

Friday on my mind – Working time in the manufacturing sector

Torsten Müller

Working Paper 2023.08



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european trade union institute

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Brussels, 2023
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Print: ETUI Printshop, Brussels

D/2023/10.574/22
ISSN 1994-4446 (print version)
ISSN 1994-4454 (electronic version)



The ETUI is co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the ETUI. Neither the European Union nor the ETUI can be held responsible for them.

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Acknowledgements

The author is very grateful to Wouter Zwysen from the European Trade Union Institute for his help in compiling the statistical data on actual working hours. His input was invaluable. The author would furthermore like to thank Isabelle Barthès, Patricia Velicu and Aurora Rossi from industriAll Europe for their help in conducting the working time survey and for the many helpful discussions while researching and writing this report. This report benefits greatly from the input from trade union experts across Europe: the author thanks all the members of industriAll Europe's Collective Bargaining and Social Policy Committee who replied to the questionnaire. Finally, the author would like to thank James Patterson for the excellent language editing of this report and Giovanna Corda for checking all the references.

Executive summary

Working time as an important tool for managing the twin transition

The twin digital and green transition will have far-reaching labour market consequences in the manufacturing sector as regards the quantity, character and quality of employment. The effects of transition will be uneven between countries and regions, different industries and different categories of workers, depending on their various socio-economic starting points and the different degrees to which they are affected by the twin transition. Against this background, industriAll is calling for a just transition that is fair for all workers and that does not destroy, but rather preserves quality employment. Working time policy more generally and working time reduction more specifically is an important tool for achieving such a just transition by helping to safeguard employment and ensure good working and living conditions.

Diversity of working time standards across Europe

Analysing the state of working time arrangements across Europe reveals great diversity. There is still an east–west divide, with considerably longer weekly working hours in central and eastern European countries than in western European countries. The study, furthermore, illustrates the important role of collective agreements in ensuring shorter weekly and annual working hours. A comparison of statutory maximum working hours and collectively agreed working hours illustrates that collective agreements lead to considerably fewer weekly working hours. Moreover, because they ensure additional vacation days on top of the holidays provided for by legislation, collective agreements also help to ensure shorter annual working time. Weekly and annual working time are longer in CEE countries because legislation rather than collective agreements remains the dominant way of regulating working time there. From a sectoral perspective, the analysis illustrates that the collectively agreed working time in the metal and chemical industries tends to be shorter than in the rest of the economy. But the analysis also showed that normal actual weekly working time in the metal and chemical industries were on average more than 2.5 hours longer than collectively agreed working hours.

How trade unions and their members view working time

In order to find out more about its affiliates' and their members' views on working time issues industriAll conducted a survey among the members of the industriAll Collective Bargaining and Social Policy Committee. This survey highlights two main political priorities of national trade unions and their members, irrespective of the diversity of national working time arrangements. First, a reduction of working time at full pay and second, an increase in employees' control and autonomy in determining their working time arrangements. The latter refers not only to the planning of their weekly working time but also to the design of more flexible working time arrangements from a working life perspective, which take into account the different needs of different life phases. The survey also inquired about trade union motives for pursuing a working time reduction. Here, the survey suggests that the most important motives are related to improving employees' immediate work and life situations. They include an improved work–life balance, employment security and better health and safety conditions. By contrast, broader societal objectives, such as improved gender equality, a fairer distribution of productivity gains, the dual transition and in particular environmental issues play only a subordinate role for unions in pursuing a collective working time reduction.

Working time reduction as a key priority

Two of the most prominent methods for realising the key priority of a collective working time reduction are, first, optional models that offer employees the possibility of choosing between a wage increase and additional time off; and second, the introduction of a four-day week. Recently, a variety of national initiatives have been launched to introduce a four-day week. Depending on the main driver, three different approaches can be distinguished. The first, pursued in Iceland, Ireland and the United Kingdom, is based on a broader campaign, driven mainly by civil society actors with trade union participation and support. The second approach, pursued in countries such as Belgium, Portugal and Spain, in which legislation plays a strong role in regulating the employment relationship, is based on political actors' initiative as the main driver. The third approach, pursued in Germany, is based on collective bargaining and entirely driven by trade unions. In particular, the examples of voluntary initiatives from Iceland, Ireland and the United Kingdom all suggest positive effects for employers and workers. Companies report improved productivity, lower health care costs, reduced employee turnover and better chances of recruiting new employees. Workers report less stress, fatigue and burnout and an overall positive effect on mental and physical health, as well as an improved work–life balance. Closer scrutiny indicates that these examples need to be put into perspective in order to define preconditions for the successful implementation of a four-day week in the manufacturing sector as a tool for dealing with the twin transition.

Preconditions for successful implementation of a four-day week

Based on a discussion of existing four-day-week initiatives, the study identifies four preconditions for successful implementation of a four-day week. First, a balance must be struck between the employer's interest in raising productivity and the employees' interest in better living and working conditions through shorter working hours and more control over their own working time arrangements. Trade unions and democratically elected company-level employee representation structures should be closely involved in the design and implementation of the four-day week to strike this balance. Second, introduction of the four-day week should be linked to a meaningful reduction of working time, ideally, to 32 hours a week. Third, room should be left for flexible solutions that combine shorter working hours with more flexible working time arrangements, increasing the discretion of employees regarding the design of their own working time. Fourth, full pay should be maintained to avoid social injustice because a four-day week without full pay favours well-paid employees who can afford a pay cut proportional to the working time reduction. There is furthermore ample empirical evidence that employers have various ways of (over-)compensating relative increases in wage costs resulting from a four-day week at full pay by realising the productivity-enhancing and cost-saving effects of a four-day week.

1. Introduction

In 1965, the Easybeats sang about the ‘five day grind’ and that on ‘Monday [they] have Friday on [their] mind’. The issue of the work–life balance, as we now call it, is more topical than ever in the context of the debate on working time reduction and the four-day week. This applies in particular to the manufacturing sector in light of the twin green and digital transitions, which will have far-reaching labour market consequences. Processes such as automation and digitalisation, reducing high-carbon activities and development of the so-called ‘circular economy’ will all affect the quantity, character and quality of manufacturing employment (industriAll 2022a: 9). The quantitative employment effect of the twin transition is difficult to predict because it also depends on how the process is managed and implemented (Spencer et al. 2021). While macro-level analyses predict a slightly positive employment effect of the green transition for the whole economy (Asikainen et al. 2021; Cedefop 2021), predictions for the digital transition are more pessimistic because of displacement and substitution effects (Bednorz et al. 2022; Riso 2021). Such a macro-perspective, however, masks important sectoral differences. In the case of the green transition, for instance, the employment forecasts are much more pessimistic for traditionally carbon- and energy-intensive industries in the manufacturing sector, such as mining and quarrying (–11 per cent), coke and refined petroleum (–11.5 per cent), and gas, steam and air conditioning (–20.9 per cent) (Bednorz et al. 2022). Furthermore, the two processes are closely interlinked, not least because achieving a low-carbon and climate-neutral economy will be possible only through digitalisation, which provides the necessary low-emission technologies. This interlinked process makes estimates of the potential employment effects even more difficult. It is also very important to look not only at the quantitative effects but also the qualitative impact on employment. Thus, even if jobs in manufacturing can be maintained or created there is still a need to ensure that these are ‘decent jobs’ in terms of working conditions and pay. In this respect, many studies indicate the danger of workforce polarisation that would, in particular, affect medium-skilled jobs and occupations subject to de-qualification processes or those set to be upgraded through up- and re-skilling in order to adapt to the new skill requirements (Ittermann et al. 2015; Bednorz et al. 2022).

Despite all these imponderables, one thing is clear: the twin transition will lead to uneven effects, with winners and losers in several respects: between countries and regions; between different sectors and industries; and between different categories of workers. The uneven effects will result, on one hand, from different starting positions as regards socio-economic conditions and industrial relations and welfare state institutions. This puts some countries/regions, industries and categories of workers in a better position to deal with and to adapt to these processes

than others. On the other hand, the uneven effects will result from the different degrees to which different countries/regions, industries and worker categories are affected by the twin transition. What some workers see as an opportunity poses a threat to others. Against this background, *industriAll* calls for a just transition ‘that is fair for ALL workers’ and ‘that does not destroy but preserves and creates good quality jobs’ (*industriAll* 2022b: 2).

Working time policy is an important element in achieving such a just transition. First, in quantitative terms, working time reductions can help to redistribute the existing volume of work in order to preserve jobs. It is no coincidence that various types of country-specific short-time working schemes were instrumental in safeguarding jobs during the economic crisis in 2008/2009 and more recently during the pandemic (Drahokoupil and Müller 2021). Second, working time policies and in particular working time reductions can play an important role in ensuring good quality jobs by providing the necessary scope for training measures to prevent workforce polarisation. In order to create a just transition that is fair for all workers, training is essential to prevent the erosion of skills and to ensure workers’ employability by equipping them with the skills needed in the new digital and green world of work. Third, working time policy is an important tool to ensure good working conditions. One consequence of digitalisation is the intensification of work from the acceleration of work processes as a result of automation and the increased use of information and communication technologies leading to increased work pressure and stress (Jürgens et al. 2018). Another consequence of digitalisation is that more and more workers will be forced to work irregular hours at night and weekends or through shift work and being ‘on call’ as companies, particularly in manufacturing, see the need to extend machine operating times to remain competitive. As a consequence, workers are increasingly losing control over their own working time arrangements. Thus, intelligent working time arrangements are an important tool for ensuring good working conditions by rebalancing the employers’ need for increased flexibility and workers’ health and safety interests, including an adequate work–life balance.

Any restructuring of working time, however, needs to take into account employees’ very diverse working time preferences (Bispinck 2020). Working time preferences differ considerably depending on age, gender, family situation, skill level and position in the production process. Many young workers at the start of their career, for instance, are indifferent to the formal restriction of working time through legislation and other forms of regulation. They want to work flexibly according to their own needs and ideas. By contrast, other workers want restrictions on working time for a variety of reasons, including unsatisfying work, care responsibilities, workload and intensity, or interests outside work (Jürgens et al. 2018). By the same token, whereas many low-skilled workers on a lower wage need to work longer hours to make a living, many high-skilled workers earning a higher wage can afford shorter working hours. Working time preferences also change in the course of life. Young employed people living alone have other priorities than working parents and older workers close to retirement (Bispinck 2020). Any working time policy aiming at a just transition also needs to do justice to this diversity of working time preferences.

Against this background, the aim of this study is to analyse the strategic debate about working time policy in the manufacturing sector. The study consists of four parts. Part 1 takes stock of national working time patterns in the EU manufacturing sector. This part deals with the national differences in working time regulation, focussing in particular on the role of legislation and collective bargaining in the various countries. This part also provides a comparative quantitative overview of statutory working time standards, as well as collectively agreed and actual working hours in the different industries of the manufacturing sector covered by industriAll.

This stock-taking exercise is followed by the second part dealing with trade unions' and their members' views on working time issues, with a particular focus on collective working time reduction. This part is based on a survey conducted among industriAll's affiliates. The survey was sent to the collective bargaining experts representing the national trade unions on industriAll's Collective Bargaining and Social Policy Committee. The main objective of the survey was to discover the key priorities of trade unions and their members as regards the development of a working time policy for the future. Focussing more specifically on the issue of working time reduction, the survey inquired about the motives of industriAll's affiliates for pursuing a working time reduction and what forms of working time reduction. Answers were received from 17 trade unions from 12 countries.

The third part explores in more detail different working time reduction strategies, focussing, first, on optional models offering workers the possibility of choosing between working time reduction and wage increases, and second, on the four-day working week, which is probably the model that receives the most public attention at present. The aim of this study is to shed some light on different national experiences and to identify some prerequisites for successful implementation from a trade union standpoint. The final, fourth part of the study summarises key points of the analysis and draws some conclusions for the debate about a future-oriented working time policy in manufacturing that takes into account the challenges posed by the twin transition.

2. State of play: working time patterns in the manufacturing sector

2.1 Regulation of working time

Working time arrangements can be based on different regulatory sources, involving different actors at different levels. Cabrita et al. (2016) usefully distinguish four general types of working-time setting regimes. The first includes pure mandated working time setting regimes in which the state plays the dominant role in regulating working time standards through legislation at the macro level. In pure mandated regimes autonomous collective bargaining over working time issues is not frequent and collective agreements covering working time duration or organisation are rare. The second type of regime are adjusted mandated working time setting regimes in which again the state plays a dominant role in regulating working time standards. These standards, however, are usually adjusted by collective agreements, mainly at sectoral and company level concluded by employers and their federations on one side and trade unions and works councils (or other forms of company-level employee representation structures) on the other. These agreements complement the regulatory framework provided by legislation and often provide provisions that tend to be more favourable to employees than the statutory standards. The third type takes in negotiated working time setting regimes in which working time standards, including duration and organisation, are set mainly by collective agreements, usually at sectoral level. Such agreements can be further complemented and specified by company-level agreements. Finally, the fourth type of regime includes unilateral working time setting regimes in which working time arrangements are usually determined through contractual arrangements between the employer and individual employees at the enterprise or workplace level. They therefore tend to reflect the conditions determined and offered by the employers.

When trying to assign the various European countries to these different ideal-type categories it is important to bear in mind that the role of different regulatory tools and levels can vary according to certain sector-specific conditions. In the manufacturing sector this applies in particular to the role of collective bargaining because bargaining coverage and union density tends to be higher than in the rest of the economy, with the notable exception of the public sector. With this caveat in mind, Cabrita et al. (2016) categorised EU countries according to the ideal-type regimes of working time setting (see Table 1).

Table 1 Working time setting regimes in the EU (plus Norway and United Kingdom)

	Overall	Chemical*	Metalworking**
Pure mandated	BG, EE, HU, LT, LV, PL, RO, SI	BG, EE, HU, LT, LV, PL, RO, SI	BG, EE, HU, LT, LV, PL, RO, SI
Adjusted mandated	CZ, FR, GR, HR, IE, MT, PT, SK	CZ, FR, GR, HR, SK	CZ, FR, GR, HR, SK
Negotiated	AT, BE, CY, DE, DK, ES, FI, IT, LU, NL, NO, SE	AT, BE, CY, DE, DK, ES, FI, IE, IT, LU, MT, NL, NO, PT, SE	AT, BE, CY, DE, DK, ES, FI, IE, IT, LU, MT, NL, NO, PT, RO, SE, SI
Unilateral	UK	UK	UK

Notes: * The chemical industry here is broadly defined as including the manufacture of chemicals, chemical products, basic pharmaceutical products, pharmaceutical preparations, rubber and plastic products, which corresponds roughly to NACE categories C20, C21 and C22.

** Metalworking here is broadly defined as including the activities of smelting and/or refining ferrous and non-ferrous metals and the manufacture of 'pure' metal products, which corresponds roughly to NACE categories C24 and C25.

Source: Cabrita et al. (2016).

Looking at Table 1 from a cross-country perspective the key finding is that the pure mandated regimes in which legislation plays the key role in determining working time standards can be found exclusively in central and eastern European countries, whereas in all western European countries collective bargaining plays a more dominant role, with the exception of the United Kingdom, where the unilateral regime dominates. This reflects the higher degree of institutionalisation of collective bargaining at sectoral level in the countries belonging to the adjusted mandated and the negotiated working time setting regimes. Looking at Table 1 from a cross-industry perspective, it is striking that negotiated solutions are more frequent in the chemical and metal industry than in the overall economy. As highlighted in Table 1, this is illustrated by the fact that in chemicals three additional countries belong to the regime of negotiated working time setting (Ireland, Malta and Portugal) and in metalworking even five additional countries (Ireland, Malta, Portugal, Romania and Slovenia).

2.2 Statutory working time standards

Some basic working time standards are defined by the 2003 European Working Time Directive (Council of the European Union 2003). The Directive defines, for example, a maximum working week of 48 hours (calculated over a reference period of up to four months), a daily rest period of at least 11 consecutive hours and at least 24 hours of uninterrupted weekly rest every 7 days (over a reference period of 2 weeks), the obligation to give the employee a break if they work more than six hours a day, and an annual leave of at least 4 weeks per year. The fact that the Directive only defines basic standards is confirmed by Table 2, which illustrates that in most countries statutory maximum weekly working hours are much lower, at 40 hours. The exceptions are Denmark, Germany, Ireland and the Netherlands, which follow the 48 hours specified in the European Working Time Directive. Two other notable exceptions are Belgium and France, with statutory maximum weekly working hours of 38 and 35 hours, respectively.

Table 2 Main statutory working time provisions in EU countries (plus Norway) (2020)

Country	Maximum weekly working hours	Maximum daily working hours	Minimum paid annual leave (days)*
Austria	40	8	25
Belgium	38	8	20
Bulgaria	40	8	20
Croatia	40	8	20
Cyprus	Not specified	Not specified	20
Czechia	40	12	20
Denmark	48	Not specified	25
Estonia	40	8	20
Finland	40	8	20
France	35	Not specified	25
Germany	48	8	20
Greece	40	8	20
Hungary	40	8	20
Ireland	48	Not specified	20
Italy	40	Not specified	20
Latvia	40	8	20
Lithuania	40	Not specified	20
Luxembourg	40	8	26
Malta	Not specified	Not specified	27
Netherlands	48	Not specified	20
Norway	40	9	21
Poland	40	8	20
Portugal	40	8	22
Romania	40	8	20
Slovakia	40	8	20
Slovenia	40	8	20
Spain	40	9	22
Sweden	40	9	25

Note: * Harmonised on the basis of a five-day working week.

Source: Cabrita and Weber (2021).

As regards the minimum days of paid annual leave, Table 2 shows that a majority – 19 countries – follow the basic standard of 20 days defined in the European Working Time Directive. Portugal and Spain grant 22 days per year and a group of six countries 25 days or more: Austria, Denmark, France and Sweden (25 days), Luxembourg (26 days), Malta (27 days).

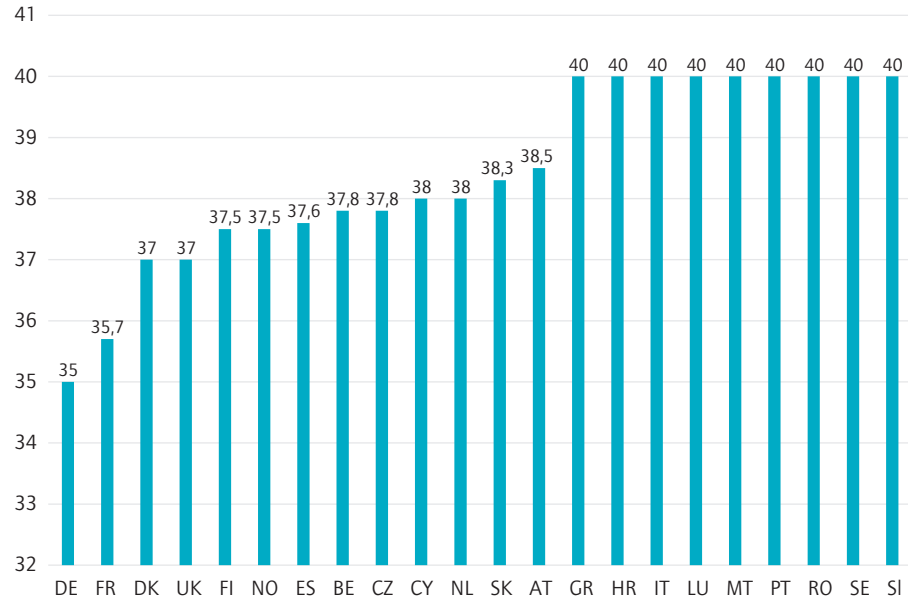
2.3 Collectively agreed working hours

While legislation is an important regulatory source for determining the amount of time spent at work, in the majority of countries collective agreements negotiated

at (cross-)industry and company level are more important in setting an industry-specific framework for working time arrangements. Comparative data on the content of collective agreements is notoriously difficult to get hold of. One of the few sources for cross-nationally comparative data that covers collectively agreed working time is Eurofound's database of wages, working time and collective disputes (Eurofound 2022), on which the data for the chemical and metal industry in this report is based. The data should be treated with some caution, however, because the quality and availability of data on collectively agreed working time differs across countries. Whereas in some countries there are public registries containing all the relevant collective agreements for a specific industry, for others the study had to rely on the most important samples of collective agreements. Despite these limitations the Eurofound database is currently probably the best source for comparative information on collectively agreed working time. In Figure 1 and 2 on collectively agreed working time, some countries have been excluded because collective bargaining plays no important role in setting working time, either because there was no collective agreement or because the collective agreements that did exist did not contain any provisions on working time.

Figure 1 illustrates that in the metal industry the collectively agreed working hours in eight countries follow the legal provision of 40 hours per week. Malta, which also has a collectively agreed weekly working time of 40 hours, is a special case because its legislation does not specify a weekly maximum. Figure 1 also shows, however, that in the majority of countries collective agreements in the metal industry provide for considerably shorter weekly working hours than specified in the legislation. The countries with the largest difference between the statutory maximum and the collectively agreed weekly working hours are: Germany (13 hours), Denmark (11 hours) and the Netherlands (10 hours), which all have a statutory maximum of 48 hours. As a rule the collectively agreed working hours in metalworking range from 37 hours in Denmark and the United Kingdom to 38.5 hours in Austria. Outliers with considerably shorter collectively agreed working hours are Germany (35 hours) and France (35.7 hours).

Figure 1 Collectively agreed working hours per week in the metal industry* (2021)

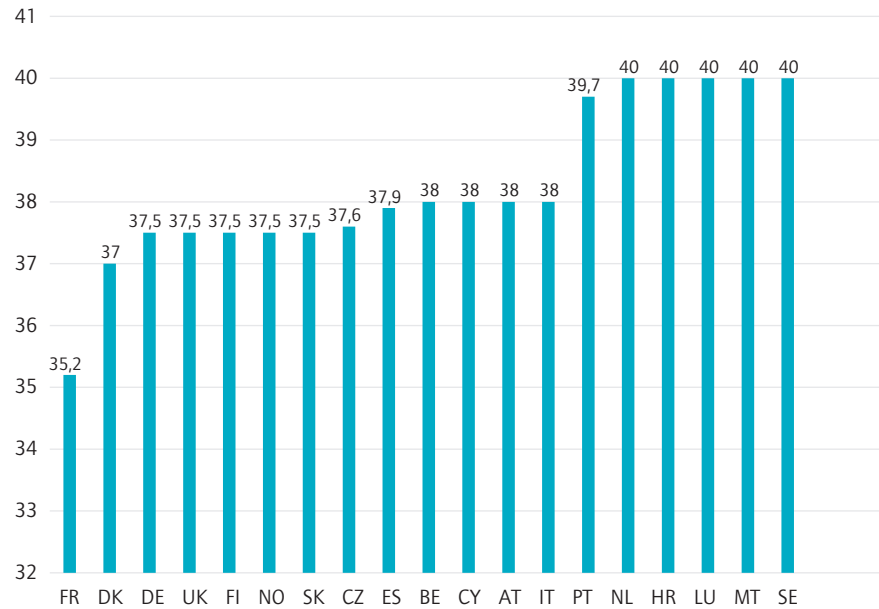


Notes: No data are available for BG, EE, HU, IE, LT, LV, PL; data for RO 2018, data for SI, SK, UK 2019, data for Spain 2020. * The metal industry here is broadly defined as including the activities of smelting and/or refining ferrous and non-ferrous metals and the manufacture of 'pure' metal products, which corresponds roughly to NACE categories C24 and C25.

Source: Eurofound (2022).

Figure 2 shows that the situation in the chemical industry is quite similar. There is a small group of three countries in which the collectively agreed weekly working time mirrors the statutory maximum of 40 hours per week. The countries are Croatia, Luxembourg and Sweden. In the Dutch and Maltese chemical industries collectively agreed working time is also 40 hours, but in the Dutch case the statutory maximum is 48 hours and in Malta the legislation does not specify a maximum. Belgium is another country in which the collectively agreed working time in the chemical industry mirrors the legislative provision, but at a lower level of 38 hours per week. As in the metal industry, collective agreements provide for shorter weekly working hours in most countries. The largest difference is once again in the three countries with a statutory maximum of 48 hours: Denmark (11 hours), Germany (10.5 hours) and the Netherlands (8 hours). In the chemical industry the weekly collectively agreed working time ranges from 37 hours in Denmark to 38 hours in Austria, Belgium, Cyprus and Italy. The two outliers are France and Portugal. The former deviates downwards with a collectively agreed working time of 35.2 hours per week and Portugal deviates upwards with 39.7 hours.

Figure 2 Collectively agreed working hours per week in the chemical industry* (2021)

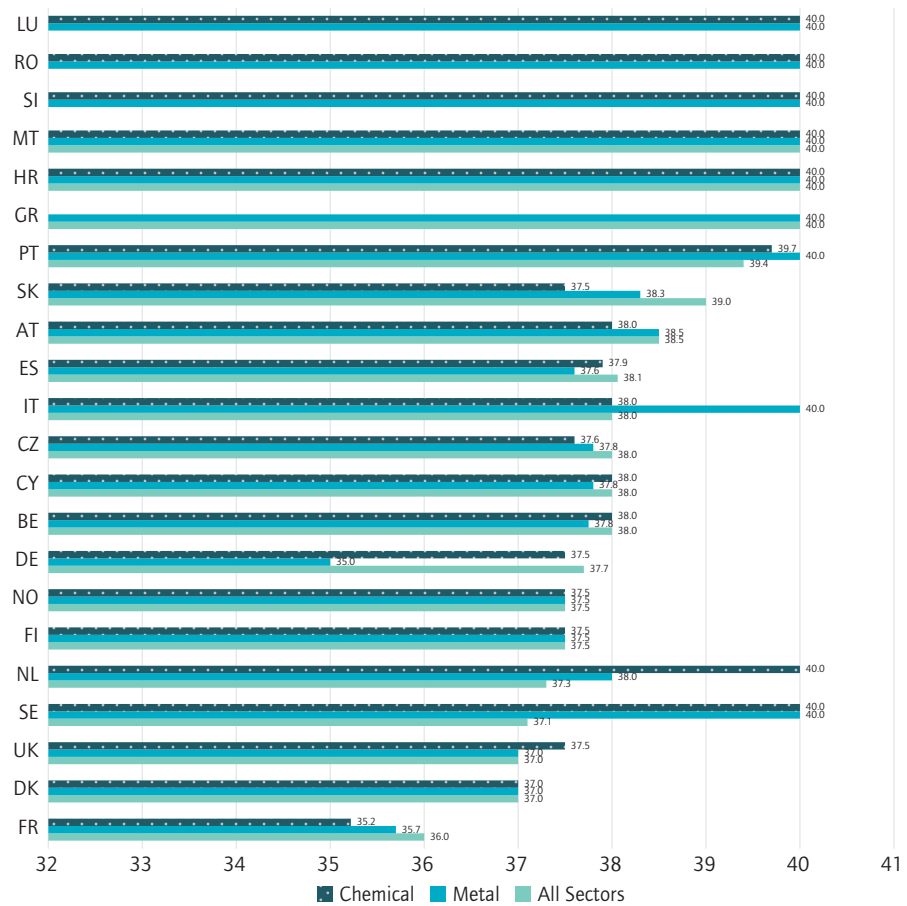


Notes: No data are available for BG, EE, GR, HU, IE, LT, LV, PL, RO, SL; data for CZ 2017, data for UK 2019, data for ES 2020. * The chemical industry here is broadly defined as including the manufacture of chemicals, chemical products, basic pharmaceutical products, pharmaceutical preparations, rubber and plastic products, which corresponds roughly to the NACE categories C20, C21 and C22.

Source: Eurofound (2022).

Comparison of collectively agreed weekly working times in the chemical and metal industries with that overall in all industries (Figure 3) shows that it tends to be shorter in the two manufacturing industries, at least in the countries for which data is available. In five countries (Czechia, France, Germany, Slovakia and Spain) the collective agreed weekly working time in both manufacturing industries is shorter than the overall figure for all industries. In a further two countries (Belgium and Cyprus) collectively agreed weekly working time in the metal industry only is shorter than overall, while in the chemical industry it is the same as overall. (In Austria the negotiated working time is shorter in the chemical industry than overall, while the result for the metal industry is the same as overall.) Only five countries show the opposite trend, namely that collectively agreed working time in the chemical and metal industries is longer than overall. According to the Eurofound data, this is the case for both manufacturing industries in the Netherlands, Portugal and Sweden. In Italy this applies only to the metal industry, while in the chemical industry the collectively agreed working time is the same as overall; and in the United Kingdom the collectively agreed working time in the chemical industry is longer than overall, while in the metal industry it is the same as overall.

Figure 3 Collectively agreed working hours per week, all industries, metal* and chemical** (2021)



Note: * The metal industry here is broadly defined as including the activities of smelting and/or refining ferrous and non-ferrous metals and the manufacture of pure metal products, which corresponds roughly to NACE categories C24 and C25. ** The chemical industry here is broadly defined as including the manufacture of chemicals, chemical products, basic pharmaceutical products, pharmaceutical preparations, rubber and plastic products, which corresponds roughly to NACE categories C20, C21 and C22.

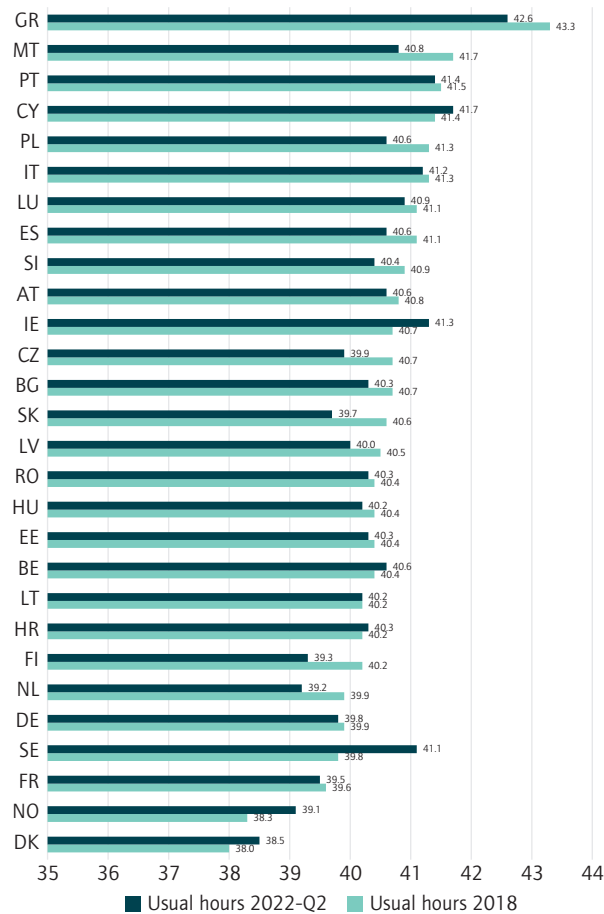
Source: Eurofound (2022).

Another noteworthy finding is the fact that in nine countries the collectively agreed working time in the two manufacturing industries is the same as overall. In five countries in this group – Croatia, Greece, Luxembourg, Romania and Slovenia – legislation plays a dominant role in setting working time so that collective agreements, where they exist, mainly mirror the legislative provisions on weekly working hours. The three Nordic countries Denmark, Finland and Norway, however, belong to the negotiated working time setting regime in which sectoral collective agreements play a dominant role. In the case of these Nordic countries the explanation can be seen in the high degree of bargaining coordination across sectors, with the industry agreement(s) as the pace-setter, followed by other sectors.

2.4 Normal actual working hours

So far, the analysis has dealt with legislation and collective agreements as two ways of establishing working time. Both methods, however, only define a framework within which work takes place and can therefore diverge from the actual time employees spend at work. Therefore, the following section deals with actual working time. The data presented is based on Eurostat’s Labour Force Survey (EU-LFS), which includes data on the ‘usual working hours’ of full-time employees defined as ‘the hours actually worked per week, over the last one to three months’ (European Commission 2021).

Figure 4 Normal actual working hours in the EU (plus Norway), 2018 and 2022



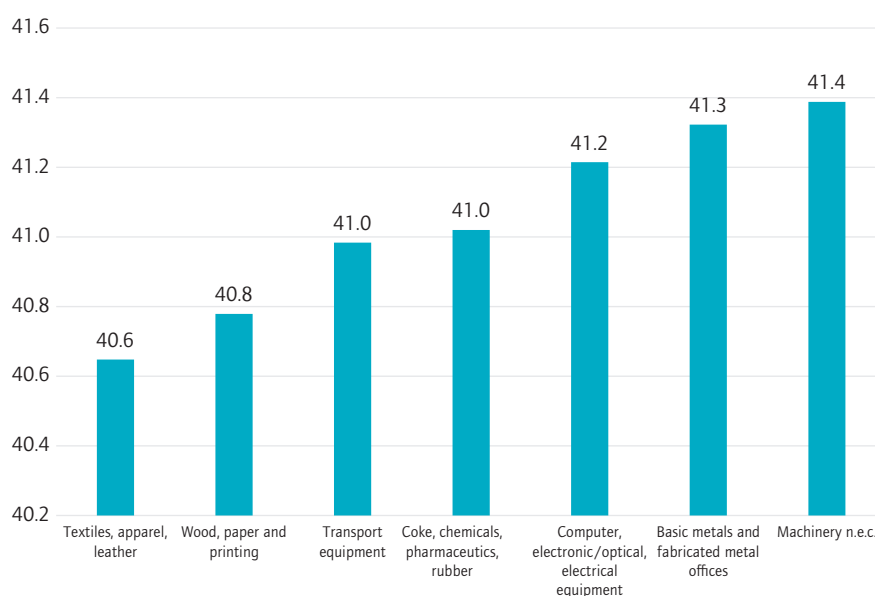
Source: Eurostat Labour Force Survey.

This definition includes overtime but excludes weeks in which an absence from work occurs, for instance in the case of holidays, other kinds of leave or strikes. Figure 4, which compares normal actual working hours in 2018 with those in 2022 for all sectors, illustrates first of all the great diversity of normal actual hours across Europe. They range from 38.5 hours in Denmark to 42.6 hours in Greece. Figure 4 furthermore shows that in 20 countries out of the 28 covered normal working hours in 2022 were shorter than in 2018. While in some countries –

such as Estonia, France, Germany, Italy, Portugal and Romania – this decrease in working hours was minimal, at just 0.1 hours, in other countries (such as Finland, Malta and Slovakia) actual working time in 2022 was almost one hour shorter than in 2018. By contrast, normal actual working hours stayed the same in Lithuania and increased in seven countries, ranging from minimal increases in Croatia (0.1 hours) and Belgium (0.2 hours) to quite substantial increases in Norway (0.8 hours) and Sweden (1.3 hours).

Unfortunately, the EU-LFS does not make it possible to break down the figures by individual industries. This is why the more fine-grained data on normal actual working hours in individual industries in the manufacturing sector is based on Eurostat's Structure of Earnings Survey (SES), which defines normal actual working hours as the hours paid during the reference month. The downside of the SES is that it is a four-yearly survey, so that at the time of writing the data for 2022 was not yet available. The data for individual industries in Figures 5–12, therefore, refers to the situation in 2018. Another limitation is that the distinction between different industries does not correspond to the normal NACE classification, which makes comparisons more difficult. With this caveat in mind, Figure 5 presents normal actual working hours for selected manufacturing industries. It shows that normal actual working hours range from 40.6 in textiles, apparel and leather to 41.4 in machinery.

Figure 5 Normal actual hours per week for selected manufacturing industries, 2018

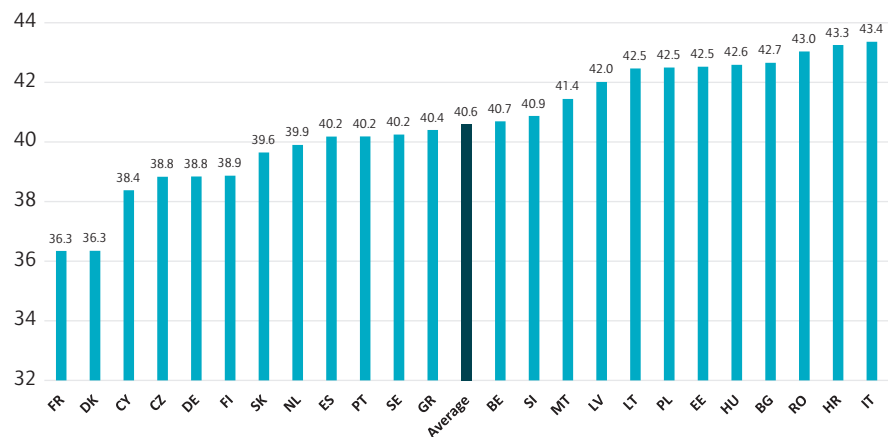


Source: Eurostat Structure of Earnings Survey.

A more detailed breakdown by country for the various manufacturing industries yields the following general trends in normal weekly working hours. First, there is a clear east–west divide. Normal actual working hours tend to be longest in central and eastern European (CEE) countries. The group of countries whose working hours are above the EU-wide industry average are almost exclusively in

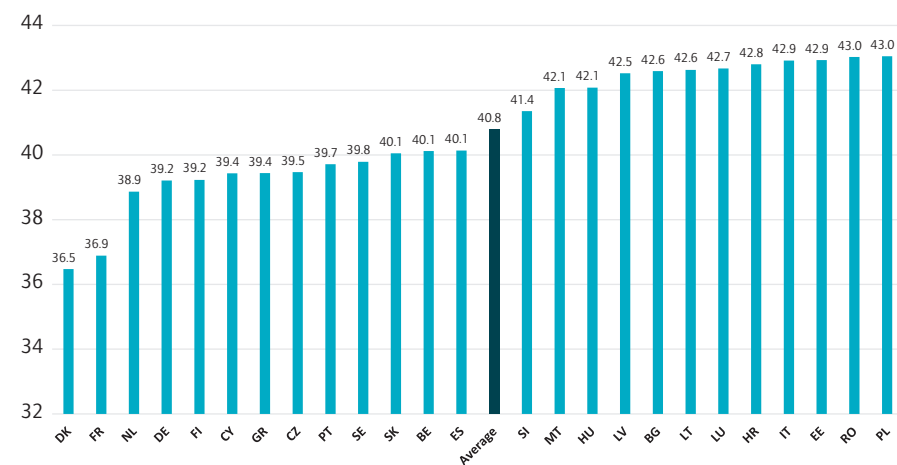
central and eastern Europe. The only western European countries whose normal working hours are persistently above the European average are Italy, Luxembourg and Malta and in four industries also Belgium. Three countries (Croatia, Italy and Romania) belong to the top five countries with the longest normal working hours in all industries covered in this report. With the exception of the textile, apparel and leather industry Poland is also always among the top five countries. Second, and by contrast, the countries whose normal actual working hours are below the European average are almost exclusively western European. The only CEE countries whose normal actual working time is persistently below the EU average for all seven industries covered are Czechia and Slovakia. The two countries with the smallest normal actual hours of work are, in all seven industries, Denmark and France, usually followed by Germany, which also belongs to the bottom five countries with the shortest normal actual working time. With the exception of the wood, paper and printing industry, Czechia also consistently belongs to the bottom five countries.

Figure 6 Normal actual weekly working hours in textile, apparel and leather, 2018



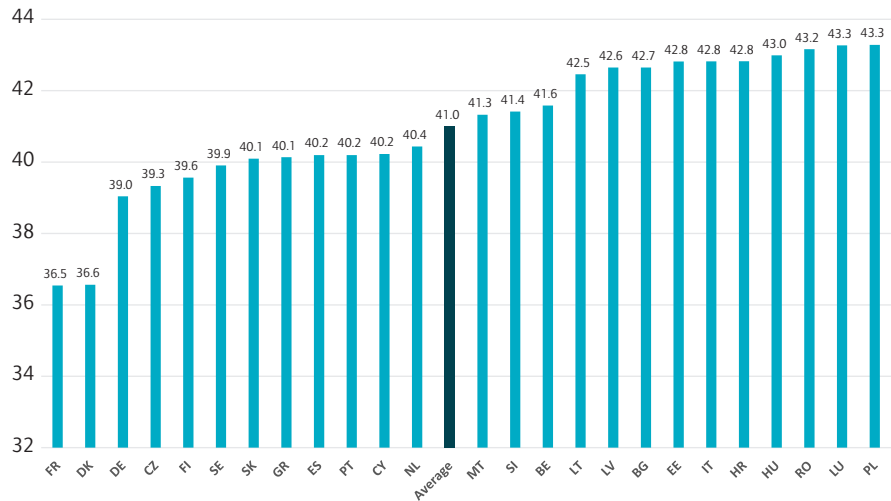
Source: Eurostat Structure of Earnings Survey.

Figure 7 Normal actual weekly working hours in wood, paper and printing, 2018



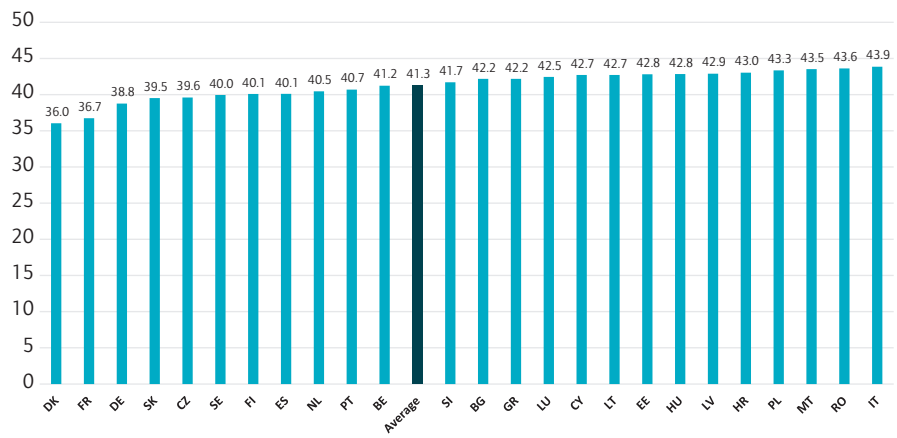
Source: Eurostat Structure of Earnings Survey.

Figure 8 Normal actual weekly working hours in coke, chemical, pharmaceuticals and rubber, 2018



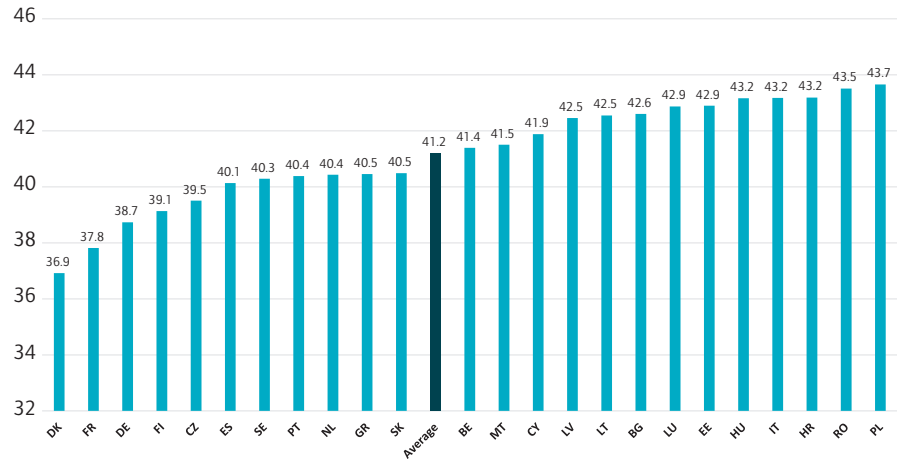
Source: Eurostat Structure of Earnings Survey.

Figure 9 Normal actual weekly working hours in basic metals and fabricated metal, 2018



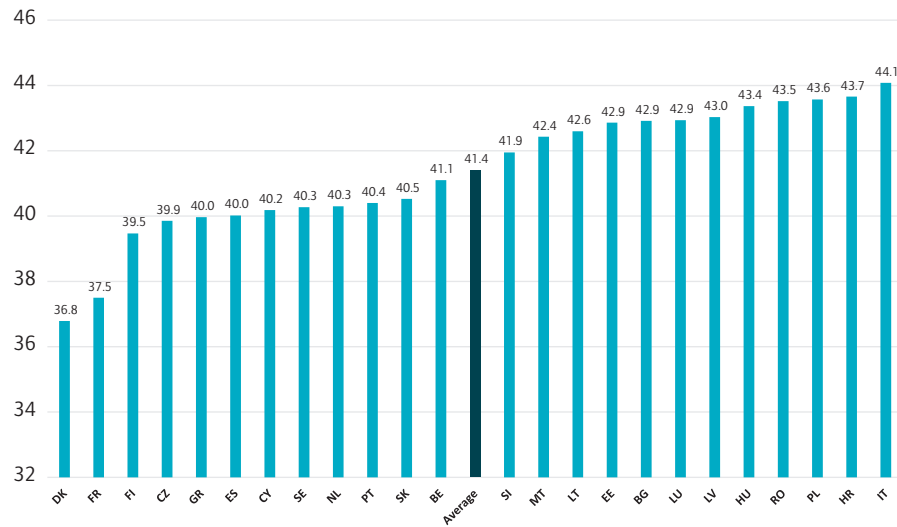
Source: Eurostat Structure of Earnings Survey

Figure 10 Normal actual weekly working hours in computers, electronic/optical and electrical equipment, 2018



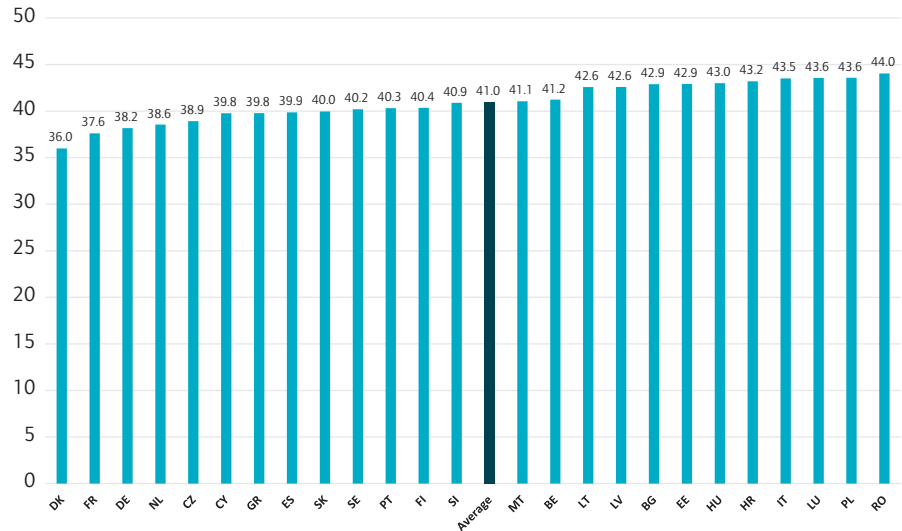
Source: Eurostat Structure of Earnings Survey.

Figure 11 Normal actual weekly working hours in machinery, 2018



Source: Eurostat Structure of Earnings Survey.

Figure 12 Normal actual weekly working hours in transport equipment, 2018

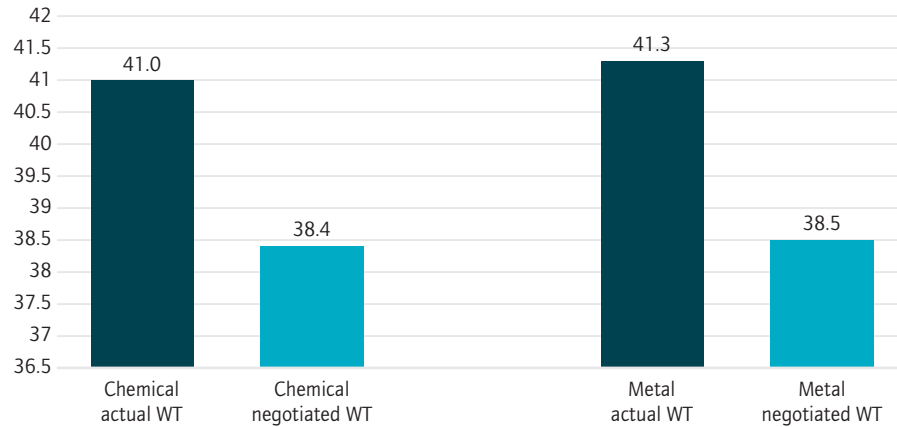


Source: Eurostat Structure of Earnings Survey.

The third key finding from the breakdown of normal actual working time by manufacturing industry is that actual working time is considerably longer than collectively agreed weekly working time. In 2018, actual working time in the chemical industry was 2.6 hours longer than the collectively agreed time, and in the metal industry even 2.8 hours (see Figure 13). These figures need to be treated with some caution. First, they refer to the situation in 2018. Second, because of data availability the data is based on different databases. The data for collectively agreed wages is taken from Eurofound's database of wages, working time and collective disputes (Eurofound 2022), while the data for actual working hours is from the EU-SES. Third, the data refers to slightly different sub-sections of the industries.¹ Despite these minor limitations, however, the comparison of normal actual and collectively agreed working hours confirms previous findings (for instance, De Spiegelaere and Piasna 2017; Cabrita and Weber 2021) namely that, as a rule, the latter are considerably longer than the former.

1. The data for actual working hours in the chemical industry from the SES covers the manufacture of coke, chemicals, pharmaceuticals and rubber; the data for collectively agreed working hours from the Eurofound database of wages, working time and collective disputes covers the manufacture of chemicals, chemical products, basic pharmaceutical products, pharmaceutical preparations, rubber and plastic products. By the same token the data on actual working hours in the metal industry from the SES covers the manufacture of basic metals and fabricated metals, while the data on collectively agreed working time from the Eurofound database of wages, working time and collective disputes covers smelting and/or refining ferrous and non-ferrous metals and the manufacture of 'pure' metal products.

Figure 13 Collectively agreed and normal actual weekly working time in the chemical and metal industries, 2018



Source: EU-SES for actual working time; EU-LFS for negotiated working time.

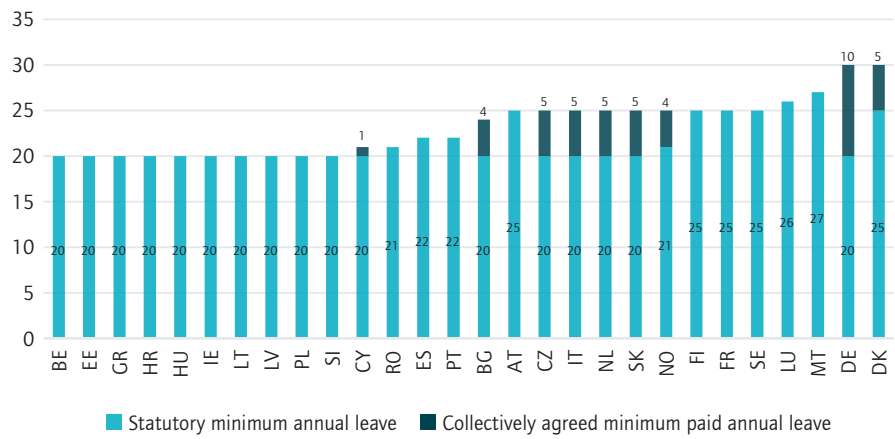
2.5 Annual paid leave

Annual paid leave is an important factor when assessing working time on an annual basis. The basic standards for the minimum days of paid annual leave are set by Article 7 of the European Working Time Directive, which requires EU Member States to ‘take the measures necessary to ensure that every worker is entitled to paid annual leave of at least four weeks’ (Council of the European Union 2003). Figure 14, which illustrates the minimum days of annual paid leave harmonised on the basis of a five-day week, shows that the majority of 17 out of the 28 countries covered follow this provision of the Directive. The 11 countries that provide for more days of paid annual leave are Norway and Romania, with 21 days, Portugal and Spain, with 22 days, Austria, Denmark, Finland, France and Sweden, with 25 days and finally the two countries that provide for the most days: Luxembourg (26 days) and Malta (27 days). The total amount of annual leave, however, is influenced by a whole range of other factors, such as age, occupation, years of service and economic sector. Examples where seniority plays a role are Austria, where workers get an additional five days after 25 years of service and Poland, where workers with more than ten years of service get an additional six days of paid annual leave.

As Figure 14 shows, collective agreements play an important role in determining the total amount of annual leave because in many countries they provide for additional days. Here once again a note of caution has to be added because, as Cabrita and Weber (2021) emphasise, data on annual leave in collective agreements is very difficult to find and to interpret because leave arrangements in such agreements are often very complex and therefore often allow only for a rough estimate. Furthermore, specific rules may be agreed at company level. Figure 14 shows the data available in Eurofound’s database on wages, working time and collective disputes (Eurofound 2022) applicable to the manufacturing sector. According to the Eurofound data, collective agreements provide for additional

days of annual leave in nine countries. The amount of additional days ranges from 1 day in Cyprus to 10 additional days in Germany. The most common provision in collective agreements is 5 additional days, as in Czechia, Denmark, Italy, the Netherlands and Slovakia. Collective agreements in Bulgaria and Norway provide for 4 additional days of paid annual leave. Combining the statutorily provided days of annual leave with those provided by collective agreements Denmark and Germany top the table with 30 days of annual leave.

Figure 14 Minimum days of annual paid leave,* 2020



Note: * Harmonised on the basis of a five-day working week.

Source: Cabrita and Weber (2021); Eurofound (2022).

3. Trade union and union member views on working time

For trade unions, the most important thing in developing a working time policy that ensures a just transition is to take into account the interests of their members, as well as of the workforce more generally because this represents the pool of potential future members. The results of the survey conducted by industriAll Europe among national collective bargaining experts who are members of its Collective Bargaining and Social Policy Committee illustrate that the top priority of union members across Europe is a reduction of working time without loss of pay. Two aspects are particularly noteworthy in this respect. First of all, the reduction of working time has been mentioned as a priority of union members regardless of the current length of collectively agreed working time. In Belgium and Spain, for instance, where the collectively agreed working time in the manufacturing sector is around 38 hours per week, a members' demand for the introduction of a 32 hour week was mentioned. By contrast, in Poland with a statutory maximum weekly working time of 40 hours the members' priority is a reduction to 35 hours per week. These responses furthermore illustrate that even though the demand for a working time reduction exists irrespective of the length of collectively agreed working time, concrete demands reflect existing working time. The second noteworthy aspect is that, despite the lively public debate about a four-day working week, the demand for working time reduction has not explicitly been framed in terms of a four-day working week. Obviously, the demand for a 32 hour week in Belgium and Spain implicitly includes the possibility of implementation through a four-day week but it was not explicitly seen as the preferred option.

Moreover, rather than specifically a working time reduction, responses from Romanian trade unions point to the enforcement of existing regulations as another important priority of union members. In Romania, the enforcement of a standard eight-hour day and a 40-hour week as foreseen in legislation and collective agreements was highlighted as an important demand of union members. Because normal actual working hours in the Romanian manufacturing sector exceed 43 hours per week (see Figures 6–12), this would amount to a de facto collective working time reduction. Closely linked to the enforcement of existing working time standards is the issue of establishing better overtime arrangements, which was another important priority of union members in Poland and Romania. The main interests reported were an increase in overtime pay for work performed on Sundays and public holidays, but also the timely and appropriate payment of overtime.

As regards the issue of working time reduction, the results of the industriAll survey illustrate that after a long period of standstill the issue of collective working

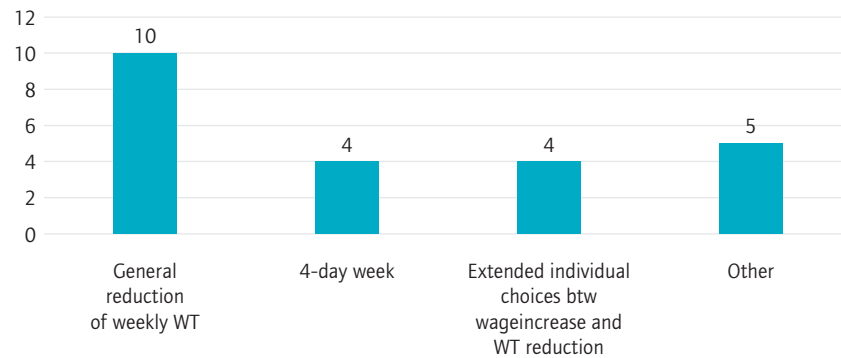
time reduction in whatever form is back on the agenda of trade unions and their members. The last working time reductions based on a sectoral collective agreement date back more than 20–30 years with the introduction of the 37-hour-week in Denmark and, also in the 1990s, several sectoral agreements concluded in the Netherlands to introduce a 37.5-hour week. Apart from that, only in Belgium was a tripartite agreement the vehicle used to introduce a 38-hour week, in 2003 (Lehndorff 2020). The only recent example is the collective agreement concluded in the German metal industry in May 2021 on the staged introduction of the 35-hour week in eastern Germany to match the standards that exist in the western part of the country. Legislative changes took place in Portugal in 1996 to reduce weekly working time from 44 to 40 hours, in Italy in 1997 with a reduction from 48 to 40 hours, in France in 1998 with the introduction of the 35-hour week, in Belgium where weekly working time was cut to 38 hours in 2001, and in Slovenia in 2002 with a reduction from 42 to 40 hours (Garnero 2022). Since then there have been no significant legislative changes to reduce working time in the EU. Against this background, the key finding from the *industriAll Europe* survey in this respect is the priority that union members in the manufacturing sector give to a collective working time reduction without loss of pay, implemented flexibly to leave enough room to take into account the specific needs of all the actors involved.

According to the replies of the national bargaining experts, another important priority of union members concerns the management of working time arrangements and in particular increasing employees' control and autonomy in designing working time arrangements. This applies to both the planning of the weekly working time and the design of more flexible working time arrangements that cover the whole working life and take into account different needs linked to different life phases, in particular taking care of children and parents. From a members' perspective more control over working time arrangements is seen as a tool for achieving a better work–life balance, improving their health and avoiding work intensification and excessive workloads. This wish for more control includes the design of working time arrangements that enable a reduction of working hours towards the end of working life before regular retirement.

Given the high priority that trade union members attach to a reduction of working time, it is not surprising that this issue also plays a central role in the working time policy pursued by trade unions. In order to find out more about the 'how' and 'why' of the trade unions' strategy as regards working time reduction, in the *industriAll Europe* survey the national collective bargaining experts were asked which approach their union pursues in order to achieve a working time reduction. The two key messages of the responses shown in Figure 15 are, first, that the preferred option is in most cases a collective reduction of weekly working time, countering the trend of the past few decades of individual working time reductions, for instance through the increased use of part-time work. Second, the trade unions prefer flexible solutions that increase employees' discretion in determining working time arrangements according to their personal preferences. It is noteworthy that compared with the most frequently mentioned approach of a general reduction of weekly working time, the two options 'four-day week' and 'extended individual choice between a wage increase and a working time reduction' feature much less prominently in union working time policies. Other approaches mentioned in

particular from trade unions in the Nordic countries were a reduction in annual working time and linking working time reduction with part-time pension and early retirement schemes. Both approaches reflect the tendency of Nordic trade unions to view working time in a more long-term perspective. However, even from a working life perspective, the collective reduction of weekly working hours is an important tool to ensure quality employment. There is ample empirical evidence that in particular digitalisation leads to an intensification of work which is not sustainable over the whole working life. Thus, even from a working life perspective, a reduction of weekly working hours serves the purpose of reducing the workload and hence making work more sustainable over the whole working life.

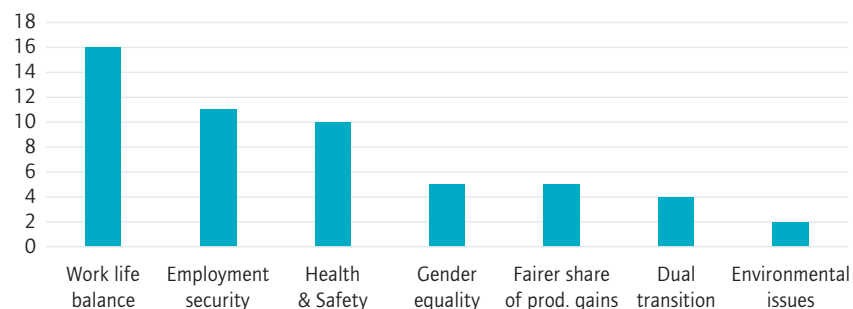
Figure 15 Trade unions' approach to working time reduction



Source: industriAll Europe Working Time Survey; multiple answers possible.

The most often mentioned motives for pursuing a collective working time reduction set out in Figure 16 are all related to improving workers' immediate work and life situation. They include an improved work–life balance as the most frequently mentioned reason, followed by employment security and better health and safety conditions. Broader societal objectives such as improved gender equality, a fairer distribution of productivity gains, the dual transition and, in particular, environmental issues play only a subordinate role for unions in pursuing a collective working time reduction.

Figure 16 Principal reasons for pursuing collective working time reduction



Source: industriAll Europe Working Time Survey; multiple answers possible.

4. Working time reduction

The trade unions responded to the employees' demand for more working time autonomy with a range of policies aimed at reducing working time and/or increasing flexibility for employees. The latter includes, for instance, the more frequent use of flexitime, working time accounts or part-time retirement and part-time educational leave. Flexitime enables employees to decide for themselves the start and end of their daily working hours within a predefined time frame. Flexitime models usually include a core working time during which the employee is obliged to be at the workplace, as well as flexitime phases before and after core working hours. The details of flexitime arrangements, such as the permissible volume of maximum time credits and time debts (the time allowed to stay above and below the collectively agreed working time), as well as the period during which the hours spent above or below the collectively agreed working time have to be balanced, are usually laid down in company-level agreements. Flexitime and working time accounts are sometimes used interchangeably. As a rule, working time accounts are used in a more long-term perspective. The difference between collectively agreed weekly or monthly working time and the normal actual working hours are put into a working time account. Once again, the detailed arrangements are usually dealt with in a company-level agreement addressing three key issues: first, the type of working time (or other collectively agreed benefits) that can be put into the account; second, the upper and lower limits for plus and minus hours; and the reference period during which the account needs to be balanced (Bispinck 2016). Because the arrangements for flexitime and working time accounts are usually agreed at company level there is considerable variety, not only across the different industries of the manufacturing sector within one country but also across companies within the same industry.

The remainder of this section will therefore focus on innovative forms of working time reduction pursued in sectoral agreements with the explicit objective of increasing employees' control over their own working time arrangements. A reduction of working time can take different forms, however, depending on whether working hours are reduced on a daily, weekly or monthly basis or even per year, for instance, through additional annual leave. Working time reduction can also refer to the whole working life by reducing the pension age, more career breaks or improved possibilities for parental leave. The *industriAll* survey clearly illustrates that a general reduction of weekly working hours is union members' preferred option. In the following the two other most frequently mentioned options – the four-day working week and optional models that give employees the choice between wage increases and additional time off – will be discussed in more detail.

4.1 Models offering a choice between time off and wage increases

The three measures – general working time reduction, the four-day week and optional models – should not be seen as mutually exclusive but rather as complementary. The four-day week can be seen as a variant of a general working time reduction and, as the following examples show, optional models can also go hand in hand with a general working time reduction. In Sweden, for instance, collectively agreed optional models have a long tradition. Already in the 1990s, a cross-sectoral collective agreement provided for the possibility to convert 0.5 per cent of annual income into time credits (Lehndorff 2020). As Anxo (2016) emphasises, in Sweden working time policies have traditionally primarily been seen as a tool for establishing a better balance between paid work and social activities outside work rather than as a remedy for labour market imbalances and for preventing unemployment by redistributing work. Accordingly, the more long-term flexible adaptation of working time patterns to employees' preferences plays an important role for Swedish trade unions. This is confirmed by the answers of Swedish trade unions in the industriAll Europe survey, which highlighted the need to improve the possibilities for a part-time pension before regular retirement – thereby reducing working time over the life course – and the reduction of annual working time.

Another country in which optional models are widespread in the manufacturing sector is Austria, where the first collective agreement with a so-called 'leisure option' (*Freizeitoption*) was concluded in the electrical and electronics industry in 2013. This agreement provided for a choice between a pay rise of 3 per cent and five additional hours of leisure time per month, which corresponds to one and a half additional weeks of leave per year. The only prerequisite for this choice is a voluntary company-level agreement implementing the sectoral agreement and that the employee's wage is above the collectively agreed minimum. The additional five hours of leisure time are put into a separate working time account without an expiry date and can be taken off the account as individual hours, accumulated as whole days (for instance as additional days' holiday or 'bridge days') or even as longer blocks of time, for instance, for a sabbatical or for early retirement (Scherz and Schwendinger 2016). An analysis of the use of the leisure option by Gerold et al. (2017) shows that the most frequently chosen option was to accumulate the leisure time and to take it as whole days rather than as individual hours to shorten working days. According to Gerold et al. (2017), the employees who chose leisure time instead of wage increases report an increase in their quality of life. The reason most frequently given by employees was the greater autonomy it gave them to organise their own work and time, rather than the additional time off per month as such which they gained through the leisure option. The five additional hours per month were viewed as rather limited, but the fact that these five hours could be put in a separate working time account offered a decisive gain in time autonomy. The optional model provided for in the 2013 agreement in the electrical and electronics industry subsequently spread to other manufacturing industries, such as mining, the steel industry, the automotive industry and the machinery and metal goods industry (Gerold et al. 2017).

The 2018 agreement in the German metal and electronics industry followed a very similar logic. Based on the results of a broad survey of 680,000 employees, including members and non-members of IG Metall, the agreement's key objectives were to extend the possibilities to reduce working time and to provide the employees with options to control and determine their working time themselves. In essence, the agreement therefore offered two options: first, a reduced 'full-time working' model. This means that all employees with more than two years of service were entitled to a reduction of working time to up to 28 hours ('short full-time') with the right to return to 'normal' full-time afterwards. The 'short full-time' can be taken for a minimum of six months and a maximum of 24 months. After that, employees can choose between a renewed 'short full-time' and the old working hours. The pay during 'short full-time' is reduced proportionally. The employer can refuse 'short full-time' only if more than 10 per cent of the employees ask for 'short full-time' or for employees with key qualifications who are impossible to replace (Wagner 2019; Zitzelsberger 2018). The second option is the choice between wage increases and additional days off for certain categories of workers. In addition to the regular wage increase of 4.3 per cent the 2018 agreement provided for an additional allowance of 27.5 per cent of one monthly salary. The following three categories of workers had the option to choose between the additional allowance and eight additional days off: employees with children up to the age of eight, employees with dependants in need of care, and shift workers (Wagner 2019; Zitzelsberger 2018). Because numerically the additional allowance of 27.5 per cent of a monthly salary corresponds to only six days, the agreement de facto provides for partial wage compensation (Bispinck 2019).

An analysis of the take-up of the different models shows that the conversion of the additional allowance into eight additional days off is particularly attractive. During the first year, 242,000 employees chose this option. Of the three categories of eligible workers, shift workers were the most common, accounting for 70 per cent, followed by workers taking care of children (23 per cent) and workers taking care of dependents (7 per cent) (Wagner 2019). In 2020, the number of workers who chose the eight additional days off increased to 312,000 with an almost constant distribution among the three eligible groups: 70 per cent shift workers, 25 per cent workers taking care of children and 5 per cent workers taking care of dependents (Wagner 2020). The fact that this option was particularly popular among shift workers illustrates the high degree of stress to which they are exposed and the need for additional time to recover from their work. Compared with the model offering a choice between money and time, the second 'short full-time' model was less attractive. During the first year only 4,000 applications were submitted (Wagner 2019). One explanation for the low take-up of this option may be that the 'short full-time' went hand in hand with a proportional wage reduction.

Overall, the experience of the IG Metall agreement confirms the main findings of the analysis of the Austrian agreement in the electrical and electronics industry. They both show that flexibility is not a one-way street for employers to extend machine operating times and that employers' need for flexibility needs to be counterbalanced with employees' wish for more autonomy in determining their own working time arrangements.

4.2 The four-day working week

The measure that probably received most public attention is the introduction of a four-day working week. While the idea of reducing weekly working days from five to four seems fairly simple the devil is, as so often, in the detail of implementation. Important questions surrounding the introduction of a four-day week include: first, does the introduction of a four-day week mean a proportionate cut in pay or will pay stay the same? Second, does the introduction of a four-day week lead to a reduction of weekly working time or is it just a means of squeezing the same number of weekly working hours into fewer days, leading to longer daily working hours? Closely linked to this, third, what does the introduction of a four-day week mean for employees' workload? Is the workload cut accordingly or does it simply mean that the same amount of work is done in four instead of five days? And finally, fourth, how can a balance be struck between the employers' interest in increasing productivity and the employees' interest in improving work–life balance and increasing their control over working time arrangements?

In the discussion about the four-day week history repeats itself to some extent because many of the arguments made by its opponents are almost identical to the arguments brought forward by the opponents of the five-day week a hundred years ago (Gomes 2021: 32). If, however, history repeats itself, this also means that we can learn important lessons from the undoubtedly successful introduction of the five-day working week. Three key arguments against a shorter working week, then and now, are that a reduction of the working week by one day at full pay is too costly; that its implementation is too complex; and that it reduces international competitiveness. Another counter-argument made by employers in the current debate is that in times of labour and skills shortages a working time reduction would be counterproductive and that instead the remaining employees should even work longer working hours.

At the heart of the economic and essentially cost-based arguments against a four-day week is the productivity debate, which in turn boils down to the question: who pays for the shorter working week? From the perspective of a profit-maximising employer the key objective is to keep unit labour costs at the same level when reducing working time. Unit labour costs are a key measure for labour productivity and the competitiveness of a company or an economy as a whole. It is defined as the ratio of labour compensation to labour output in a specified period of time. Let's illustrate this with a concrete example. Let's assume that an employer pays an employee 5,000 euros of compensation for five days work in which the employee produces 5,000 units of a certain product. This means that the ULC is 1; that is, the price of labour for a single unit is 1 euro. If the same worker now only works four days a week at full pay this means that the employer still pays 5,000 euros of compensation, but, all things being equal, the employee will only produce 4,000 units due to the shorter working week. This, however, means that the ULC has increased from 1 to 1.25. Thus, in order to keep ULC constant at 1, the employer has two basic options: first, to reduce wages proportionally to the cut in working time; in other words, pay only 4,000 euros for the four days worked. Or second, to increase the output of the worker during the four days of work and make the employee produce 5,000 units in four days. In this scenario, the introduction of

the four-day week is entirely financed by the employee either through accepting a cut in wages or through work intensification by producing the same amount in a shorter period of time.

The second scenario is that the employer pays for the reduction of working time by different measures to compensate for the relative increase in costs, such as accepting lower profit margins or increasing the price of the goods and services produced. The employer's capacity to respond in one way or the other heavily depends on the overall profitability of the company and the price-elasticity of product demand (De Spiegelaere and Piasna 2017).

Empirical evidence suggests that there is a third scenario, however, in which the introduction of the four-day week essentially finances itself. This third scenario is based on a more dynamic view of economic processes, taking into account the wider consequences of introducing a four-day week. The first two scenarios are based on a static view of economic processes, assuming that nothing else will change as a consequence of bringing in a four-day week – for example, 'workers will not change the energy they put into production, managers will not change their practices and consumers will not change their demand for goods' (Gomes 2021: 33). The focus of the third scenario goes beyond the cost-enhancing effect of a four-day week at full pay and also takes into account its productivity-enhancing effect, which potentially would (more than) compensate the resulting relative increase in labour costs. The scenario in which the introduction of the four-day week finances itself is, furthermore, based on a broader view of production costs. It takes into account that production costs – in particular in the manufacturing sector – include not only labour costs but also the costs of raw materials and consumable manufacturing supplies, as well as for capital and general overheads. Thus, there is potential to save costs in other areas than just compensation.

There are numerous examples of the productivity-enhancing effects of reducing working time. One of the earliest examples goes back to 1926 when Henry Ford introduced the five-day week across his US and overseas factories. Ford pointed to two main reasons for the rise in productivity: 'better workers and better management' (Gomes 2021: 85). This historical example illustrates the wider impact of a far-reaching reduction in working time on the behaviour of both workers and management. The introduction of the five-day week not only enabled better rested employees to work more productively, but also prompted management to improve organisational processes, which improved efficiency. Very similar arguments are made today by proponents of a four-day working week, highlighting that shorter working hours help to increase productivity in a number of ways (Stronge and Harper 2019). The first argument concerns the physiological effect of reduced fatigue levels – workers have more time to recuperate from their work. The second argument concerns the motivational effect: workers on shorter working hours will work more effectively in the remaining working time. The third argument is that shorter working hours often prompt companies to improve their work organisation and processes, enabling employees to do more work in less time by working smarter, not harder. The fourth argument is based on the idea that workers will use some of their additional spare time for training

or other competence-enhancing activities, which might also help them to be more productive at work (De Spiegelaere and Piasna 2017).

In addition to the arguments pointing to the productivity-enhancing effects of a four-day week, a second set of arguments highlights the wider cost-saving effects (Gomes 2021). First, more rested and motivated workers make fewer mistakes, which helps to reduce waste in the production process. Second, shorter working hours help to reduce short- and long-term absenteeism, for instance through burn-out, which reduces health-related costs for the employer. Third, there is empirical evidence from pilot companies that have already experimented with a four-day week that it also reduces labour turnover, which in turn helps to save costs arising from hiring new employees and to retain company-specific knowledge and expertise within the company. Fourth, a four-day week greatly facilitates the process of recruiting new employees, if needed. As a matter of fact, the four-day week to some extent represents a functional equivalent to offering higher wages in an attempt to attract new employees in times of labour and skills shortages. Thus, from an employer's perspective, the combination of the various productivity-enhancing and cost-saving effects of the four-day week will help to (more than) compensate the relative increase in labour costs resulting from reducing working time without a proportional wage reduction.

Research showing that shorter working hours improve labour productivity (Bosch and Lehndorff 2001; Golden 2012; Pencavel 2014), however, also highlights that productivity improvements are not inevitable and are linked to specific requirements in the implementation process. More than 20 years ago, Bosch and Lehndorff (2001) already emphasised the need to open the 'black box' of firms, not only looking at the macro level but also taking into account the micro level of implementation processes within individual firms. There are still only a few in-depth analyses of the actual implementation of the four-day week. Most recent studies focus primarily on the reported effects of the four-day week from the perspective of the employer or the employees. One notable exception is the in-depth case study by Delaney and Casey (2022) of the implementation of the four-day working week in a medium-sized financial services company in New Zealand. This analysis illustrates that one important prerequisite for successful implementation is that the employees' interest in more autonomy and control over their work arrangements is given the same consideration as the employer's interest in increased productivity. In this particular case, the implementation of the four-day week at full pay was accompanied by intensified managerial measurement and monitoring of performance, resulting in a deterioration of working conditions. Put differently, the employer's preoccupation with increasing labour productivity resulted in a trade-off for the employees between one additional day off without a wage cut and the intensification of work, as well as less discretion, autonomy and control over their work.

Thus, striking a balance between employers' economic interest in productivity increases and the employees' interest in better living and working conditions is a key challenge when introducing the four-day week. An important aspect in this respect is the involvement of employees and their trade unions and/or company-level representation structures in designing the implementation process to ensure

that the employees' interests are given the same importance as those of the employer. The involvement of trade unions and employee representation structures in the process of introducing the four-day week varies considerably depending on national industrial relations customs and practices and the respective national regulatory framework. The discussion below of the most recent four-day week initiatives illustrates this.

4.3 Recent initiatives to introduce a four-day working week

More recently, initiatives to introduce a four-day working week have spread across many European countries and were given an additional push by the Covid-19 pandemic, when companies had to think of new ways of organising their work. A closer look, however, indicates that these initiatives are limited to western Europe. The absence of such initiatives in CEE countries can be explained by the fact that in most of them both collectively agreed and actual working hours are considerably longer than in western European countries. As a consequence, the step towards a four-day week with 32 hours would be much more dramatic in CEE countries. The absence of such initiatives in the Nordic countries – with the exception of Iceland – can be explained by the fact that a reduction in weekly working hours is not on the trade union agenda. They focus more strongly on longer-term working time arrangements from an annual or even working-life perspective.

As regards the nature of the initiatives in the various countries, three general approaches can be distinguished which are shaped by national industrial relations traditions and are each characterised by different main drivers (Table 3). The first approach, pursued in Iceland, Ireland and the United Kingdom – all countries with a strong voluntarist industrial relations tradition – is based on a broader campaign driven mainly by civil society actors with trade union participation and support. The second approach pursued in countries in which legislation plays a strong role in regulating the employment relationship is based on the initiative of political actors as the main drivers. Trade unions did not play a key role in the initiative and in the case of Belgium were even opposed to it. Finally, the third approach reflecting the strong role of collective bargaining in regulating the employment relationship is entirely driven by trade unions and based on their capacity to negotiate a collective agreement with the employers' side, which sets out the terms and conditions of introducing a four-day week. In what follows, the specific nature of the various approaches will be outlined in more detail.

Table 3 Overview of national approaches to the four-day week

	General approach	Main driver	Motives
Iceland, Ireland, United Kingdom	Campaign	Civil society actors with participation of trade unions	Work–life balance, productivity
Belgium, Portugal, Spain	Political initiative	Political parties	Work–life balance, productivity
Germany	Collective bargaining	Trade unions	Safeguarding jobs, work–life balance, control over working time

Source: Author's compilation based on Goerlich (2021).

4.3.1 The campaign approach – Iceland, Ireland, United Kingdom

The initiatives in Ireland and the United Kingdom were based on a broader campaign led by the non-profit advocacy group 'Four-Day Week Global', which has conducted further pilot initiatives around the world, for instance in the United States, Canada, Australia and New Zealand. As part of the trial project, companies signed up voluntarily to take part in the trial, which in both cases lasted six months. The only requirement placed on the companies was that they 'offer a meaningful working time reduction ... with the smallest allowable reduction set at four hours' (Kelly et al. 2022: 10), while keeping pay constant. The UK pilot comprised 61 companies with approximately 2,900 employees and in Ireland 12 companies with a total of 188 employees. In both countries, the trial applied the '100:80:100 model' – 100 per cent of pay for 80 per cent of the scheduled working time, in exchange for a commitment to maintain 100 per cent productivity. The response from the participating companies and workers was overwhelmingly positive. Companies report improved productivity, lower health care costs, reduced employee turnover and improved chances of recruiting new employees. Workers report less stress, fatigue and burnout and an overall positive effect on mental and physical health, as well as an improved work–life balance (Kelly et al. 2022; Lewis et al. 2023).

Table 4 The four-day week campaign in Ireland and the United Kingdom

	UK	Ireland
Starting point	Pilot project in the context of or in cooperation with the broader 'Four-day week global' advocacy group	
Duration	6 months starting in June 2022	6 months starting in February 2022
Four-day week model	100 x 80 x 100 model; 100% wage, 80% working time, 100% productivity	
Scope	61 companies with a total of around 2,900 employees (approximately 48 employees on average)	12 companies with a total of 188 employees (approximately 14 employees on average)
Results	<p>Employers' perspective: Increased productivity, reduction of labour turnover, reduction in health-related costs, facilitating recruitment of new employees</p> <p>Employees' perspective: Less stress, fatigue and burnout, improved general well-being, better work–life balance</p>	

Source: Author's compilation based on Lewis et al. 2023 and Kelly et al. 2022.

While the trial results seem to provide further evidence of the feasibility of the four-day week and in particular that it is possible to strike a balance between the employers' interest in improved productivity and the employees' interest in better living and working conditions, this positive assessment needs to be put into perspective. First of all, as with all voluntary initiatives there is a certain selection bias. Because the companies signed up voluntarily they are more open to the idea in the first place and therefore may be more inclined to make the scheme work. Second, small- and medium-sized companies from the service sector were strongly overrepresented in the sample. In the UK trial, the average number of employees per company was 48 and in Ireland 14. In the United Kingdom less than 10 per cent of participating companies were in manufacturing and engineering and only one of the 61 participating companies had around 1,000 employees. This is relevant because it is easier to implement changes in work processes to make the scheme work for small- and medium-sized companies in the service sector than in large manufacturing companies, which in many cases operate a shift system. Third, the general problem with voluntary initiatives is their limited scale in terms of the number of companies and workers covered. Thus, the 'scaling up' of voluntary initiatives such as the trials in the United Kingdom and Ireland requires more robust systems of institutional enforcement and regulation.

The trials in Iceland, where two of the first large-scale voluntary working time reductions took place, stand out in a number of respects. The first noteworthy difference from the trials in the United Kingdom and Ireland is the larger scope and duration. The first trial, initiated by Reykjavik City Council in response to a trade union campaign, took place from 2014 to 2019 and involved around 2,500 employees overall. The second trial, conducted by the Icelandic government, took place from 2017 to 2021 and involved around 400 staff. This means that the number of workers participating in the two trials amounted to 1.3 per cent of Iceland's total workforce (Haraldsson and Kellam 2021). Even though these trials are often referenced when talking about the four-day week, their intention was to obtain a better understanding of the impact of working time reduction (without loss of pay) more generally. In these trials working time was reduced from 40 hours to 35 or 36 hours a week, which in some cases resulted in a four-day week but not in all. The key findings were similar to the trials in the United Kingdom and Ireland: employees report less stress and burnout, better overall well-being and better work–life balance. At the same time, employers reported that productivity stayed the same or even improved across the majority of workplaces. Even more important than these improvements in only a limited number of workplaces in public services (schools, police stations, care homes and city maintenance) is the fact that, following the trials, trade unions managed to conclude collective agreements that ensured permanent reductions in working time for tens of thousands of workers, including in the private sector and manufacturing. In 2021, a total of 86 per cent of Iceland's workforce moved to shorter working hours or at least gained the right to shorten their working hours (Haraldsson and Kellam 2021). Thus, the trials' key impact was that they prepared the ground for a broader reduction in working time based on collective agreements, thereby solving the 'scaling up' problem of voluntary initiatives.

4.3.2 The political approach – Belgium, Portugal and Spain

In Belgium, Portugal and Spain the measures to introduce a four-day week were based on the initiative of the respective government and/or political parties. In Belgium, for instance, new legislation came into effect in November 2022 giving employees the option to work only four instead of five days a week. The scheme applies only to full-time workers in the private sector. Public sector workers in government services, such as the military, law enforcement, public transport and public education, are not eligible. The government's objective with this law was to improve work–life balance and to make the supposedly rigid Belgian labour market more flexible by giving companies and employees more freedom to arrange their working time. The Belgian scheme is not about a real reduction in working time, however, because employees will do the same amount of work in four instead of five days. In practice, this means that, based on a statutory maximum weekly working time of 38 hours, employees opting for this scheme will work 9.5 hours a day instead of 7.6 hours. Thus, rather than being a tool to implement a working time reduction, this variant of a four-day week is a work intensification scheme that will be very difficult to implement in parts of the manufacturing sector characterised by hard physical work. The extremely long working days may, furthermore, have a negative impact on workers' productivity and motivation.

Further politically-driven four-day-week pilots have been announced in Spain and Portugal. After lengthy discussions, in December 2022 the Spanish government announced the launch of a pilot scheme involving between 60 and 70 small- and medium-sized companies with fewer than 250 employees. The trial is scheduled to run for two years and the participating companies are expected to reduce working time by at least 10 per cent for at least 25–30 per cent of the workforce (depending on company size) without reductions in pay. The companies are also expected to introduce measures aimed at increasing productivity to compensate for the relative increase in labour costs. The government will provide a budget of approximately 10 million euros, which during the first year of the trial will also be used partly to finance the companies' wage costs. The trade unions support the initiative but are not wedded to the idea of a four-day week. For them, the most important aspect of the trial is that it helps to bring the issue of working time reduction back on the political agenda.

Similar plans were announced by the government of Portugal in November 2022. The trial is supposed to start in June 2023 involving around 50 private sector companies from a wide range of industries. There are important differences from the trial in Spain (Tzvetozar 2022; Gomes 2023): first, the sample of companies should explicitly also include large companies with more than 1,000 employees. Second, there will be no government subsidies, for instance, to cover part of the wage costs. Third, the duration of the trial will be six months following the examples of the United Kingdom and Ireland. In order to participate in the trial, companies make sure that the introduction of the four-day week is linked to a real reduction in working time and that it involves the majority of the workforce. Whereas in Spain participating companies have to commit to participate for the full two years of the trial, in Portugal companies can choose to stop participating

at any time. Because neither trial had started by the time of writing no results are available.

4.3.3 The collective bargaining approach – Germany

Germany's metalworking industry is a telling example of the collective bargaining approach to the four-day week. The historical trendsetter, which still is a point of reference in the debate today, is the 1993 agreement at Volkswagen. Faced with the loss of 30,000 jobs at the German Volkswagen plants, IG Metall and management agreed to reduce working time by 20 per cent, from 36 to 28.8 hours per week in return for a temporary employment guarantee of two years for all Volkswagen employees (Schwitzer 1994; Peters 1994). IG Metall's main objectives in the negotiations was to safeguard employment through a working time reduction, while at the same time keeping employees' monthly wages at the same level. The latter was achieved by bringing forward future wage increases, by converting additional annual wage components such as bonuses and holiday pay into monthly payments and by a so-called 'Volkswagen contribution' paid by the company. While IG Metall thus succeeded in safeguarding jobs and in keeping monthly wages stable, the price to be paid for the 20 per cent reduction in working time was an annual wage cut of approximately 16 per cent (Schwitzer 1994). Thus, overall the four-day week was introduced with only partial wage compensation. Because wages in the German metal industry more generally and at Volkswagen more specifically are far above the German average, however, this model of a four-day week with only partial wage compensation in return for job guarantees was more easily acceptable than in other low-wage industries. As a consequence, the Volkswagen model of using working time reductions to safeguard employment provided a precedent for many other company-level agreements in the German metalworking industry.

The challenges posed by the twin transition and more recently by the Covid crisis have given new impetus to the debate about working time reduction more generally and the four-day week more specifically (Jänicke 2023). Within IG Metall, employment security is still a key motive driving the debate on the four-day week. Other motives have gained in importance, however, such as the employees' demand for improved work–life balance and more control over their working time arrangements. These motives were confirmed by a recent survey of more than 2,500 employees, which shows that the overwhelming majority – almost 90 per cent – of respondents want a four-day week without wage cuts to improve their work–life balance (Lott and Windscheid 2023).

As a consequence, the sectoral agreements concluded by IG Metall in 2018 and 2021 include various elements for realising these two objectives. Without explicitly referring to the four-day week, the 2018 agreement, for instance, allows employees to reduce their working time to 28 hours a week, although with a proportional wage cut. As already highlighted, the 2018 agreement also gives employees the option of choosing between wage increases and shorter working hours. Moreover, the 2021 sectoral agreement on safeguarding employment concluded by IG Metall in the metal and electronics industry provides for the option of reducing weekly working

time to 32 hours for up to three years, preferably implemented as a four-day week (IG Metall 2021), but once again with a proportional pay cut. The 2021 agreement in metal and electronics, furthermore, provides for a so-called ‘transformation allowance’, which is an additional wage component of 18.5 per cent of the monthly salary. In the case of a working time reduction to safeguard employment this ‘transformation allowance’ can also be used partially to compensate for the wage loss due to the reduced working time. Thus, IG Metall’s current collective agreement toolbox already provides many options for introducing a four-day week with partial compensation of lost wages resulting from the working time reduction. According to IG Metall, if all the collectively agreed wage compensation options were used, this would mean that, in the case of a reduction from 35 to 32 hours, almost 34 hours of work would be paid for (IG Metall 2021).

The debate ahead of the 2023 bargaining round in the steel industry illustrates that IG Metall wants to take the issue one step further by demanding the introduction of a four-day week by reducing weekly working time from 35 to 32 at full pay (IG Metall 2023). It is no coincidence that this demand has emerged in the steel industry. First of all, it was the highly unionised steel industry which at the end of the 1970s spearheaded IG Metall’s fight for a 35-hour week. Second, in a range of companies working time reduction is already a reality. At Thyssenkrupp, for instance, employees can choose their own working week between 33 and 35 hours; and at ArcelorMittal employees can opt to reduce their working time from 35 to 32 hours – in both cases without full pay, however. The two groups already account for almost half of the employees in the German steel industry (IG Metall 2023). Third, the steel industry is heavily affected by the green transition. Thus, according to IG Metall’s chief negotiator Knut Giesler, the four-day week can be a model to achieve a just transition from a coal-based heavy industry to ‘green steel’ by helping to prevent or minimise the job losses expected in the course of the transformation process and by making the steel industry more attractive to the young employees needed to tackle the transition process (WAZ 2023).

The example of Germany illustrates the valuable contribution a collective working time reduction and in particular a four-day week can make to safeguarding employment. What one should probably not expect from a four-day week, however, is an increase in overall employment. An analysis of the employment effect of a collective reduction in statutory working hours that took place in various countries between 1995 and 2007 demonstrates that a working time reduction does not lead to more overall employment; in other words there was no redistribution of working hours through work sharing (Batut et al. 2022; Garnero 2022). The distinction between saved jobs and created jobs is subtle but important (Gomes 2021: 138), in particular in the context of the twin transition during which many jobs will be threatened. Rather than increasing overall employment, the four-day week can contribute to making the labour market fairer by enabling the many (largely female) employees in involuntary part-time work to increase their working time because the four-day week would enable their (largely male) partner to take on more care and/or household work.

A collective reduction in working time more generally and the introduction of the four-day week more specifically can also help to provide more scope for workers to

engage in reskilling or upskilling, which is another important prerequisite of a fair transition. While training should in principle be carried out during working hours, the four-day week increases the scope for workers to engage in training, whether directly related to the job or privately, not directly related to the job, because better rested workers can more easily muster the energy to engage in some kind of re- or upskilling.

4.4 Should Friday be the new Saturday?

The answer is yes – if certain preconditions are met which have emerged from the cases in which a four-day week has already been implemented. An important lesson to be learnt from past experience with collective working time reductions in general and the four-day week in particular is that employees' main objective is a better work-life balance which takes their specific life circumstances into account. Against this background, three aspects are of particular importance: first, a four-day week opens up opportunities for up- and reskilling of employees, which is particularly important in the context of the twin transition; second, a four-day week provides more space for care responsibilities, which will become increasingly important in the wider context of demographic change, and for a more gender-balanced division of care work; and third, a four-day week is more in line with the values of the younger generation, which attaches much greater importance to a better work-life balance. A day less work means more time for recreation and frees up space for other activities such as training, care responsibilities, volunteer work and leisure activities. This is consistent with the finding that, given the choice between a pay rise and extra time off, most employees choose the latter.

The first precondition therefore, is that introducing a four-day week is based on striking a balance between employers' interest in increasing productivity and the employees' interest in better living and working conditions through shorter working hours and more control over their own working time arrangements. Strong involvement of trade unions and democratically elected company-level employee representation structures in designing and implementing the four-day week is essential to strike this balance.

The second precondition is that the introduction of the four-day week be linked to a meaningful reduction of working time, ideally to 32 hours a week. Otherwise, as the Belgian example illustrates, the four-day week will lead to work intensification, which is at odds with its original intention from an employee's point of view.

As Figures 6–12 illustrate, working hours within the same country vary across the industries organised by industriAll affiliates, and even more across the whole economy. This means that there are different starting points for introducing the four-day week. It is, for instance, much easier to introduce a four-day week with 32 hours if the starting point is a 35-hour week. In many industries and countries, however, the 40-hour week is still the norm. In these cases, it might be easier to pursue a staged process, with a reduction to 35 or 36 hours as an intermediate step on the way to realising a 32-hour week as a more long-term objective. This would take into account an important lesson from the trials, namely that companies need

some time to prepare for the introduction of the four-day week and to adapt their work organisation.

This leads to the third precondition: leaving room for flexible solutions. There is no one best way or a ‘one-size-fits-all’ solution. This means that even if a 32-hour week is introduced, there will be different models, depending on industry- and company-specific conditions. Despite its limited scope and coverage, this is one of the important lessons learned from the UK trial. There were a whole range of types of four-day week (Lewis et al. 2023: 20/21): the most simple type was the ‘fifth day stoppage’, which means that the company shut down operations for one additional day. In many cases, this is not possible, either technically because of the nature of the production process or because services need to be provided at all times, as in hospitals and care homes. In these cases, a more complex solution needs to be found involving a reorganisation of work processes and company-specific shift patterns. In yet other cases in which business is highly seasonal the solution could be to introduce the 32-hour week on an annual basis, which means that staff work a 32-hour average week calculated over a year. Every four-day week looks different, but the crucial factor is that the rules regulating the introduction of the four-day week, whether in the form of legislation or collective agreements, need to leave room to allow for industry- and company-specific arrangements to be negotiated by management and trade unions and/or democratically elected employee representation structures.

This room for flexibility should also involve a choice for the employees concerning whether they want to opt for a four-day week or stay with the existing model. This would depend on their preferences, which in turn depend on individual life circumstances. This would combine optional models and working time reduction schemes, increasing employees’ control over their working time arrangements. This would, however, also increase the need for coordination both internally as regards the scheduling of working hours as well as externally as regards customer relations (Gomes 2021).

The fourth precondition is that the four-day week is introduced without loss of pay. This is probably the most controversial precondition. From an employee perspective – but also from a broader societal perspective – this is first and foremost a question of equal opportunities. A working time reduction with a proportional wage cut means that the introduction of the four-day week remains a privilege of well-paid employees who can buy themselves a better work–life balance and relief from work because they can afford it. A working time reduction with full pay would also benefit employees in jobs involving hard physical and very often low-paid work. Another reason for making retention of full pay a precondition is the fact that it is possible. There is ample empirical evidence from the introduction of the five-day week in the more distant past, as well as from the more recent four-day week pilots which illustrates that employers have enough means at their disposal to introduce the four-day week in such a way that its productivity-enhancing and cost-saving effects (more than) compensate for the relative increase of wage costs.

5. Conclusion

The analysis has illustrated that working time reduction is an important tool for ensuring a just transition that is fair for all workers and provides for good quality jobs. The analysis of how things stand with regard to working time in manufacturing, however, also illustrates the great diversity of conditions across countries. This creates very different starting positions for the formulation of working time reduction policies and their implementation. In a nutshell, these differences can be summarised as follows: from a geographical perspective, almost 20 years after the first round of EU accession of central and eastern European countries, there is still a clear east–west divide. Normal actual working hours in the manufacturing sector tend to be considerably longer in these countries than in western European countries. This is closely linked to the fact that in central and eastern Europe, legislation still is the dominant mode of regulating working time, whereas in western European countries collective bargaining is much more important. The comparison of statutory maximum working hours and collectively agreed working hours illustrates that collective agreements lead to considerably fewer weekly working hours. Collective agreements not only provide for a shorter working week but also ensure more days of paid annual leave, which in turn helps to reduce annual working time. As a consequence of the combined effect of longer weekly working hours and the lack of additional collective agreed days of paid annual leave annual working hours are much longer in central and eastern European countries than in western Europe.

From a sectoral perspective, analysis of the current state of play illustrates that, with regard to the regulatory regime, collective agreements tend to play a more important role in manufacturing than in the economy as whole and that, furthermore, collectively agreed working time in the metal and chemical industries tends to be shorter than in the rest of the economy. The analysis also showed, however, that in 2018 normal actual weekly working time in the metal and chemical industries was on average more than 2.5 hours longer than collectively agreed working hours.

All these differences across countries and industries shape the approach of industriAll's national affiliates to a future working time policy more generally and working time reduction more specifically. The industriAll survey among its affiliates' collective bargaining experts, however, highlights two main political priorities for a future working time policy which are shared by most organisations and their members, irrespective of the existing working time situation in the respective country. These are, first, a reduction in working time at full pay, and second, an increase in employees' control and autonomy in determining their working time

arrangements. The latter refers not only to the planning of their weekly working time but also to the design of more flexible working time arrangements from a working-life perspective, which take into account the different needs linked to different life phases.

What does all this mean for the formulation of a future-oriented working time policy in the manufacturing sector in light of the big challenges resulting from the twin digital and green transitions? First and foremost this means that there is no one best way and that any working time policy needs to offer flexible solutions combining different tools for shortening working time, such as optional models and the four-day week, with tools for making working time arrangements more flexible, such as flexitime and different models of working time accounts. These tools should not be thought of as mutually exclusive, but as complementary. The need for flexible solutions also means that, depending on specific conditions in the industry and the company, every model of collective working time reduction will look a little bit different. In this context the analysis has illustrated that if certain conditions are met the four-day week can be one promising model for ensuring a just transition in terms of safeguarding employment and ensuring good working conditions. The benefits of the four-day week do not fall from the sky, however. Realising them in the manufacturing sector requires serious reorganisation of internal work processes to ensure that the interests of employers and those of employees are taken into account equally. If the two sides manage this, the four-day week can provide a win–win situation. Let us therefore get to work on it, with Friday on our minds.

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