at sectoral level – by granting the right to larger companies or groups of companies to conclude sectoral agreements (Karnite, 2017). In Slovakia, a change took place in the rules for the extension of multi-employer collective agreements, effective from 1 September 2017: amendments to the Act on collective bargaining introduced the term 'representative collective agreement' and only such agreements can be extended.

A lively discussion was held in France in the context of the Labour Code reform on the relationship between branch- and company-level agreements, with the government being in favour of giving more space and flexibility to company-level agreements. Finally, it was decided that the setting of minimum wage standards (apart from statutory minimum wages) will remain part of branch-level collective agreements, while company agreements might stipulate less favourable provisions in relation to working time and some part of remuneration, such as reduced compensation for overtime. The reform also changed the rules on the adoption of a company-level agreement, allowing for alternate modes of bargaining (referendums) and ratification, and enforcing the role of the majority union. In addition, the government is currently reducing the number of branches: social partners of the smaller branches are being asked to merge collective agreements, so they tend to become fewer but wider in coverage.

Following the withdrawal of the Confederation of Finnish Industries (EK) from centralised collective bargaining in 2016, the collective bargaining process in Finland took place in 2017 exclusively at sectoral level without being preceded by a central-level framework agreement. The uneasy relations of the social partners provided a challenging starting point for the collective wage negotiations of 2017-2018, but the process developed smoothly enough. The technology industry agreement, which is the main export industry agreement covering around 100,000 employees, set a benchmark limit of a maximum wage rise of 3.2% between 2018 and 2020 (allowing for deviations at local level). Despite the lack of a formal agreement, employer organisations across sectors stuck firmly to the benchmark.

In **Greece**, the expected review of the collective bargaining framework in 2017 shifted to August 2018 following the end of the Economic Adjustment Programme, meaning that there was no change in collective bargaining practices. Greek collective wage bargaining – if it happens at all – is still confined to company level.

¹⁹ These Member States were: Austria, Bulgaria, Croatia, the Czech Republic, Germany, Latvia, Luxembourg, Netherlands, Poland, Slovenia, Sweden, United Kingdom.

Box 2: Maximum increases implemented in Belgium

In **Belgium**, according to the regular biannual programming of this bargaining round for 2017–2018, new agreements had to be settled at the different levels of the multi-level bargaining system. Most sectors have implemented wage increases to the maximum allowed for, although sometimes with different types of reward or with options that companies could adopt the increase in a more made-to-measure agreement.

Wage bargaining in Belgium shows two opposing trends. On the one hand, an increasing trend of centralisation is visible from sectoral to the cross-sectoral level as the 'wage norm', which used to be more indicative, becomes increasingly imperative. This wage norm, established at the inter-professional level, is a margin or range of wage increases to which sector-level bargaining actors must adhere when negotiating and implementing their agreements. In almost all sectors, this margin has been nearly fully utilised in 2017–2018. In effect, the sectoral level now has less autonomy over the level of wage increases and its role in the process has been reduced. On the other hand, an opposing trend of decentralisation is visible at the company level, often used by companies to attract highly sought-after candidates, for example. Despite these trends affecting sector-level bargaining, it remains the dominant form.

Recent outcomes of negotiated wages

In 2017, the **nominal** increase in collectively agreed wage change in 8 out of 14 countries (with available data) surpassed the level of 2016 (see Table 2 below). In four other countries, nominal growth was the same or just marginally lower (by a maximum of 0.2 percentage points) than in 2016. The only two countries that saw a considerable slowdown in nominal growth were the Netherlands and Finland. At the same time, Finland was the only country where the nominal collectively agreed wage decreased in 2017. Slovakia and the Czech Republic were the countries with the highest pace of growth in both years, in both nominal and real terms.

However, the overall picture is different in **real terms**. Due to the most recent increase in inflation, real increases in collectively agreed wages in 2017 surpassed 2016 levels in only three countries.²⁰ Remarkably, six countries saw a decrease of collectively agreed wages in real terms in 2017. The decrease was highest in Belgium and Finland. Belgium has seen collectively agreed wage decreases for the third year in a row. There are no statistics on collectively agreed pay changes available for all other countries, but there is some anecdotal evidence on the most recent developments, which is presented below.

Nominal Real Country 2016 2017 2016 2017 Austria 1.6 1.5 0.6 -0.7 Belgium 0.6 1.1 -1.2 -1.1 Czech Republic* 3.5 1.1 3.0 2.4 Germany 2.4 2.4 2.0 0.7 Spain 1.1 1.4 1.4 -0.6 **Finland** 0.7 -0.3 -1.1 0.3 France 1.2 1.4 0.9 0.2 Italy 0.6 0.7 0.7 -0.6 Malta** 0.8 1.2 2.1 0.3 Netherlands 1.9 1.5 1.6 0.1 **Portugal** 1.5 2.6 0.9 1.0 Sweden 2.3 2.2 1.1 0.2 Slovakia 4.1 3.1 3.6 4.5 **United Kingdom** 2.5 1.8 -0.3 2.4 Median 1.6 1.8 1.0 0.1 Eurozone 1.4 1.5 1.2 0.0

Table 2: Nominal and real collectively agreed wage change in the EU, 2016 and 2017

Note: Table contains only countries with available data; * Only agreements with nominal wage changes agreed; ** Private sector only.

Source: EurWORK database on wages, working time and collective disputes 2.0, variable 'WaCh, ZZ – whole economy'. The national sources of these statistics are described in Table A1 in the annex. National statistics: AT: Tariflohnindex TLI by Statistics Austria; BE: Statbel by Statbel; CZ: Informační systém o pracovních podmínkách by Trexima s. r. o.; DE: WSI Collective Agreement Archive by the Institute of Economic and Social Research (the Hans Boeckler Foundation); ES: Estadística de Convenios Colectivos de Trabajo by the Ministry of Labour, Migration and Social Security; FI: Index of negotiated wages by Statistics Finland; FR: National expert's own calculation based on branch-level wage agreements by DARES; IT: Contractual wages and salaries by the National Institute of Statistics; MT: Economic Survey by the Economic Policy Department, Ministry for Finance; NL: Statline by CBS; PT: Variação Média Ponderada Intertabelas by General Direction of Employment and Labour Relations; SE: The National Mediation Office's data on wage increases in central agreements; SK: Informačný system o pracovných podmienkach by Trexima s.r.o. Bratislava and the Ministry of Labour, Social Affairs and Family; UK: The Payline database by the Labour Research Department. Euro Zone: ECB indicator of negotiated wages, covering 19 eurozone countries; Median: Eurofound's indicator of negotiated wages. The 14 countries listed above are those with available national statistics.

Collective wage bargaining, 2016–2017

2017 was reportedly relatively calm in a number of Member States.

In Germany, compared to previous years, 2017 was an uneventful year in terms of collective bargaining because some major agreements reached in 2016 were still ongoing and not due for renegotiation. In light of a positive economic outlook, the trade unions called for a rise of 5–6%. According to the WSI Collective Agreement Archive, the average agreed wage increase in 2017 was 2.4%. In two sectors with a high proportion of low-wage earners (industrial cleaning and fast food restaurants), lump sum wage rises (that is, in euro per hour rather than in percentage points) were achieved over a period of three months, thereby potentially creating some 'ripple effects' for those covered by collective agreements, on top of the recently introduced statutory minimum wage. Also, in the United Kingdom, 17% of

pay agreements within the Payline database contained measures aimed at boosting pay for the lowest paid. In **Finland**, contrasting with the past couple of years, where collectively agreed wage rises have been very modest or non-existent (see Figure 7 and Table A2), the negotiated average of a 3.2% wage rise between 2018 and 2020 marks an upward turn in collective wage bargaining outcomes. Similarly, the 2017 wage bargaining round in **Sweden** was a fairly calm affair. The Swedish Trade Union Confederation (LO) managed to coordinate the wage demands among the sectors and most agreements now stretch over three years. However, entry-level wages continued to be a hot topic.

In **Denmark**, wage increases scarcely featured in collective agreements from 2014, 2012 and 2010, due to the financial and economic crisis. The 2017 agreements, on the other hand, provide for a nominal 7% wage increase up to 2020. Wages are one of several subjects of collective bargaining together with working time, continued training, special benefits, pensions,

maternity and paternity leaves, etc. While wage increases are negotiated and determined at sectoral level, further negotiations take place in 85% of the companies. Sector-level agreements serve as a guideline, but increases agreed at company level are often much higher.

In 2017, trade unions in Ireland announced they would seek a 4% pay increase for their members. The figure was agreed by the private sector committee of the Irish Congress of Trade Unions (ICTU), based on the projected productivity growth rate of 1.5% and rate of inflation of 2% up to 2021. The Irish Business and Employers Confederation (IBEC) insisted that company-level pay bargaining has been and remains the 'most appropriate way to determine pay in the private sector, taking account of the competitive and productivity pressures on individual firms'. According to figures from Industrial Relations News (IRN), a clear majority of pay settlements were in the 2-3% per annum range in 2017, compared to 1-3% in 2015 and 2016. Increases greater than 3% usually involved an element of recovery from pay cuts or freezes imposed in the crisis years.

In Portugal, the priority for the trade unions was to continue to boost the number of signed agreements and the share of workers covered by collective bargaining. During the crisis, collective bargaining underwent a period of intense difficulty. In 2012–2014, the numbers of published agreements and of workers covered reached very low levels; however, slow recovery of these indicators continued up to 2017. Employer associations in some larger sectors, where there had been a standstill in negotiations, were willing to sign agreements in 2017. Between 2016 and 2017, the number of published agreements rose from 146 to 208 and the number of workers covered rose from 749,000 to 821,000, respectively. The trade unions also aimed to achieve higher wage increases than in previous years. Generally, employers were willing to meet claims for wage increases at a moderately higher level than in 2016.

As a result of negotiations between the government and trade unions in 2017 in **Romania**, a number of salary increases in the range of 10–50% were granted to certain categories of employees paid from public funds. Moreover, for personnel paid by public funds, gross salary increased by 25% from January 2018. However, these apparently generous increases need to be seen in context; they are meant to counteract the decrease in employee net income following the transfer of social contributions from the employers to the employees. All Romanian companies – regardless of size – were obliged to initiate the collective wage bargaining process. Employers can increase employee gross salaries in such a way that net wages remain at the 2017 level.

Negotiations and bargaining rounds in some other countries were reportedly not so smooth. In Italy and Spain, the main controversies concerned the linking of pay increases to inflation.

Most national collective agreements in Italy base wage increases on the expected inflation rate and assume that they will be adjusted to the actual rate accordingly. Since the actual inflation rate remained below the provisional rate in recent years, however, employer organisations' aimed to offset agreed wage increases in the latest bargaining rounds, triggering strong opposition by unions. Collectively agreed welfare benefits and performance-related pay have also been at the core of negotiations, as they have been incentivised by the government with income tax reliefs.

In **Spain**, the main social partners – the Trade Union Confederation of Workers' Commissions (CCOO) and the General Union of Workers (UGT) and employer organisations the Confederation of Employers and Industries of Spain (CEOE) and the Spanish Confederation of Small and Medium-Sized Enterprises (CEPYME) – were supposed to sign the Pact on Salary Recommendations for 2017. Initially, employer representatives were in favour of salary moderation to maintain employment levels but, progressively, they accepted higher salary increases. Meanwhile, unions wanted workers to recover the purchasing power lost during the crisis and argued that productivity increases and benefits obtained by companies should lead to pay rises. Moreover, trade unions wanted to link salary increases to national economic indicators, such as the inflation index. By June, there seemed to be a consensus between unions and employers, with salary increases in the range of 1.2–2.5%. However, unions wanted to introduce wage guarantee clauses linked to inflation, whereas employer organisations were against it. By July 2017, as social partners were not able to reach an agreement, negotiations broke down.

In other countries, some difficult negotiations in selected sectors were highlighted by correspondents. The annual autumn wage bargaining rounds in Austria, which traditionally begin in the influential metal industry sector, were quite controversial in 2017, as employers were only willing to accept increases of slightly more than 2%, despite more favourable economic forecasts. An agreement was only reached following six bargaining rounds, works council conferences, works meetings and after the Austrian Trade Union Federation (ÖGB) decided against industrial action. Conflicts also occurred in the social and healthcare sector bargaining rounds, where negotiations were still ongoing at the beginning of 2018, after warning strikes had taken place. Apart from this, the social partners had already implemented the new minimum wage of €1,500, as requested by the federal government, in a variety and multitude of sectors in the course of 2017 (Allinger, 2017a).

In the Czech Republic, multi-employer bargaining was comparatively difficult in 2017, with total negotiation time lasting up to 40 weeks compared to 25 weeks in 2016. The biggest controversies involved the Czech Metalworkers' Federation (OS KOVO), which repeatedly failed to agree with the Association of Foundries on a higher-level agreement from 2016 to the time of writing. The union also submitted a draft collective agreement in 2016 for the year 2017, but AutoSAP (the Automotive Industry Association) refused to negotiate collectively and only offered to negotiate a non-binding cooperation agreement. Consequently, the Ministry of Labour and Social Affairs had to designate a mediator and the issue is now before the court.

In Slovakia, the most important wage bargaining dispute of 2017 took place between Volkswagen Slovakia and Modern Trade Unions Volkswagen (MOV). Following the excellent economic performance of the company in 2016, MOV demanded a 16% increase of the wage tariffs. Management insisted on a 4% increase for each of the following three years. The failed negotiations led to a strike of about 8,500 employees in June 2017, with serious implications for car production. A compromising collective agreement stipulated, among other things, a 14.1% step-by-step increase of wage tariffs until 1 November 2018 and a lump sum payment of €500.

3 Public sector pay restoration

Before going on to report in more detail on recent developments in public sector wage setting and bargaining, it is worthwhile having a quick look at the small number of countries that have sectoral figures available on collectively agreed pay. Looking into 'Public administration', 'Education' and 'Health and social work' (or differently defined sectors when these NACE classifications were not available), two groups emerge: in Austria, Italy, Spain and the United Kingdom, public sector negotiated pay grew much less than the average collectively agreed pay and thereby public

sector employees – in particular those in public administration and education – experienced a stronger real pay devaluation than employees in other sectors. ²¹ With the exception of Italy, where public sector pay remained constant (see Figure 9), there was a return to growth in these countries; yet, as the figures demonstrate, without any substantial catch-up in most of them. Only in the Netherlands did the restoration process advance, with growth in collectively agreed pay in education coming back into line with the average, and public administration pay being close to it.

²¹ A recent study examined the development of actual earnings – and also grouped the Czech Republic, Ireland, Latvia, Romania and Slovenia together, along with Austria, Spain and Italy (EPSU, 2018).

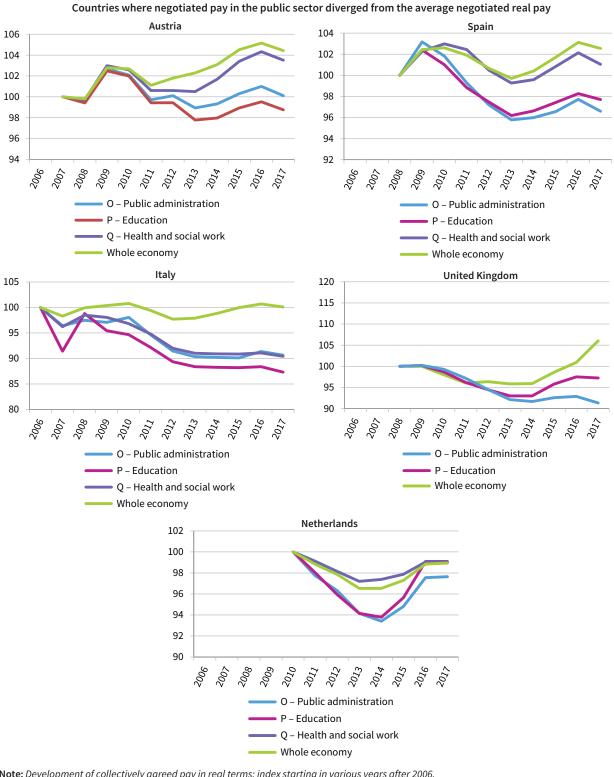


Figure 9: Development of collectively agreed pay in real terms in the public sector

Note: Development of collectively agreed pay in real terms; index starting in various years after 2006. **Source:** Eurofound (2018), EurWORK database 2.0, WACR, NACE O, P, Q or alternative sectoral specification, if NACE was not available.

In a second group of countries – Germany, Sweden, Slovakia and Finland – the public sector negotiated pay developed largely 'in line' with average collectively agreed pay (see Figure 10). In Sweden, public sector employees in the state, county and municipal sectors have experienced slightly higher than average pay increases since 2008; whereas in Germany, in contrast, public service negotiated wages have grown more slowly since 2010 than those in private services due to austerity measures. In Finland, on the other hand, public sector employees are about equally affected by decreases in their real negotiated salaries when compared to the average collectively agreed pay.

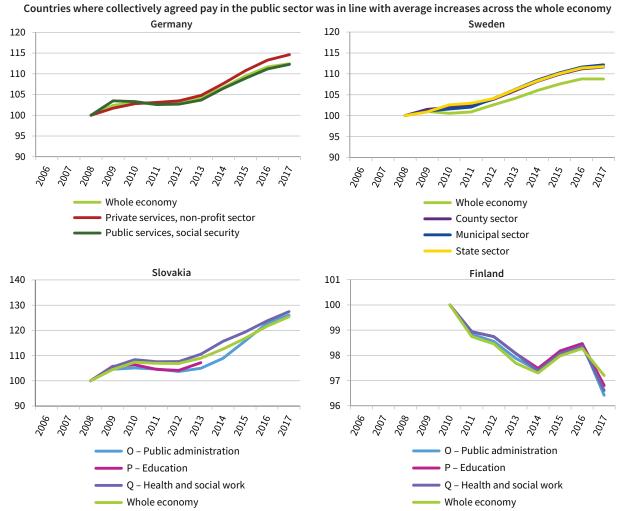


Figure 10: Development of collectively agreed pay in real terms in the public sector

Note: Development of collectively agreed pay in real terms; index starting in various years after 2006.

Source: Eurofound (2018), EurWORK database 2.0, WACR, NACE O, P, Q or alternative sectoral specification, if NACE was not available.

In a number of countries, the bargaining rounds of 2016–2017 were dominated by the lifting of crisis-related measures (predominantly in the public, but also in the private sector) which led, in the context of an improving economic environment, to higher wage demands from the unions. Disputes and controversies, however, remain such an integral part of negotiations that according to a recent study by EPSU 'the crisis is still being felt' in the public sector (EPSU, 2018).

Not all attempts to restore public sector pay or align it with wages in other (private) sectors have been successful, as detailed below.

In **Finland**, the main controversy in collective bargaining in 2017 concerned the public sector, where trade unions demanded significant raises to bridge the gap to industrial sector wages and to compensate for a

holiday bonus reduction in the 2016 Competitiveness Pact. However, public finances lagged behind the general economic improvement, and the negotiation outcome was in line with the general pay rise level. In **Greece**, where public sector pay had been reduced and/or frozen within all three Memoranda of Understanding (MoU) with the Troika (the 2016 MoU to be applied up until 2018), implementation continues to include strategies for public sector reforms, such as a fiscally neutral reform of the wage grid or a modern performance assessment system (Lampousaki, 2016). In **Romania**, there was unrest and protest over public sector pay in the context of new legislation on the 'unitary pay law'.

During 2017, there were continued attempts to restore public sector pay, in particular in those countries hit hardest by the crisis, as outlined here.²²

²² Earlier restoration attempts at new public sector agreements include, for instance, the Czech Republic (Pojer, 2016), Slovakia (Cziria, 2016) and the Netherlands (van Het Kaar, 2015).

In Cyprus, at the end of 2016, most of the crisis-related taxation measures, wage cuts in the public sector and the special arrangements in the private sector expired. In 2017, the social partners were dealing with negotiations for the recovery of pre-crisis wage levels and benefits. The most important debates related to the reinstitution of the 'Cost of Living Allowance' (COLA) and to the implementation of the framework agreement, providing for public sector pay increases. An agreement was reached for the reactivation of the COLA for the private sector, providing for a number of changes and a duration of four years. A similar agreement and a complementary framework agreement for the public sector resolved a controversy over the implementation of a previous agreement and paved the way for up to 2% accumulative pay increases in the broader public sector.

In the public sector in **Ireland**, unions and employers worked together to agree a new wage agreement, including faster pay restoration. The Public Service Stability Agreement for 2018–2020 was concluded in June 2017, establishing pay increases of 6.2–7.4% over three years and reductions in pension levies for all but those who receive fast pension accrual. It was described

by Minister for Finance and Minister for Public Expenditure and Reform Paschal Donohoe as a 'negotiated solution for dismantling the emergency legislation over the coming years'.

Some new or renewed comprehensive collective agreements within the public sector are summarised in Box 3 below.

In a number of countries, bargaining in the public sector, including healthcare and education, was accompanied by disputes concerning pay issues in 2017.

In Estonia, an important collective bargaining round took place in healthcare, one of the two sectors where sectoral-level collective agreements are concluded. This round started in January 2016 and proved to be complex. The reasons included demands for wage increases and improvements in working conditions. The negotiations were further complicated by expected government decisions on the funding of healthcare to guarantee the quality of the system and improve access to services. After a letter of intent aimed at guaranteeing sustainable financing of the sector was signed in March 2017, the collective agreement was signed in April 2017.

Box 3: Public sector agreements in 2017

A newly signed agreement unifies the collective bargaining in 30 municipalities in **Cyprus**. It provides for the harmonisation of pay and benefits in municipal administration with just two instead of 60 collective agreements.

In **Hungary**, there were debates in recent years on collective agreements in the public sector, with particular attention to healthcare. New legislation from 2016 allows for the extension of a collective agreement if 50% of the workers work for the employer signing and the signing trade union has at least 10% of the membership. As a result, in April 2017, the sectoral collective agreement in healthcare was signed and the minister initiated an extension.

At the end of 2017, the first Italian National Collective Bargaining Agreement covering the public sector was renewed after eight years and a verdict of the Constitutional Court deemed as unconstitutional the freezing of collective bargaining in 2015.

In Lithuania, two sectoral collective agreements covering wage-related issues were for the first time signed in the education and healthcare sectors. Discussions and collective bargaining over two years had preceded the signing of the collective agreement in education.

A collective agreement covering employees in the public service in **Malta** was signed by government representatives and seven unions in April 2017. The agreement covers an eight-year period (2017–2024). This unusually long period aims to increase stability in public services. While collective agreements in the private sector in Malta tend to last for three years, those in the public sector tend to be longer, sometimes spanning five or six years.

In **Ireland**, a Public Service Stability Agreement was concluded in June 2017 providing for some pay increases and a reduction of the pension levy, which was part of the austerity measures.

Source: Network of Eurofound Correspondents and national contributions.

In Latvia, disputes over wage levels provoked the first long-term strike by medical workers in the country's modern history. Since the introduction of austerity measures, salaries had not returned to their pre-crisis level and medical workers were forced to work in a so-called 'normal prolonged working time' regime in which work beyond statutory normal working hours (40 per week) was not considered as overtime and was not therefore paid double, as prescribed by the Labour Law. Medical workers demanded higher salaries and less onerous working time. They started their protest at the end of 2016 and the strike was called on 2 July 2017, continuing until the claims of medical workers were at least partly met. The education and science sector trade union was also active; it not only kept teacher salaries on the agenda, but also contributed to bargaining aimed at improving the financing of research and science activities - an issue that was not previously in their field of interest.

In Luxembourg, the main controversy took place in the private social care sector where an agreement had been concluded in June 2017, covering around 12,000 employees. During the negotiations, the employers refused to increase wages and to adapt wages to employees' qualifications, arguing that the resulting higher costs could not be implemented without a transitional period. Additional costs would have detrimental effects on the quality of service. However, following a cancelled mediation effort and the threat of strike action, both parties agreed to implement the public wage agreement as part of the new collective agreement.

In the **Netherlands**, the main controversy took place in primary education. A group of teachers who were unhappy with the results of traditional trade unions and

the new government agreement started an action group called POinactie. Their goal was wage increases (closing the gap with secondary education wages) and reduced work pressure. This initiative made use of social media (it started as a Facebook group and quickly attracted more than 45,000 teachers as supporters). Strikes were held in autumn and winter 2017 and spring 2018, although the budget for the sector has been already raised.

Slovenia experienced tough negotiations over higher wages in the public sector throughout 2017. After negotiations failed, four strikes by civil servants took place at the beginning of 2018. Their main demands were the elimination of all austerity measures taken in the crisis and higher wages. The government estimated the costs of demands at around €1 billion (about a fifth of the current wage bill).

In the United Kingdom, the main pay-related debates during the year included the effects of rising inflation and long-term slow pay growth on living standards. Public sector unions, in particular, threatened industrial action in opposition to the 1% annual cap on public sector pay increases that had applied since 2013 (following a two-year pay freeze). The government ended the cap in 2017 for police and prison officers but these groups still received below-inflation pay rises. The government indicated that there would be a wider easing of public sector pay restrictions in 2018. In 2017, collectively agreed increases within the public sector continued to lag behind the private sector in terms of overall median pay increases (median: +1.32% in the public sector versus +2.39% in the private sector, according to the Labour Research Department's Payline database). A number of pay freezes took place in further education.

4 Summary and overview

This report has examined the development of collectively agreed pay in conjunction with the development of actual compensation ('wages') and labour productivity in real terms. It has applied both a longer-term perspective (the early 2000s to 2017) and a short-term perspective, with a focus on the outcomes of the most recent bargaining rounds in 2016–2017.

Wage and productivity developments 2000–2017

While the wage policy focus during and in the aftermath of the economic crisis was on restoring wage-related competitiveness and moderation, it has now – in a more favourable economic and labour market context – shifted towards the development of real wages. Real wages are an indicator of employee purchasing power and, especially in 'wage-led' countries, they have an important role in promoting further economic growth.

Since the early 2000s, real wages in the EU28 have grown less than real labour productivity. However, such results are strongly linked to the measurement of the different variables: in particular, which price deflators are used, how labour productivity is measured, the period in question and the variation in (non-)alignment over the business cycles. In this report, both a worker and an employer perspective has been applied by using different price indices. The findings suggest that, from an employer perspective, labour compensation in the EU28 has largely grown in line with productivity since the early 2000s, despite cyclical deviations. From an employee perspective, however, and applying harmonised consumer prices, wages per employee have grown more slowly than productivity since the beginning of the millennium and the gap has been widening, despite hourly wages having been more aligned.

Country-specific findings naturally vary, and so does the role played by collectively agreed pay in determining actual wages. In most countries with available data (14 EU Member States), there has been a positive wage drift since the early 2000s, indicating that actual wages have grown more than collectively agreed pay. Only in Germany and France over the whole period and in Italy and Portugal in the post-crisis period has the wage drift been negative, insofar as growth in collectively agreed pay has outstripped the growth of actual wages. While this can point either to increases in lower-paid employment or lower growth of individual pay components beyond collectively agreed pay, it may also be related to a drop in collective bargaining coverage (as seen in Germany and Portugal). For the majority of

other countries, growth in actual real wages per hour has exceeded that of collectively agreed pay. Yet, while in the United Kingdom and Sweden actual real hourly wages have been closely aligned with productivity developments, other countries (like Austria, the Netherlands, Belgium, Finland, Malta and Spain) have pursued either implicit or explicit policies of wage moderation. The latter policies have resulted in wage–productivity gaps in terms of wages per employee – less so in terms of hourly wages. In the Czech Republic and Slovakia, growth of actual real wages has exceeded productivity growth, pointing to an ongoing catching-up process driven most recently by increased labour shortages.

Most recent developments in collectively agreed pay 2016–2017

Growth in collectively agreed pay has, by and large, gained momentum in 2017, but due to higher inflation rates, this has not often translated into growth in real terms (+1.8% nominal versus +0.1% real in 2017 as a median of the 14 countries with available data); in 2017, six out of these 14 countries even saw a decline in collectively agreed pay in real terms.

Collective bargaining was reportedly relatively 'calm' compared to previous years in Germany, Sweden, Denmark, Ireland and Portugal, while it was deemed more conflictual or protracted (at least in certain sectors) in Austria (metal sector), the Czech Republic and Slovakia (automotive sector), Italy (disagreement over readapting wages to lower actual than expected inflation) and Spain (after failure to agree on a Pact on Salary Recommendations for 2017) and Romania.

Developments concerning public sector collectively agreed pay and attempts to restore it continued to be of concern in many countries. This report has presented some evidence on public sector developments in collectively agreed pay, where such figures are available. In Germany, Sweden, Slovakia and Finland, real collectively agreed pay in the public sector developed largely in line with average collectively agreed pay in the respective economies. In Austria, Spain, Italy and the United Kingdom, public sector collectively agreed pay was diverging considerably from the rest of the economy, particularly in public administration and education. According to a recent European Federation of Public Service Unions study, this pattern has also been witnessed in the majority of other European Member States, when looking at actual earnings (EPSU, 2018).

This report has described many attempts in 2017 to restore public sector pay, as well as disputes over the issue. In Italy, where the Constitutional Court ruled the freezing of collective bargaining in the public sector in 2015 as unconstitutional, the first public sector agreement for central government and national public institutions was renewed at the end of 2017 after eight years of freeze. In Cyprus, as austerity-related measures came to an end, social partners negotiated a new public sector agreement allowing for some pay increases in 2017. In Ireland, a new Public Service Stability Agreement 2018-2020 was concluded in June 2017. Finally, new and renegotiated collective agreements in the healthcare sector – following tense negotiations and some industrial action - were reported from Estonia, Lithuania and Hungary; in each of these countries, collective bargaining coverage is otherwise very low.

There is some optimism now that wage growth should start to rise again, with labour markets further improving, as some parts of the economy are already facing labour shortages, crisis-related wage moderation measures to improve price competitiveness in some

countries are fading away and wage freezes in the public sector are coming to an end (see the recent forecasts from the ECB (2018) and the European Commission (2018a)).

Over time, growing wage drifts between collectively agreed pay and actual compensation can mean that negotiated wages are less able to influence pay outcomes. This is irrespective of whether the drift is positive - as observed in the majority of countries - or negative. In the longer term, a decoupling of collectively agreed pay from actual compensation can mean that social actors are letting go of an important instrument to influence wage developments. To what extent social actors in the context of their respective wage-setting framework can govern changes, in whatever direction, remains to be seen. Frequent changes to institutional structures come at a cost, and it takes time for the benefits of a new structure to compensate for the initial costs (Brandl and Lyhne Ibsen, 2017). Stable collective bargaining coverage and coordination between the actors within countries, but also transnationally, remain crucial features of any bargaining system in this regard.

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Annexes

Annex 1: Supplementary data

Table A1: Collective wage bargaining coverage in the European Union

	Previously	Most recent	Previous year	Most recent year	Source and description of data
Belgium	m 92 92 2007 2		2016	Due to extensions of collective agreements, the bargaining coverage increased by about 100,000 employees in 2014 and 2015. Time series are found on the ONSS website: http://www.rsz.fgov.be/nl/statistieken/onlinestatistieken/evolu tie-van-de-arbeidsplaatsen-naar-paritair-comite. Table 1 is used for the figures, counting all jobs in sectors with a joint committee from 2007 onwards (yearly average) as 'covered' and those without a joint committee as 'non-covered'. Civil servants ('ambtenaren') are excluded from the figures. Alternatively, Table 3 can be used, excluding civil servants (but including some state employees not covered by negotiations in a joint committee).	
Bulgaria	40	12.5	2006	2016	Data for 2011–2016 are calculated based on NICA data – Annual reports. NICA has no information before 2011. Source of the figures in 2002, 2006 and 2010 is the Bulgarian Structure of Earnings Survey.
Croatia	56	54	2007	2017	-
Czech Republic	51	45.3	2006	2014	Czech-Moravian Confederation of Trade Unions (ČMKOS)
Denmark	85	89	2006	2015	There is a break in the series of data after 2012 since that is the latest updated year of the DA Labour market report. The new figures from 2013 onwards are based on data from StatBank Denmark, Register-based Labour Force Statistics, RAS300.
Estonia	32.5	18.6	2009	2015	Estonian Working Life Survey 2009 and 2015.
Finland	85	89	2008	2014	Precise estimates for 2008 and 2014. No certainty for figures prior to 2008 (Ahtiainen, 2016).
France	98	98	2006	2017	Source 1997–2004: Dares (2006). From 2017, ILO data, as presented in Chevreux and Rambert (2017).
Germany	63	56	2006	2016	Federal Institute for Employment research. Percentage share of workers covered by either sectoral- or company-level agreements. Data is extracted from the Establishment Panel conducted by the Federal Institute for Employment research, IAB. The nationally representative panel of some 16,000 establishments is based on a stratified random sample of all establishments with at least one worker liable to social security contribution (thus excluding civil servants). The questionnaire contains, among other issues, questions on the type of collective bargaining coverage, the number of employees and wage bills.
Greece	100	25	2006	2017	These rates are estimates based on the fact that (until 2011), the total number of employees (except public servants) were covered by the National General Collective Agreement (EGSSE) and by extended sectoral agreements. After 2012, the legislation abolished the extension mechanism of the collective agreements. And, after 2012, the EGSSE no longer included wage issues.

	Previously	Most recent	Previous year	Most recent year	Source and description of data
Hungary	26	31	2014	2018	Employment Relations Information System for the number of employees covered by any kind of collective agreement. 2018 data: number of employees covered as of 25 July 2018 as a percentage of the number of employees in May 2018. 2014 data: number of employees covered as of 31 December 2014 as a percentage of the number of employees in December 2018.
Ireland	48		2009	2017	The CSO National Employment Survey 2009 put the bargaining coverage rate at 48% (union membership since 2003: new research on long-term trends in IRN 14/2015). The NES stopped as a data service in that year, but it is likely the coverage rate would be lower now due to a pattern of declining union density.
Luxembourg	57	59	2006	2010	Figures are based on STATEC data: http://www.statistiques.public.lu/catalogue- publications/regards/2013/PDF-06-2013.pdf. These are percentages. No other information available.
Malta	60.8	62.8	2008	2012	Figures indicated for the years 2002, 2008, 2009, 2010, 2011 and 2012 are derived from ILO database and are based on administrative records of the Department of Industrial and Employment Relations.
Netherlands	70	77	2006	2017	Ministry of Social Affairs and Employment, CAO-afspraken 2016
Portugal	79	87.5	2006	2016	Refers to all the workers covered by collective agreements in force and by operational extension procedures. In the Portuguese legal framework, collective agreements can remain in force when they are not renewed. But the number of workers covered by collective agreements that have been renewed (flow) can be much lower. It has declined sharply since 2012 as a result of the severe crisis and uncertainty and of the Troika Memorandum and blockade of extension procedures. See Eurofound, working life country profile for Portugal and Campos Lima, p. 46 in Schmid-Druener and Dessimirove (2016). DGERT (2015). The data source (Quadros de Pessoal) is based on a regular annual administrative register based on a survey to all companies (and not only to a sample) with 10 or more employees in the market sector where, among other questions, they are asked to indicate how many employees are covered by collective agreements and extension ordinances. Answering the survey is compulsory.
Romania	100	100	2006	2017	The figures are based on own calculations based on the data from the National Institute of Statistics. The calculation assumes that the collective bargaining excludes by law the employees working in establishments with more than 20 employees. Source: ILO (2013)
Spain	83	83.6	2006	2016	Statistics of Collective Agreements (Ministry of Labour, Migration and Social Security). Source: Spanish Labour Force Survey. It includes employees in the private sector (i.e. those people in the denominator that could potentially be covered by a collective agreement). Workers in the public sector are entitled to specific forms of collective bargaining.
Sweden	93	90	2015	2015	Kjellberg (2016)
United Kingdom	33.3	26.3	2006	2016	From Visser (2015), Eurofound annual updates, 'Developments in Collectively Agreed Pay' and the LRD Payline survey. The pay information collected for the LRD Payline is derived from trade union sources at national, regional and local levels. A small amount of information comes from private sector employers. The sample is essentially a convenience one, although its coverage is extensive with regard to the economy as a whole. Visser's ICTWSS database only contains data up to 2013. For 2015 and 2016, the ONS figures for total employment used are divided by government figures on collective agreement coverage.

Note: Hungary: further updated by correspondents during the work on this report. No data for Austria, Cyprus, Italy, Lithuania, Poland, Slovenia and Slovakia. **Sources:** EurWORK database of wages, working time and collective disputes 2.0, CACalc, based on CACovEnum and CACovDenom

Table A2: Developments of collectively agreed pay in nominal and real terms, 2000–2017, Index: 2000 (or latest year available) = 100

Nominal	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	100	103	105	107	110	112	115	118	122	126	128	130	135	138	141	144	147	149
Belgium	100	103	107	109	112	115	117	119	123	126	127	131	134	137	138	138	139	141
Czech Republic*	100	105	111	115	120	124	129	135	142	148	153	157	161	166	170	175	180	186
Germany	100	102		107	110	111	113	116	119	122	124	127	130	134	138	141	145	148
Spain	100	104	108	112	116	120	125	130	135	138	141	144	145	146	147	148	150	152
Finland	100	103	106	109	111	114	116	118	123	128	130	133	137	139	140	141	142	141
France	100	103	107	110	113	117	121	125	129	132	135	137	141	144	146	147	149	151
Italy						100	105	105	111	112	114	116	118	119	121	122	123	124
Malta**	100	104	106	109	111	115	119	122	124	126	129	130	132	134	137	138	139	142
Netherlands	100	104	108	111	113	113	116	118	122	126	127	129	131	132	133	135	138	140
Portugal	100	104	108	111	114	117	121	124	128	132	135	137	139	140	141	142	145	148
Sweden	100	103	105	108	110	112	114	117	121	125	127	130	133	136	139	142	145	149
Slovakia				100	107	113	120	128	136	143	148	154	159	165	170	176	182	190
United Kingdom	100	104	107	111	114	118	121	125	129	132	134	137	138	140	142	146	150	153
Eurozone - nominal	100	103	105	108	110	113	115	118	122	125	127	130	132	135	137	139	141	143
Eurofound - 14 countries	100	103	107	109	112	114	117	119	123	126	129	131	135	138	140	142	145	148
Real	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		2014	2015	2016	
Austria	100	100	101	102	102	102	103	103	103	106	106	105	105	106	107	108	109	108
Belgium	100	101	103	104	104	104	104	104	103	105	104	103	103	104	104	104	103	102
Czech Republic*	100	101	104	109	110	113	115	116	115	119	122	122	122	123	126	129	132	133
Germany	100	100	101	103	103	103	103	102	103	105	106	105	106	107	109	112	115	115
Spain	100	101	101	102	102	103	103	104	104	106	106	106	104	103	104	105	107	106
Finland	100	101	101	102	105	106	107	107	108	110	110	109	109	108	107	108	108	107
France	100	103	103	104	105	106	108	109	109	112	112	112	112	113	114	115	116	117
Italy						100	103	101	103	103	103	102	100	100	101	103	103	103
Malta**		101	101	102	101	102	103	104	101	101	102	100	99	99	100	100	100	101
	100	101	101	102	101	102	100											
Netherlands	100	99	99	100	100	99	99	100	101	103	103	101	100	99	99	100	101	102
Netherlands Portugal									101 101	103 105	103 106	101 104	100 102	99 103	99		101 105	102 106
	100	99	99	100	100	99	99	100		111						100		
Portugal	100	99	99	100	100	99	99	100	101	105	106	104	102	103	104	100 104	105	106
Portugal Sweden	100	99	99	100	100 100 101	99 100 102	99 100 103	100 101 104	101 104	105 105	106 105	104 106	102 108	103 110	104 112	100 104 114	105 115	106 115
Portugal Sweden Slovakia	100 100 100	99 100 100	99 100 101	100 99 100	100 100 101 100	99 100 102 103	99 100 103 105	100 101 104 109	101 104 112	105 105 117	106 105 120	104 106 120	102 108 119	103 110 122	104 112 126	100 104 114 131	105 115 136	106 115 140
Portugal Sweden Slovakia United Kingdom	100 100 100	99 100 100	99 100 101 105	100 99 100	100 100 101 100 109	99 100 102 103 110	99 100 103 105 110	100 101 104 109 111	101 104 112 111	105 105 117 111	106 105 120 109	104 106 120 106	102 108 119 104	103 110 122 103	104 112 126 103	100 104 114 131 106	105 115 136 108	106 115 140 108

Note: * Only agreements with nominal wage changes agreed; ** Private sector only. Nominal rates are available upon request.

Source: EurWORK database on wages, working time and collective disputes 2.0 (variable WaCh, deflated with Eurostat's HICP = WACR)

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