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EUROPEAN TRADE UNION

Wages and collective bargaining during the European economic crisis

Developments in European manufacturing industry

...

Les salaires et les négociations collectives durant la crise économique européenne

Evolutions dans l'industrie manufacturière européenne

...

Entgelte und Tarifpolitik in Zeiten der europäischen Wirtschaftskrise

Entwicklungen in der europäischen Fertigungsindustrie

Report - Rapport - Bericht

Collective Bargaining
and Social Policy Conference
Vienna, 12-13 June 2014

Thorsten Schulten (WSI) and Torsten Müller (ETUI) · Düsseldorf/Brussels, March 2014

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Preface

When we – the Select Working Party of the Collective Bargaining and Social Policy Committee and the Committee itself – began preparation of the first industriAll European Trade Union Conference on Collective Bargaining and Social Policy, we knew that the main topic for debate at the Conference was going to be the ongoing crisis and the effects that this is having on collective bargaining results as well as collective bargaining structures in all our countries.

From the very start, we wanted to have our own overview of what was going on, based on our own experiences - the results of which you can also find, by the way, in two reports included in the Conference documentation: "Tendencies in Collective Bargaining and Social Policy over the last few years" and "Collective Bargaining Strategies in the Ongoing Crisis".

However, we also wanted to have a more scientific and in-depth analysis of the situation in our sectors, including the medium-term trends in wages, working time, employment, etc. In short, a substantial and effective study, supportive of our ideas and concrete demands, because we need such an analysis to effectively come up with trade union responses.

We need these responses because this crisis is without any doubt the worst crisis since the 1930s, and it continues to have a ripple effect throughout Europe. The direct impact on our sectors has in some cases been devastating, and the end of the tunnel is unfortunately not yet in sight. Moreover, this crisis has been misused by the European Commission, national governments, and not least by many employers, to implement neo-liberal policies aimed at lowering wages and social benefits and at weakening the position of trade unions.

And the study clearly shows these effects. Collective bargaining structures are under pressure everywhere and, in some cases, are even being dismantled. The research also clearly demonstrates that overall wages in Europe did not really increase over the past few years. And, last but not least in importance, is that it poses the question as to how trade unions can return once more to the offensive, and how and what we can do to achieve more solidarity and cooperation in relation to collective bargaining policy.

The choice for the authors of this study was logical: Thorsten Schulten (WSI) and Torsten Müller (ETUI) are both very well-known for their prior publications in this domain. We were therefore also very pleased that they agreed to produce this study for us, a study which I am sure is going to be of great help in our work and our activities.

May 2014

Bart Samyn
Deputy General Secretary
IndustriAll Europe

Introduction

Since 2008, Europe has been affected by the deepest crisis since the 1930s. This has had a far-reaching impact on the economic and social situation of millions of European workers. The most obvious impact has been the dramatic increase in mass unemployment. Today, there are more than 26 million unemployed people in the European Union (EU). It has been European manufacturing industry, in particular, which has suffered most from the crisis. Between 2008 and 2011, the number of manufacturing workers in the EU was reduced by more than 3 million. More than two-thirds of them came from the industries and sectors which are represented by the affiliates of industriAll Europe.

Immediately after the outbreak of the crisis, many European countries pursued a more expansionary policy which prevented unemployment from becoming even higher. After a short period, however, there was a sharp shift towards austerity policies. The crisis, which is fundamentally rooted in a totally deregulated financial market system, as well as in the economic consequences of growing inequality in Europe, was reinterpreted as a 'debt crisis' and 'crisis of competitiveness'. Accordingly, the policy focus was shifted to cuts in public spending and to so-called 'structural reforms' of the labour market. Moreover, as part of the EU crisis management, a new form of European economic governance has been developed, which aims at a much closer coordination of economic policy at European level. As wage policy and collective bargaining are seen as a core issue to regain competitiveness, this new European governance mechanism is used to justify far-reaching interventions in wage policy in many countries.

The economic crisis and the dominant political crisis-management strategies have had a major impact on both current wage developments and on the development of collective bargaining systems in Europe. In many countries, increasing unemployment has furthermore led to a significant weakening of trade union bargaining power. However, there are also important national differences: some countries have been much more affected by the crisis than others. For example, the hard-hit countries in southern Europe saw major interventions in their bargaining systems often leading to a radical decentralisation of collective bargaining with a sharply decreasing bargaining coverage. Other less affected countries in northern Europe managed to find more innovative forms of dealing with the crisis in collective bargaining, for instance through the conclusion of agreements on short-time working schemes. But even these countries also saw classical forms of concession bargaining, whereby workers agreed to wage freezes or wage cuts in exchange for fixed-term job security.

The aim of this study is to analyse the impact of the crisis on wage developments and collective bargaining in European manufacturing industry. It is divided into two main parts. The first part includes a quantitative analysis of the development of employment, working hours and wages for the period 2000 to 2011. It also contains an evaluation of more detailed data for some major

sub-sectors within manufacturing industry covering the more recent crisis period from 2008 to 2011. As the first part draws mainly on official data provided by Eurostat, it has some limitations stemming from the limited availability and coverage of Eurostat data. Therefore, not all sub-sectors and activities represented by industriAll Europe could be considered in this study.

The second part of this study deals with the area of collective bargaining. First, it evaluates the existing data on collectively-agreed wages, which is however very limited since there is still no official database providing comparable data at European level. The second part, furthermore, contains a more qualitative analysis of the main trends and changes with regard to the collective bargaining systems and levels for various regional clusters in Europe. Finally, there is a short evaluation of crisis-induced, company-level employment pacts in the European automotive industry, which demonstrates by way of example that despite remaining national differences there is also a spread of certain forms of concession bargaining across countries. The final section summarizes the key tendencies.

The study was jointly conducted by the European Trade Union Institute (ETUI) and the German Wirtschafts- und Sozialwissenschaftliches Institut (WSI), which is part of the Hans Böckler Foundation, on behalf of industriAll Europe. We would like to thank Magdalena Bernaciak from the ETUI for writing the sub-section on recent developments in Central and Eastern European countries. We also thank Jim Weekers from Radboud University in Nijmegen in the Netherlands, who is currently doing an internship at the ETUI, for his help in gathering and processing data.

Brussels/Düsseldorf March 2014

1 Quantitative developments: employment, working hours and wages in industriAll Europe sectors

1.1 Preliminary remarks on methodology and data

In this chapter we exclusively use data from the national accounts provided by Eurostat[1]. In contrast to other wage statistics, which usually have only data for the whole manufacturing sector, Eurostat's national accounts also provide sector-specific data on employment, working hours and wages at a two-digit basis for a range of sub-sectors within manufacturing. In this chapter we consider the following sectors:

- Textiles (NACE C 13-15) (including textiles, wearing apparel, leather and related products)
- Chemicals (NACE C20)
- Pharmaceutical products (NACE C 21)
- Rubber, plastic and other non-metallic minerals (NACE C 22-23)
- Basic metals and fabricated metal products (NACE C 24-25)
- Computer, electronic and optical products (NACE C26)
- Electrical equipment (NACE C27)
- Machinery and equipment (NACE C28)
- Automotive industry (NACE C29-30)

In addition to that, we define three more aggregate sectors:

- Chemicals and related industries (NACE C20-23)
- Metalworking (NACE C24-30)
- All industriAll Europe sectors (NACE C13-15 and C20-30)

The data provided under the "industriAll Europe sector" aggregate is only an estimate and should not be considered as an exact figure for all economic activities covered by industriAll Europe. First of all, there is the more general problem that the sectoral coverage of trade unions affiliated to industriAll Europe does not usually fit exactly with the sectoral classification of official statistics – in this particular case the NACE codes.

While the national accounts have the advantage of providing relatively detailed sectoral data for various branches of manufacturing industry, they have the disadvantage of providing this data with a certain time lag. At the time of writing (March 2014), the Eurostat database provides a relatively broad coverage of sectoral data on employment and wages until 2011 only. Moreover,

[1] The Eurostat database on national accounts is available on the internet at the following address: http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/database

for some countries the data is rather sketchy and for certain countries such as Croatia, Malta and Sweden, as well as non-EU countries, there is no data available at all from Eurostat. At an aggregate level, we therefore exclusively refer to data on the European Union (EU 27).

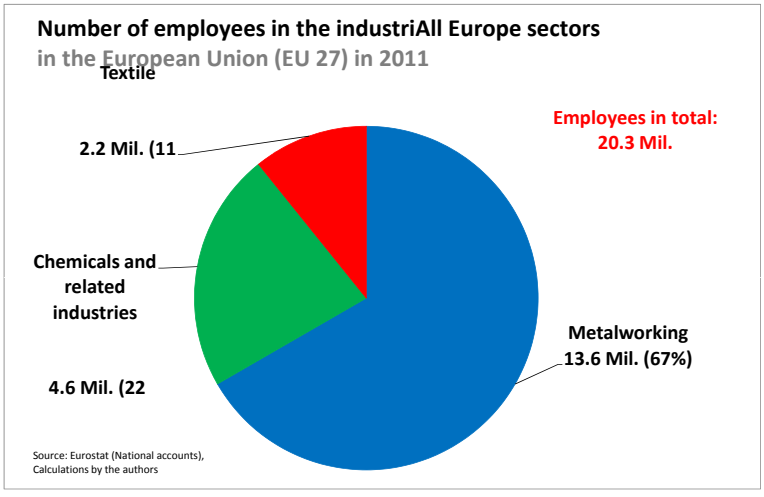
All wage data used in this chapter refers to "real" or "effective" wages in contrast to "collectively-agreed wages", which we will discuss in the second part of this report. Since the Eurostat database only provides data on the overall wage sum and on the overall number of working hours, we have calculated the data for wages per hour ourselves.

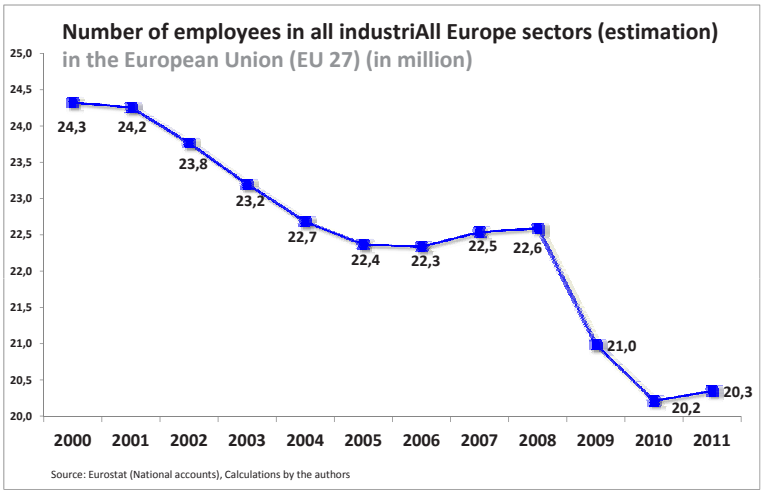
1.2 Overview of industriAll Europe sectors

Employees

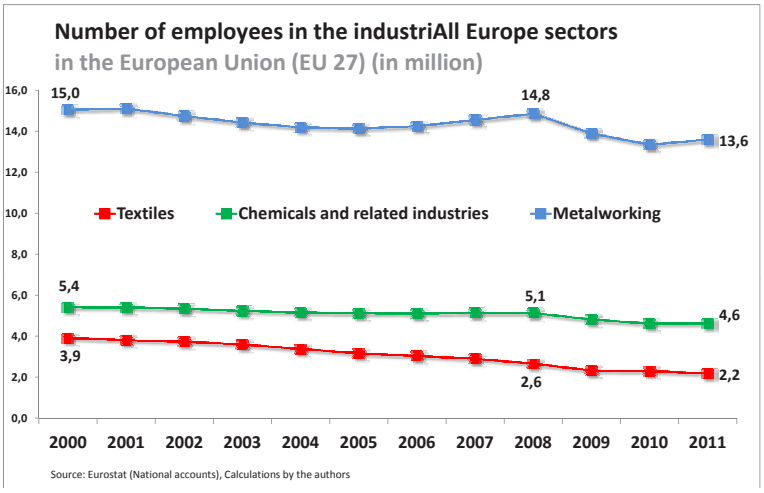
In 2011, approximately 20 million people in the EU 27 were employed in the industriAll Europe sectors concerned. About two-thirds of them (13.6 million) worked in the metalworking and related industries. More than 22 % (4.6 million) worked in the chemical and related industries, and a further 11% (2.2 million) worked in the textile industry.

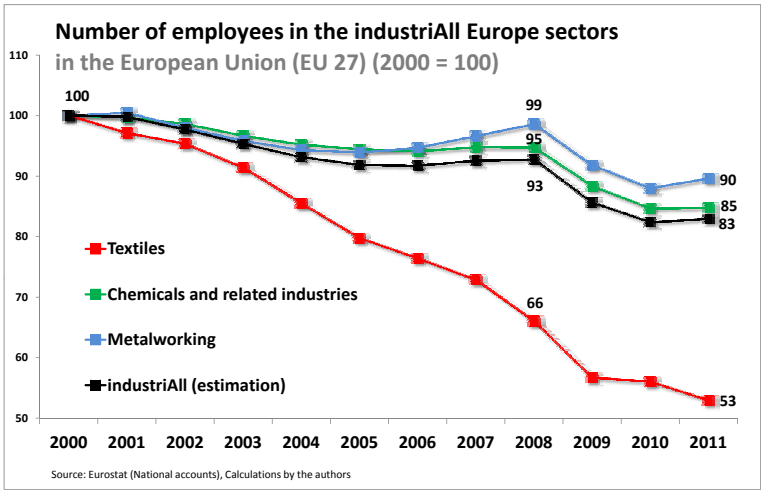
During the last decade, about 4 million jobs were lost in these industriAll Europe sectors in the EU 27, which corresponds to a decline of around 17%. The overall number of employees in these sectors decreased from 24.3 million in 2000 to 20.3 million in 2011. Half of that decline took place in the first half of the 2000s, while there was another sharp decrease in the late 2000s, after the economic crisis kicked in, with a loss of another 2.4 million jobs in 2009 and 2010.



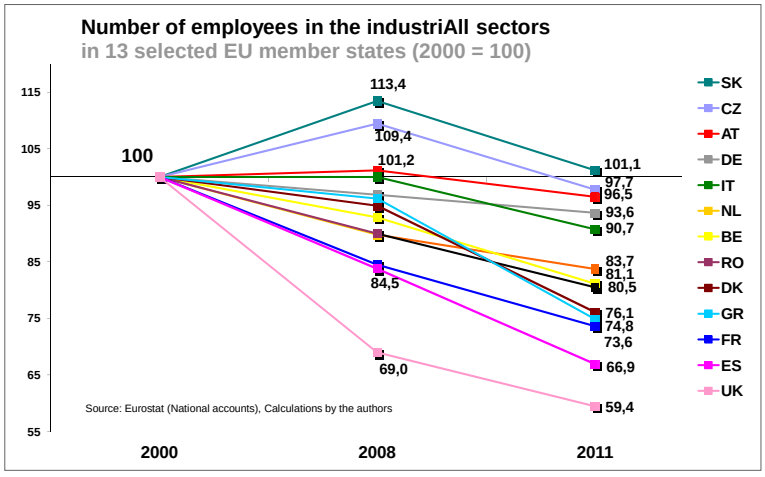


Among the industriAll Europe manufacturing sectors, the sharpest decline in employment took place in the textile industry, where the number of employees dropped by 47% from 3.9 million employees in the year 2000 to 2.2 million in 2011. By contrast, the number of employees in the chemicals and related industries, as well as the metalworking sector, remained relatively stable between 2000 and 2008, with a slight decline in the first half of the 2000s and a small increase in the second half of the 2000s. However, since the crisis started in 2008, both sectors witnessed a significant decline in employment in 2009 and 2010, followed by only a slight recovery in 2011. All in all, the total number of employees in metalworking in 2011 was 10% lower than in 2000. In the chemical and related industries sector, the number of employees in 2011 was even 15% lower than it had been in 2000.





There are also significant national differences in the development of employment in the industriAll Europe sectors. The analysis of developments in 13 EU Member States yields that more than two-thirds (9 countries) already saw a decline in employment in the pre-crisis period 2000-2008. The by far strongest decline took place in the UK where the number of employees in the industriAll Europe sectors dropped by 31%. While in Austria and Italy employment during the pre-crisis period remained roughly stable, the two exceptions to the more general trend of declining or stagnating employment figures are the Czech Republic and Slovakia with an increase in employment of more than 9% or even more than 13% respectively.

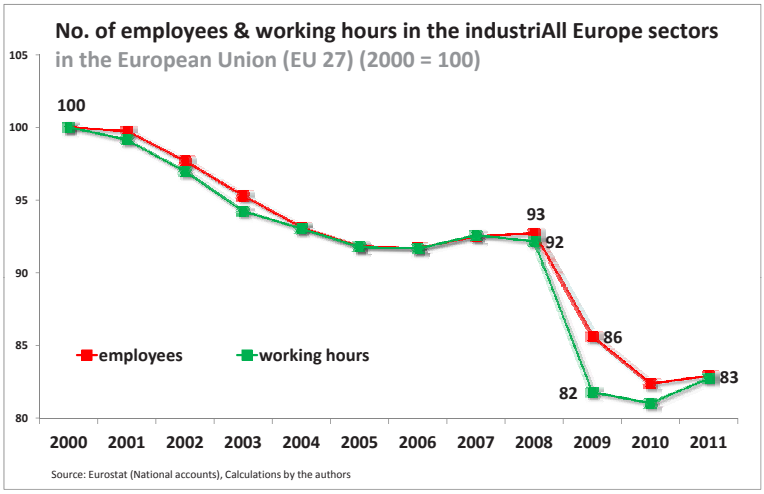


After the beginning of the crisis in 2008, all EU countries covered here were faced with a more or less significant decline in employment. In 2011, with the exception of Slovakia, employment

levels in all countries were below the level of the year 2000. The sharpest decline took place in the UK, followed by Spain, France, Greece and Denmark. Moderate decreases of less than 10% could be observed in the Czech Republic, Austria, Germany and Italy only.

Working hours

The development of working hours in the industriAll Europe sectors shows a very similar trend to that of the development of employees, which indicates that there were no major changes in working time arrangements. The exception was the year 2009 in which the number of working hours decreased much faster than the number of employees because of the crisis. This is due to the fact that the use of short-term work and other forms of temporary working time reduction became a crucial element of the crisis management in many countries.



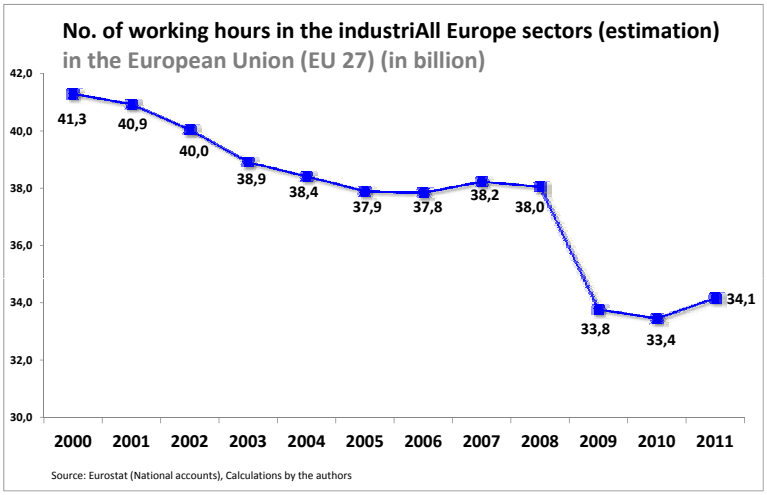
In 2009, the number of employees in the industriAll Europe sectors decreased by about 7%, while the number of working hours decreased by more than 11%. The use of working time reduction was particularity widespread in the European automotive industry where the number of working hours decreased more than twice as fast as the number of employees. In 2011, however, the number of working hours rose again, indicating that most of the working time reductions had been solely of a temporary nature.

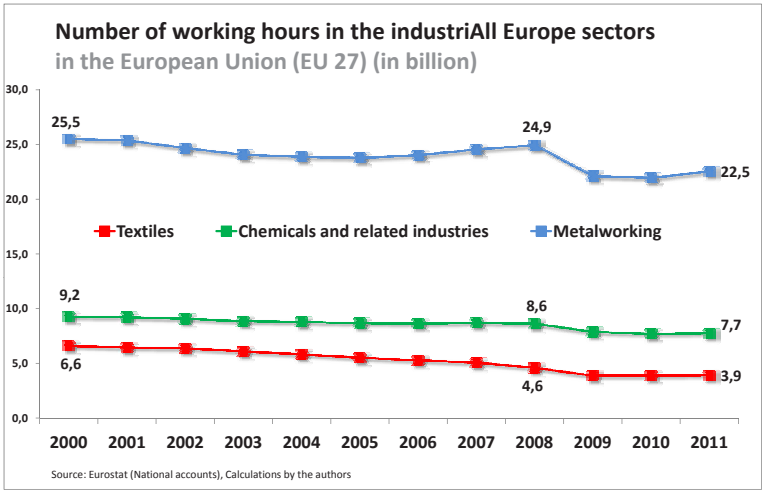
Overall, the number of working hours in the industriAll Europe sectors decreased by more than 7 billion hours or 17% between 2000 and 2011 .The strongest fall was in the textile industry (-41%), followed by chemicals and related industries (minus 16%) and metalworking (-12%).

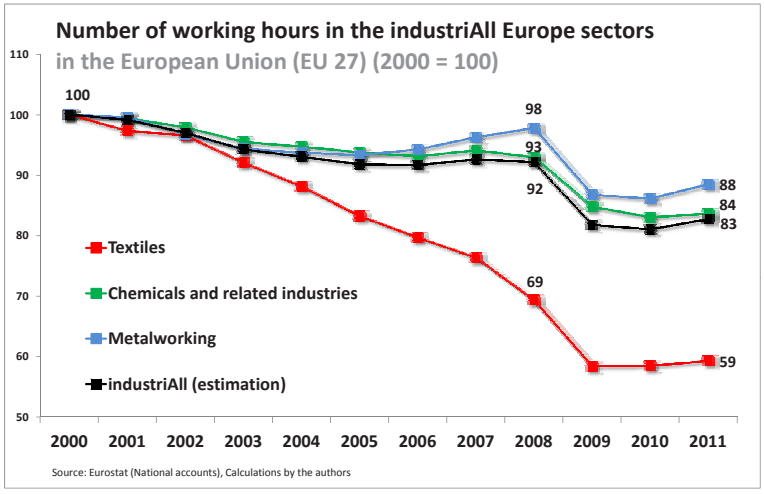
Change of employment and working hours in the crisis year of 2009
(in % compared to 2008)

	Employees	Working hours
Textiles	**-12.4**	**-15.8**
Chemicals and related industries	**-6.3**	**-8.8**
• Chemicals	-4.9	-6.5
• Pharmaceutical products	-1.3	-0.2
• Rubber and plastic products	-7.9	-11.3
Metalworking	-6.5	-11.3
• Basic metals and fabricated metal products	-7.0	-12.1
• Computer, electronic and optical products	-8.5	-11.5
• Electrical equipment	-7.9	-11.4
• Machinery and equipment	-6.0	-11.5
• Automotive industry	-4.3	-9.5
industriAll Europe (estimation)	**-7.1**	**-11.3**
Manufacturing	-6.3	-9.7
Total Economy	-1.9	-3.5

Source: Eurostat (national accounts), Calculations by the authors



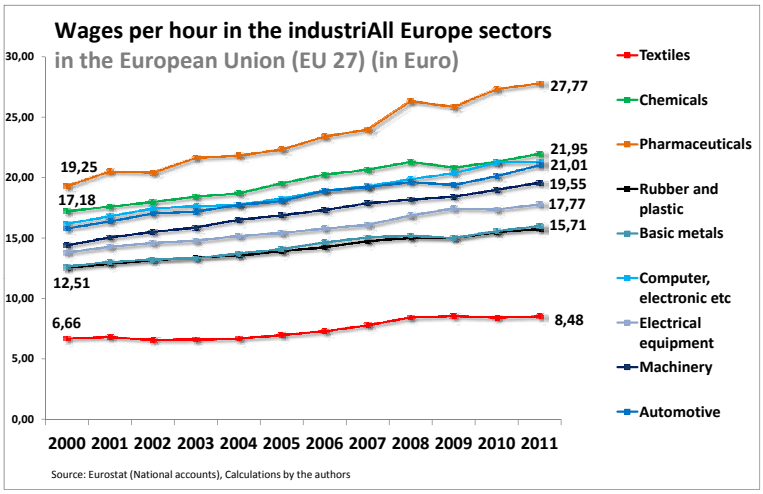




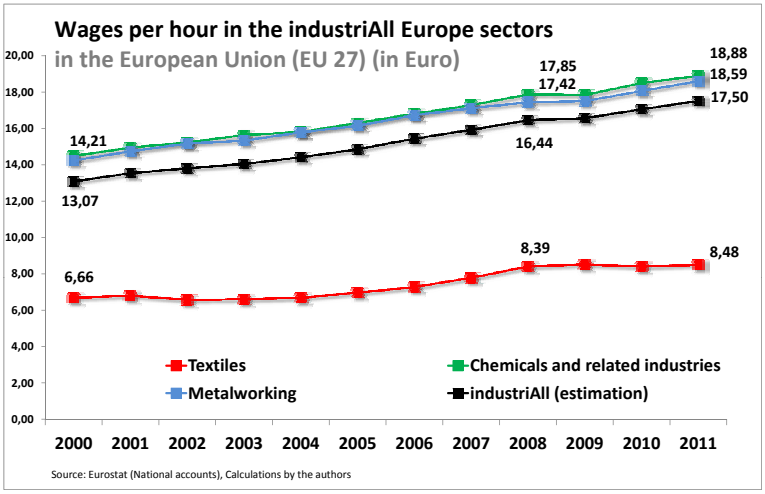
Wages

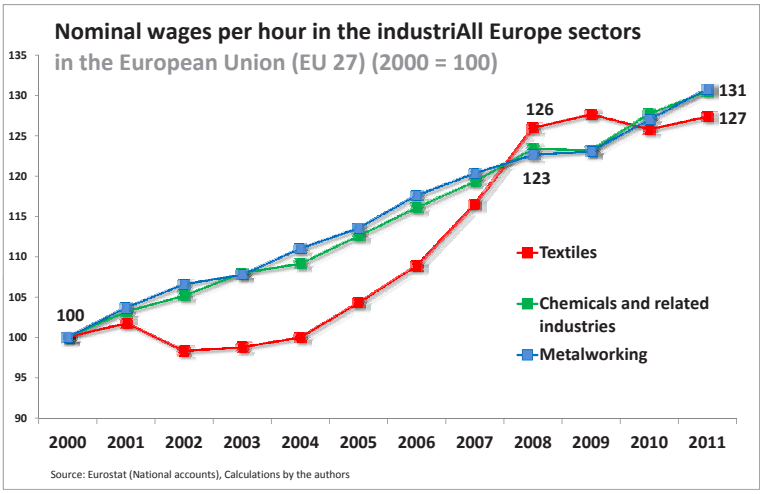
In 2011, the average hourly wage in the industriAll Europe sectors was 17.50€. The highest wages were paid in the pharmaceutical industry (27.77€), followed by chemicals (21.95€), computer and electronic products (21.27€) and the automotive industry (21.01€). The lowest wages by far were paid in the textile industry, with an average wage per hour of merely 8.48€. However, the differences in sectoral wages also reflect to a large extent the differing importance of sectors within the various European countries, whereby the high-wage sectors are more concentrated in the high-wage countries and vice versa[2].

[2] For the different national wage levels in the various sectors see the sectoral studies below.

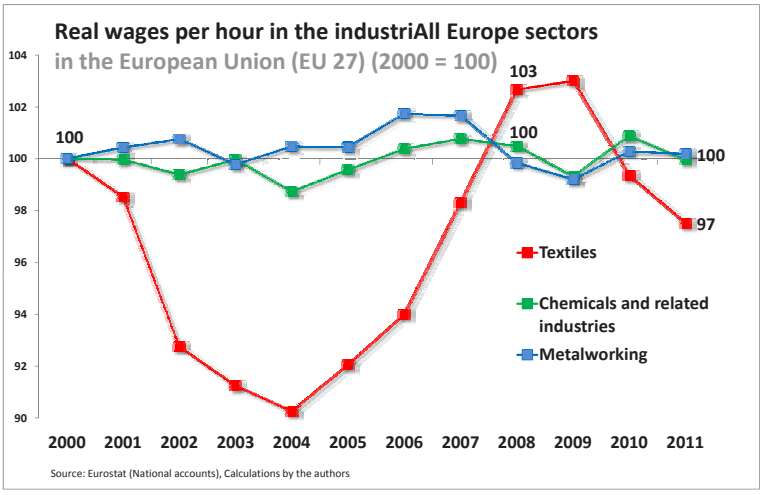


Since 2000, there has been a steady growth of nominal average wages in the industriAll Europe sectors, which continued even in the crisis year of 2009. Between 2000 and 2011, the average hourly "industriAll Europe wage" grew by 4.43€ or 34%. Over the last decade, the nominal wages increased in both metalworking and chemicals and related industries by about the same rate of 31%, while in the textile industry wage growth was slightly weaker at 27%.



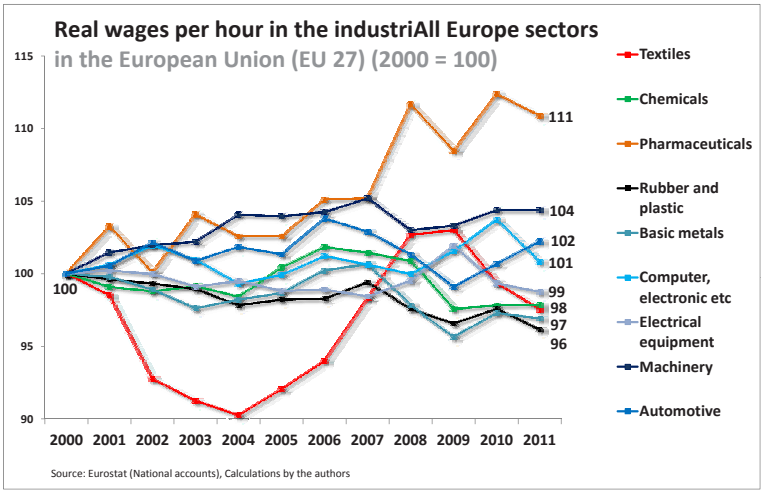


Adjusted for consumer price developments, average real wages in European metalworking, as well as in chemicals and related industries, almost stagnated – whereby the slight increase in the second half of the 2000s was offset by a decrease in the years 2008 and 2009. Developments in the European textile industry were more diverse. The sharp decrease in real wages during the first half of the 2000s was followed by a relatively strong increase in the second half of the 2000s. However, real wages in textiles then started to decrease again starting with the crisis year 2009. All in all, the average real wage level in 2011 was 3% below the real wage level of the year 2000.

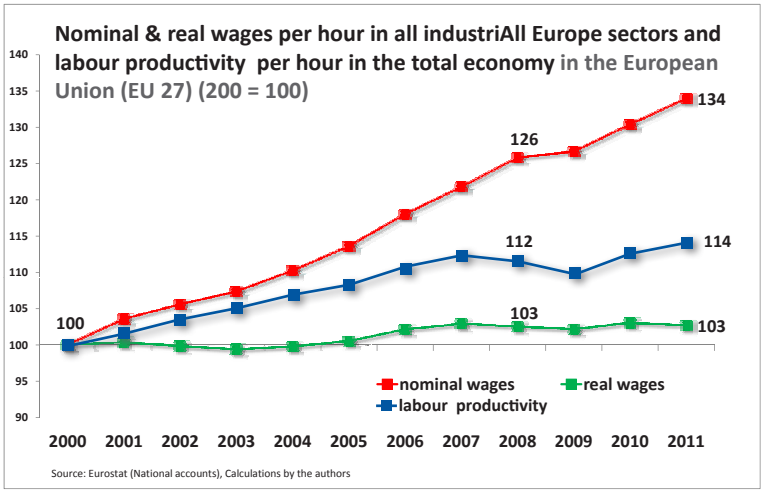


A closer look at developments within the various European manufacturing sub-sectors, shows that real wage levels in most sectors in 2011 were either slightly below or above the real wage

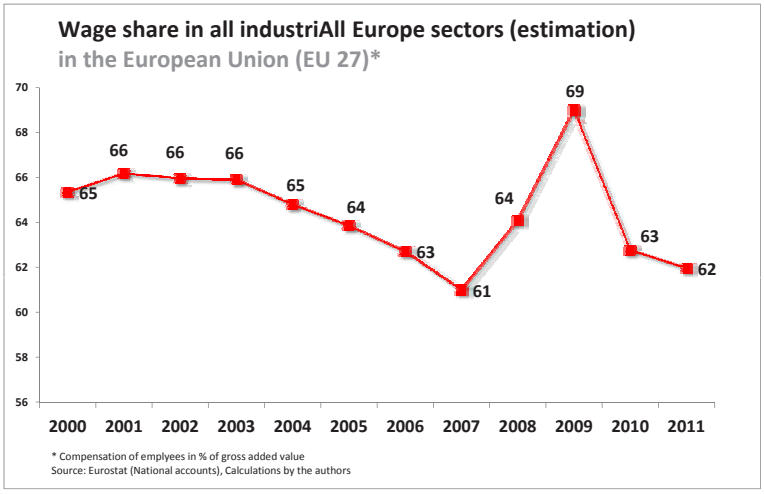
levels of the year 2000. One remarkable exception is the pharmaceutical industry, which was the only sector within industriAll Europe which saw a significant increase in real wages during the last decade.



To sum up, the overall wage developments in the industriAll Europe sectors since the year 2000 showed a continuous increase in nominal wages, but a somewhat stagnating development in real wages. In any case, according to Eurostat data, real wages were not able to match overall developments in productivity.



Taking into account not only wages but also the total compensation of employees (including all other labour costs except wages) the industriAll Europe sector witnessed a continuous decline of the wage share (i.e. the proportion of labour income in overall income) during the last decade. This was only temporarily interrupted in the crisis years 2008 and 2009 due to a sharp decrease in the overall income in that sector.



Employees

Number of employees in the industriAll Europe sectors in the European Union (EU 27), in millions

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Textiles	**3.9**	**3.8**	**3.7**	**3.6**	**3.4**	**3.1**	**3.0**	**2.9**	**2.6**	**2.3**	**2.3**	**2.2**
Chemicals and related industries	**5.4**	**5.4**	**5.3**	**5.2**	**5.1**	**5.1**	**5.1**	**5.1**	**5.1**	**4.8**	**4.6**	**4.6**
Chemicals	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.2	1.2
Pharmaceutical products	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Rubber and plastic products	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.0	2.8	2.8
Metalworking	**15.0**	**15.1**	**14.7**	**14.4**	**14.2**	**14.1**	**14.2**	**14.5**	**14.8**	**13.9**	**13.3**	**13.6**
Basic metals and fabricated metal products	5.1	5.1	5.0	5.0	4.9	4.9	4.9	5.1	5.2	4.8	4.6	4.7
Computer, electronic and optical products	1.8	1.8	1.7	1.6	1.6	1.5	1.5	1.6	1.5	1.4	1.3	1.4
Electrical equipment	1.7	1.7	1.6	1.6	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.5
Machinery and equipment	3.2	3.2	3.1	3.1	3.0	3.0	3.0	3.1	3.3	3.1	3.0	3.0
Automotive industry	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.0	3.1
industriAll Europe (estimation)	**24.3**	**24.2**	**23.8**	**23.2**	**22.7**	**22.4**	**22.3**	**22.5**	**22.6**	**21.0**	**20.2**	**20.3**
Manufacturing	35.3	35.2	34.7	34.0	33.5	33.0	32.9	33.1	33.2	31.2	30.0	30.1
Total Economy	176.5	178.4	179.4	180.0	181.1	183.4	186.9	190.7	193.1	189.4	188.2	189.0

Source: Eurostat (National accounts), Calculations of the authors

Employees

Number of employees in the industriAll Europe sectors in the European Union (EU 27), in % compared to the previous year

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Textiles	**-2.8**	**-1.8**	**-4.0**	**-6.0**	**-6.3**	**-4.0**	**-4.4**	**-8.6**	**-12.4**	**-1.1**	**-5.2**
Chemicals and related industries	**-0.4**	**-1.0**	**-2.0**	**-1.5**	**-0.8**	**-0.3**	**0.7**	**0.0**	**-6.3**	**-4.0**	**0.1**
Chemicals	-1.5	-0.8	-2.1	-3.5	-1.7	-1.2	0.1	-0.8	-4.9	-3.2	-0.6
Pharmaceutical products	1.5	1.2	-0.1	-1.3	0.8	0.3	1.2	-0.4	-1.3	2.1	-0.2
Rubber and plastic products	-0.2	-1.5	-2.2	-0.6	-0.6	-0.1	0.9	0.3	-7.9	-5.6	0.5
Metalworking	**0.4**	**-2.4**	**-2.1**	**-1.6**	**-0.4**	**0.8**	**2.1**	**2.1**	**-6.5**	**-4.0**	**1.9**
Basic metals and fabricated metal products	0.6	-1.6	-1.0	-1.6	0.1	0.9	2.9	2.4	-7.0	-4.5	1.2
Computer, electronic and optical products	0.6	-5.2	-5.4	-1.2	-1.2	-0.5	1.4	-1.4	-8.5	-4.8	1.6
Electrical equipment	0.3	-3.7	-2.9	-1.3	-0.9	1.8	0.6	2.4	-7.9	-0.5	-0.2
Machinery and equipment	0.7	-3.1	-1.3	-2.8	-0.6	1.8	3.2	4.8	-6.0	-4.7	2.5
Automotive industry	-0.1	-0.9	-2.6	-0.6	-0.5	-0.1	0.8	0.5	-4.3	-3.8	3.6
industriAll Europe (estimation)	**-0.3**	**-2.0**	**-2.4**	**-2.2**	**-1.4**	**-0.1**	**0.9**	**0.2**	**-7.1**	**-3.7**	**0.7**
Manufacturing	-0.4	-1.3	-2.1	-1.3	-1.4	-0.2	0.4	0.4	-6.3	-3.8	0.5
Total Economy	1.1	0.5	0.3	0.6	1.3	1.9	2.1	1.2	-1.9	-0.6	0.4

Source: Eurostat (National accounts), Calculations of the authors

Working hours

Number of working hours in the industriAll Europe sectors in the European Union (EU 27), in billions

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Textiles	**6.6**	**6.4**	**6.4**	**6.1**	**5.8**	**5.5**	**5.2**	**5.0**	**4.6**	**3.8**	**3.8**	**3.9**
Chemicals and related industries	**9.2**	**9.2**	**9.0**	**8.8**	**8.8**	**8.7**	**8.6**	**8.7**	**8.6**	**7.8**	**7.7**	**7.7**
Chemicals	2.5	2.5	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.1	2.0	2.1
Pharmaceutical products	0.9	1.0	1.0	1.0	0.9	1.0	0.9	1.0	0.9	0.9	1.0	1.0
Rubber and plastic products	5.8	5.7	5.6	5.5	5.5	5.4	5.4	5.5	5.4	4.8	4.7	4.7
Metalworking	**25.5**	**25.3**	**24.6**	**24.0**	**23.9**	**23.7**	**24.0**	**24.5**	**24.9**	**22.1**	**21.9**	**22.5**
Basic metals and fabricated metal products	8.7	8.7	8.5	8.4	8.3	8.3	8.4	8.7	8.9	7.8	7.7	7.9
Computer, electronic and optical products	2.8	2.8	2.6	2.5	2.5	2.5	2.4	2.5	2.4	2.2	2.1	2.1
Electrical equipment	2.8	2.8	2.7	2.6	2.6	2.5	2.6	2.6	2.6	2.3	2.4	2.5
Machinery and equipment	5.5	5.5	5.3	5.2	5.2	5.1	5.2	5.4	5.6	5.0	4.9	5.1
Automotive industry	5.6	5.5	5.5	5.3	5.3	5.3	5.3	5.4	5.3	4.8	4.8	4.9
industriAll Europe (estimation)	**41.3**	**40.9**	**40.0**	**38.9**	**38.4**	**37.9**	**37.8**	**38.2**	**38.0**	**33.8**	**33.4**	**34.1**
Manufacturing	60.4	59.7	58.5	57.1	56.6	55.8	55.6	56.0	55.9	50.5	49.6	50.3
Total Economy	286.9	288.2	287.5	287.2	290.0	293.2	297.9	304.4	308.2	297.4	296.8	298.9

Source: Eurostat (National accounts), Calculations of the authors

Working hours

Number of working hours in the industriAll Europe sectors in the European Union (EU 27), in % compared to the previous year

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Textiles	**-2.7**	**-0.8**	**-4.7**	**-4.3**	**-5.6**	**-4.3**	**-4.2**	**-9.2**	**-15.8**	**0.2**	**1.4**
Chemicals and related industries	**-0.6**	**-1.5**	**-2.4**	**-0.8**	**-1.0**	**-0.7**	**1.1**	**-1.2**	**-8.8**	**-2.0**	**0.7**
Chemicals	-1.2	-1.9	-2.3	-2.5	-2.6	-0.9	0.1	-2.0	-6.5	-1.3	1.9
Pharmaceutical products	1.1	1.3	-1.0	-1.2	1.3	-0.9	0.7	-0.9	-0.2	1.2	0.4
Rubber and plastic products	-0.6	-1.9	-2.7	0.0	-0.7	-0.6	1.5	-1.0	-11.3	-3.0	0.3
Metalworking	**-0.5**	**-2.8**	**-2.5**	**-0.7**	**-0.4**	**1.0**	**2.1**	**1.6**	**-11.3**	**-0.7**	**2.8**
Basic metals and fabricated metal products	0.0	-2.1	-1.4	-0.7	-0.1	0.8	3.0	2.3	-12.1	-1.0	2.3
Computer, electronic and optical products	-0.7	-5.9	-5.4	-1.4	-0.3	-0.5	0.4	-0.3	-11.5	-3.3	1.2
Electrical equipment	-0.7	-3.3	-3.5	-0.8	-0.6	2.7	0.7	1.0	-11.4	2.7	2.2
Machinery and equipment	-0.1	-3.2	-1.8	-1.6	-0.8	2.1	3.4	4.1	-11.5	-1.1	3.9
Automotive industry	-1.4	-1.6	-2.9	0.6	-0.6	0.2	1.0	-0.9	-9.5	-0.4	3.2
industriAll Europe (estimation)	**-0.9**	**-2.2**	**-2.8**	**-1.3**	**-1.3**	**-0.1**	**1.0**	**-0.5**	**-11.3**	**-0.9**	**2.1**
Manufacturing	-1.0	-2.1	-2.4	-0.8	-1.4	-0.3	0.6	-0.1	-9.7	-1.7	1.3
Total Economy	0.4	-0.3	-0.1	1.0	1.1	1.6	2.2	1.3	-3.5	-0.2	0.7

Source: Eurostat (National accounts), Calculations of the authors

Wages per hour

Wages per hour in the industriAll Europe sectors in the European Union (EU 27), in Euro

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Textiles	**6.66**	**6.78**	**6.55**	**6.58**	**6.66**	**6.95**	**7.25**	**7.76**	**8.39**	**8.50**	**8.38**	**8.48**
Chemicals and related industries	**14.47**	**14.93**	**15.21**	**15.62**	**15.79**	**16.28**	**16.79**	**17.26**	**17.85**	**17.82**	**18.47**	**18.88**
Chemicals	17.18	17.57	17.96	18.40	18.69	19.50	20.22	20.63	21.28	20.79	21.28	21.95
Pharmaceutical products	19.25	20.49	20.37	21.61	21.80	22.30	23.37	23.94	26.30	25.81	27.28	27.77
Rubber and plastic products	12.51	12.85	13.14	13.36	13.52	13.89	14.21	14.72	14.99	14.99	15.46	15.71
Metalworking	**14.21**	**14.73**	**15.14**	**15.31**	**15.77**	**16.13**	**16.71**	**17.10**	**17.42**	**17.49**	**18.04**	**18.59**
Basic metals and fabricated metal products	12.61	12.99	13.20	13.30	13.69	14.07	14.62	15.03	15.16	14.98	15.55	15.97
Computer, electronic and optical products	16.16	16.78	17.42	17.61	17.73	18.24	18.90	19.24	19.84	20.34	21.21	21.27
Electrical equipment	13.79	14.26	14.58	14.76	15.15	15.40	15.77	16.07	16.84	17.42	17.34	17.77
Machinery and equipment	14.36	15.03	15.48	15.84	16.50	16.86	17.29	17.86	18.15	18.39	18.97	19.55
Automotive industry	15.76	16.35	17.02	17.16	17.72	18.04	18.90	19.18	19.60	19.36	20.08	21.01
industriAll Europe (estimation)	**13.07**	**13.53**	**13.80**	**14.02**	**14.40**	**14.84**	**15.42**	**15.91**	**16.44**	**16.54**	**17.03**	**17.50**
Manufacturing	12.67	13.12	13.41	13.59	13.92	14.34	14.87	15.39	15.73	15.81	16.35	16.78
Total Economy	12.81	13.33	13.77	13.87	14.24	14.60	15.08	15.58	15.67	15.72	16.13	16.42

Source: Eurostat (National accounts), Calculations of the authors

Wages per hour

Wages per hour in the industriAll Europe sectors in the European Union (EU 27), in % compared to the previous year

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Textiles	**1.7**	**-3.4**	**0.5**	**1.2**	**4.3**	**4.4**	**7.0**	**8.1**	**1.3**	**-1.4**	**1.2**
Chemicals and related industries	**3.2**	**1.9**	**2.7**	**1.1**	**3.2**	**3.1**	**2.8**	**3.4**	**-0.2**	**3.7**	**2.2**
Chemicals	2.3	2.2	2.5	1.6	4.4	3.7	2.0	3.1	-2.3	2.4	3.1
Pharmaceutical products	6.4	-0.6	6.1	0.8	2.3	4.8	2.5	9.8	-1.9	5.7	1.8
Rubber and plastic products	2.8	2.2	1.7	1.2	2.7	2.4	3.5	1.9	0.0	3.1	1.6
Metalworking	**3.6**	**2.8**	**1.1**	**3.0**	**2.3**	**3.6**	**2.3**	**1.9**	**0.4**	**3.2**	**3.0**
Basic metals and fabricated metal products	3.0	1.6	0.8	2.9	2.8	3.9	2.8	0.9	-1.2	3.8	2.7
Computer, electronic and optical products	3.8	3.8	1.1	0.7	2.9	3.6	1.8	3.1	2.6	4.2	0.3
Electrical equipment	3.4	2.3	1.2	2.7	1.6	2.4	1.9	4.8	3.4	-0.5	2.5
Machinery and equipment	4.6	3.0	2.3	4.1	2.2	2.6	3.3	1.6	1.3	3.1	3.1
Automotive industry	3.7	4.1	0.9	3.3	1.8	4.7	1.5	2.2	-1.2	3.7	4.6
industriAll Europe (estimation)	**3.5**	**2.0**	**1.7**	**2.7**	**3.0**	**3.9**	**3.2**	**3.3**	**0.6**	**3.0**	**2.7**
Manufacturing	3.6	2.2	1.3	2.4	3.0	3.7	3.5	2.2	0.5	3.4	2.6
Total Economy	4.1	3.3	0.8	2.7	2.5	3.3	3.3	0.6	0.3	2.7	1.8

Source: Eurostat (National accounts), Calculations of the authors

Wages per hour

Wages per hour in the industriAll Europe sectors in the European Union (EU 27), in % compared to the previous year*

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Textiles	**-1.5**	**-5.9**	**-1.6**	**-1.1**	**2.0**	**2.1**	**4.6**	**4.4**	**0.3**	**-3.5**	**-1.9**
Chemicals and related industries	**0.0**	**-0.6**	**0.6**	**-1.2**	**0.9**	**0.8**	**0.4**	**-0.3**	**-1.2**	**1.6**	**-0.9**
Chemicals	-0.9	-0.3	0.4	-0.7	2.1	1.4	-0.4	-0.6	-3.3	0.3	0.0
Pharmaceutical products	3.2	-3.1	4.0	-1.5	0.0	2.5	0.1	6.1	-2.9	3.6	-1.3
Rubber and plastic products	-0.4	-0.3	-0.4	-1.1	0.4	0.1	1.1	-1.8	-1.0	1.0	-1.5
Metalworking	**0.4**	**0.3**	**-1.0**	**0.7**	**0.0**	**1.3**	**-0.1**	**-1.8**	**-0.6**	**1.1**	**-0.1**
Basic metals and fabricated metal products	-0.2	-0.9	-1.3	0.6	0.5	1.6	0.4	-2.8	-2.2	1.7	-0.4
Computer, electronic and optical products	0.6	1.3	-1.0	-1.6	0.6	1.3	-0.6	-0.6	1.6	2.1	-2.8
Electrical equipment	0.2	-0.2	-0.9	0.4	-0.7	0.1	-0.5	1.1	2.4	-2.6	-0.6
Machinery and equipment	1.4	0.5	0.2	1.8	-0.1	0.3	0.9	-2.1	0.3	1.0	0.0
Automotive industry	0.5	1.6	-1.2	1.0	-0.5	2.4	-0.9	-1.5	-2.2	1.6	1.5
industriAll Europe (estimation)	**0.3**	**-0.5**	**-0.4**	**0.4**	**0.7**	**1.6**	**0.8**	**-0.4**	**-0.4**	**0.9**	**-0.4**
Manufacturing	0.4	-0.3	-0.8	0.1	0.7	1.4	1.1	-1.5	-0.5	1.3	-0.5
Total Economy	0.9	0.8	-1.3	0.4	0.2	1.0	0.9	-3.1	-0.7	0.6	-1.3

**deflated by the HICP*

Source: Eurostat (National accounts), Calculations of the authors

1.3 European Automotive Industry

Definition:

In the following, the automotive industry is defined as the "Manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment" (NACE Code C29-C30).

Main trends in employment:

- The economic crisis in Europe has led to a significant decline in employment in the European automotive industry. Between 2008 and 2011, the total number of employees decreased by approximately 150,000 or 4.7%. The low point was reached in 2010, while the European automotive workforce started to grow again in 2011.

- In 2011, there were still around 3 million workers in the European automotive industry. About one-third of them (965,000) work in Germany. A comparatively large number of employees also work in the automotive sector in Poland, France, Italy and the UK.

- Out of the 26 European countries for which data are available, 20 countries saw a decline in the number of automotive sector employees between 2008 and 2011, while in six countries the number of automotive workers increased.

- The sharpest decline in the number of automotive sector employees could be observed in Lithuania, which was faced by a drop of 46%, followed by Denmark (30%), Cyprus (25%) and Finland (31%)

- The strongest increase took place in Estonia where the number of workers grew by 24%, followed by Bulgaria (19%) and Hungary (17%).

Main trends in working hours:

- Between 2008 and 2011, the total number of working hours in the automotive industry in the European Union (EU 27) decreased by approximately 400 million (roughly 7%). The decline in working hours was much stronger than the decline in the overall number of employees due to a significant shortening of working time.

- In 2011, the total amount of hours worked in the European automotive industry was almost 5 billion. Of these, 1.4 billion hours were worked in Germany alone, followed by around 560 Million hours in Poland and 380 Million hours in France.

- Out of the 24 European countries for which data are available, 18 countries saw a decline in the number of working hours between 2008 and 2011, while the total amount of hours worked in the automotive industry increased in only 6 countries.

- The sharpest decline in the number of working hours could be observed in Lithuania, which was faced by a drop of 54%, followed by Denmark (32%) and Slovenia and Latvia (24% each)

- The strongest increase took place in Bulgaria, where the number of working hours grew by 17%, followed by Ireland (12%) and Estonia (10%).

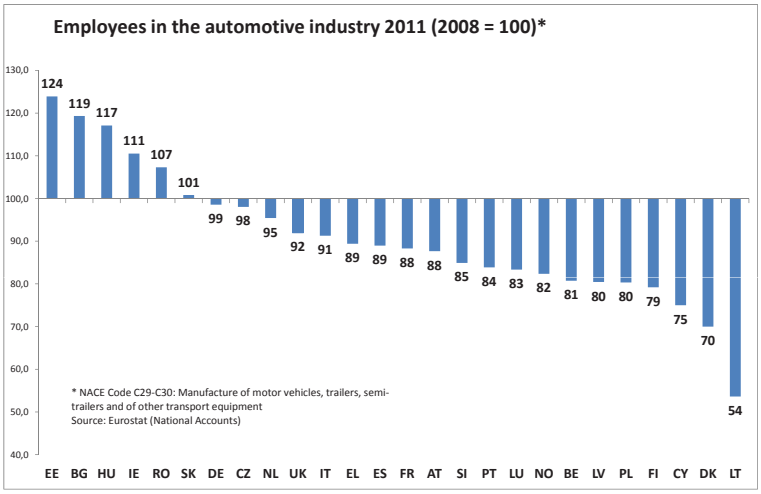
Main trends in hourly wages:

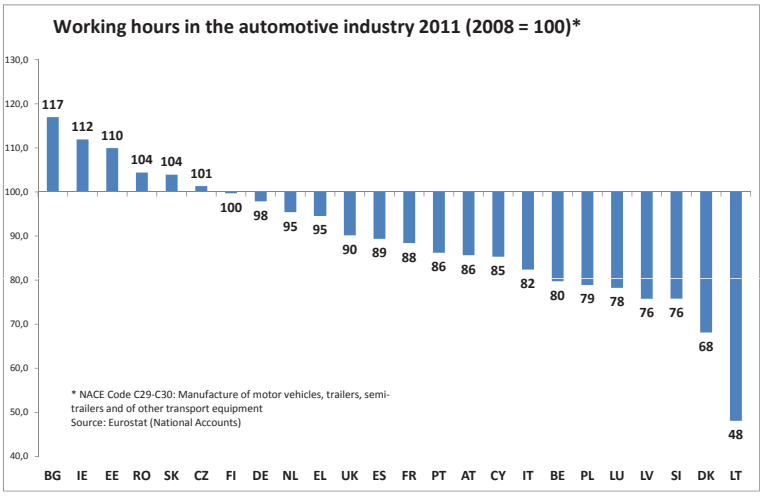
- Between 2008 and 2011, 16 out of the 24 European countries for which data are available saw an increase in nominal wages, ranging from 35% in Poland to 2% in Portugal. Eight countries witnessed a decline in nominal wages. The strongest decrease took place in Ireland with -55%, followed by Lithuania (-24%), Finland (-19%) and Greece (-18%).

- Deflated by the development of consumer prices, real wages decreased in 10 out of the 24 countries for which data was available. Another eleven countries saw only small or moderate increases in real wages ranging from between 2% to 8% for the 3-year period. Finally, there were three countries with rather significant real wage increases: Poland, Slovenia and Luxembourg.

- A decline in wage levels was often the result of wage freezes or wage cuts. It could also be influenced by changes in the composition of the workforce within the automotive industry.

- In absolute terms, there are still enormous differences in wage levels in the European automotive industry. In 2011 the highest hourly wages existed in Denmark and Germany (both around 35€), while the lowest hourly wages could be found in Bulgaria (2.50€) and Romania (3.40€).


Employees in the automotive industry 2011 (2008 = 100)*
130,0
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
124
119
117
111
107
101
99
98
95
92
91
89
89
88
88
85
84
83
82
81
80
80
79
75
70
54
EE BG HU IE RO SK DE CZ NL UK IT EL ES FR AT SI PT LU NO BE LV PL FI CY DK LT
* NACE Code C29-C30: Manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment
Source: Eurostat (National Accounts)


Working hours in the automotive industry 2011 (2008 = 100)*
130,0
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
117
112
110
104
104
101
100
98
95
95
90
89
88
86
86
85
82
80
79
78
76
76
68
48
BG IE EE RO SK CZ FI DE NL EL UK ES FR PT AT CY IT BE PL LU LV SI DK LT
* NACE Code C29-C30: Manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment
Source: Eurostat (National Accounts)

Number of employees (in thousands) in the automotive industry*

	2008	2009	2010	2011	2012
Belgium	52.4	45.5	43.3	42.3	43.0
Bulgaria	15.0	14.2	16.5	17.9	18.0
Czech Republic	173.2	157.4	155.5	169.8	172.8
Denmark	10.0	8.0	7.0	7.0	6.0
Germany	979.0	958.0	939.0	965.0	-
Estonia	4.6	3.5	3.3	5.7	5.9
Ireland	3.8	3.8	3.5	4.2	3.2
Greece	15.1	14.2	14.1	13.5	-
Spain	222.0	198.7	193.8	197.5	-
France	292.8	275.9	261.1	258.5	262.1
Italy	277.8	267.1	255.8	253.6	248.8
Cyprus	0.4	0.3	0.3	0.3	0.3
Latvia	4.6	3.5	3.5	3.7	4.0
Lithuania	6.9	5.8	3.6	3.7	3.6
Luxembourg	0.6	0.5	0.5	0.5	0.5
Hungary	90.7	80.6	86.0	106.2	105.6
Malta	-	-	-	-	-
Netherlands	41.5	40.9	39.6	39.6	39.7
Austria	42.1	38.1	35.3	36.9	37.9
Poland	333.7	292.0	257.5	268.1	-
Portugal	47.7	41.1	40.5	40.0	-
Romania	169.8	201.4	157.8	182.2	-
Slovenia	15.9	13.9	13.5	13.5	13.8
Slovakia	61.9	53.1	55.2	62.4	66.2
Finland	20.2	17.9	16.3	16.0	16.6
Sweden	-	-	-	-	-
United Kingdom	273.0	268.0	259.0	251.0	265.0
EU 27	3,209.6	3,070.8	2,953.1	3,058.4	
Norway	34.0	32.0	29.0	28.0	30.0

** NACE Code C29-C30: Manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment*

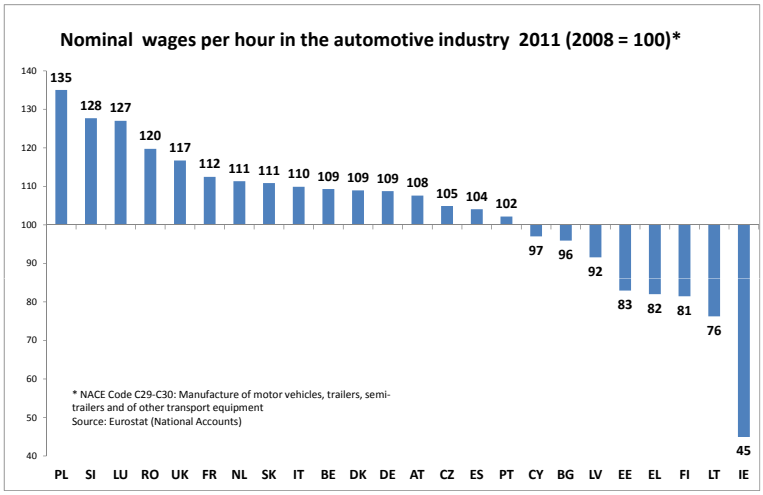
Source: Eurostat (National Accounts)

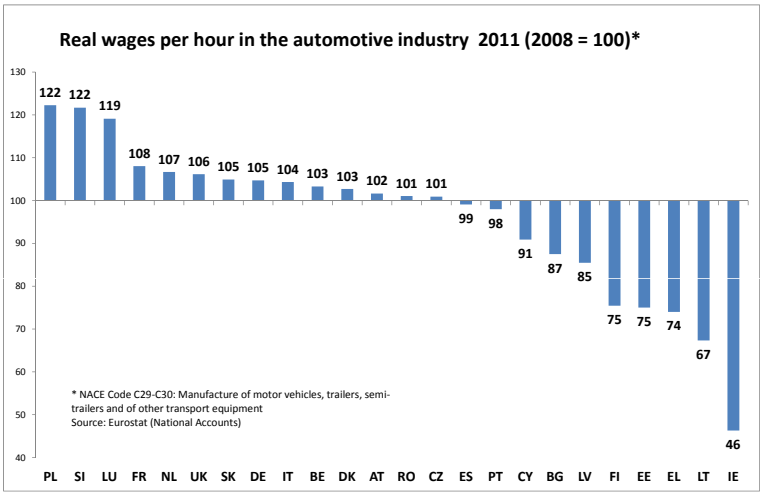
Number of working hours (in thousands) in the Automotive industry*

	2008	2009	2010	2011	2012
Belgium	82,400	63,700	66,200	65,700	64,800
Bulgaria	26,942	25,030	29,087	31,518	31,725
Czech Republic	288,248	255,930	268,358	292,095	297,524
Denmark	14,669	11,808	10,253	9,992	9,064
Germany	1,405,000	1,256,000	1,314,000	1,375,000	:
Estonia	9,167	5,532	6,314	10,077	11,644
Ireland	7,405	7,034	6,995	8,287	6,310
Greece	29,628	28,221	28,879	28,069	:
Spain	368,761	325,814	321,588	329,534	:
France	429,125	385,167	372,662	379,419	:
Italy	440,115	370,711	362,480	362,588	351,585
Cyprus	633	610	536	540	507
Latvia	9,623	6,101	6,703	7,291	7,929
Lithuania	13,708	11,440	6,858	6,588	6,824
Luxembourg	956	698	711	748	751
Hungary					
Malta					
Netherlands	64,591	60,082	60,728	61,636	61,802
Austria	70,563	58,317	58,665	60,432	62,309
Poland	708,864	609,427	537,121	559,252	563,130
Portugal	88,740	76,172	76,086	76,514	:
Romania	334,227	379,026	301,351	348,905	:
Slovenia	27,025	20,967	21,922	20,482	20,762
Slovakia	103,993	84,387	94,907	108,065	115,304
Finland	31,300	25,400	23,000	31,200	33,100
Sweden					
United Kingdom	516,100	501,332	494,260	465,296	503,724
EU 27	5,311,505	4,807,334	4,788,402	4,943,656	:

** NACE Code C29-C30: Manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment*

Source: Eurostat (National Accounts)


Nominal wages per hour in the automotive industry 2011 (2008 = 100)*
140
130
120
110
100
90
80
70
60
50
40
135
128
127
120
117
112
111
111
110
109
109
109
108
105
104
102
97
96
92
83
82
81
76
45
PL SI LU RO UK FR NL SK IT BE DK DE AT CZ ES PT CY BG LV EE EL FI LT IE
* NACE Code C29-C30: Manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment
Source: Eurostat (National Accounts)


Real wages per hour in the automotive industry 2011 (2008 = 100)*
130
120
110
100
90
80
70
60
50
40
122
122
119
108
107
106
105
105
104
103
103
102
101
101
99
98
91
87
85
75
75
74
67
46
PL SI LU FR NL UK SK DE IT BE DK AT RO CZ ES PT CY BG LV FI EE EL LT IE
* NACE Code C29-C30: Manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment
Source: Eurostat (National Accounts)

Wages per hour in EURO in the Automotive industry*

	2008	2009	2010	2011	2012
Belgium	25.42	26.31	27.95	27.79	28.58
Bulgaria	2.56	2.62	2.33	2.46	2.54
Czech Republic	7.71	7.45	7.78	8.20	8.33
Denmark	32.31	33.52	35.26	35.24	35.35
Germany	32.14	33.55	33.12	34.96	-
Estonia	5.20	5.87	5.81	4.32	4.17
Ireland	39.91	30.94	21.69	17.93	22.42
Greece	10.62	10.91	9.46	8.71	-
Spain	18.56	18.86	19.19	19.32	-
France	24.37	25.97	25.95	27.41	-
Italy	17.91	18.36	18.93	19.68	20.30
Cyprus	9.16	9.34	8.77	8.89	9.07
Latvia	5.23	4.62	4.73	4.76	-
Lithuania	5.82	5.25	7.12	4.45	6.33
Luxembourg	17.05	20.63	20.68	21.66	22.50
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	24.23	26.85	26.23	26.98	27.85
Austria	25.90	28.72	26.52	27.87	28.50
Poland	3.62	2.95	3.94	4.16	-
Portugal	7.93	7.98	8.11	8.11	-
Romania	3.26	3.02	3.34	3.39	-
Slovenia	10.21	11.62	11.85	13.03	13.58
Slovakia	6.24	7.00	6.82	7.18	7.73
Finland	21.41	22.64	23.04	17.44	17.67
Sweden	-	-	-	-	-
United Kingdom	27.63	23.27	26.51	29.58	
EU 27	19.60	19.36	20.08	21.01	

** NACE Code C29-C30: Manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment*

Source: Eurostat (National Accounts)

1.4 European Machinery and Equipment Industry

Definition:

In the following, the machinery and equipment industry is defined as the "Manufacture of machinery and equipment" (NACE Code C28).

Main trends in employment:

- The economic crisis in Europe has led to a significant decline in employment in the European machinery and equipment industry. Between 2008 and 2011, the total number of employees decreased by approximately 267,000 or 8.1%. The low point of below 3 million workers was reached in 2010, while in 2011 the European workforce started to grow again.

- In 2011, there were just over 3 million workers employed in the European machinery and equipment industry. Exactly one-third of them (1 million) work in Germany. Large numbers of employees also work in the machinery and equipment industry in Italy, the UK and France.

- Out of the 25 European countries for which data is available, 24 countries saw stagnating or declining numbers of employees in the machinery and equipment industry between 2008 and 2011. Only Ireland managed to increase the number of employees by 8%.

- The sharpest decline in the number of employees occurred in Romania (-48%), followed by Cyprus (-33%), Lithuania (-31%) and Latvia (-27%).

Main trends in working hours:

- Between 2008 and 2011, the total number of working hours in the machinery and equipment industry in EU 27 decreased by approximately 510 million (roughly 9%).

- In 2011, the total amount of hours worked in the European machinery and equipment industry was approximately 5.1 billion. Of these, 1.4 billion hours were worked in Germany (28%), followed by around 768 million hours in Italy and 337 million hours in the UK.

- Out of the 23 European countries for which data is available, the number of working hours declined in 22 countries between 2008 and 2011. The hours worked increased only in Ireland by 11%.

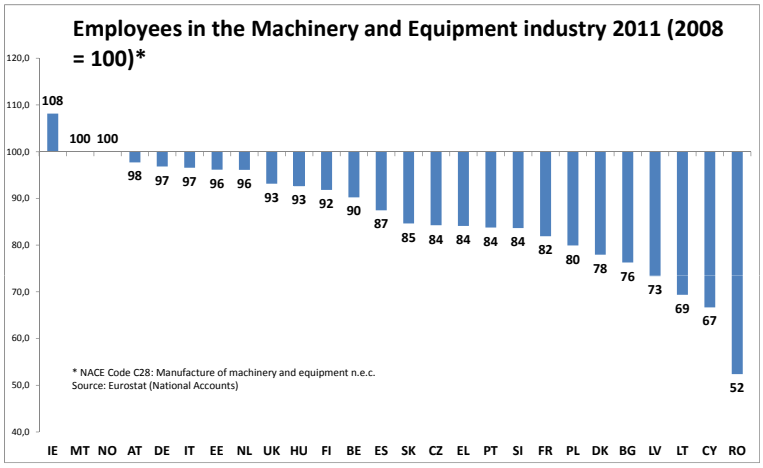
- The sharpest decline in the number of working hours was found in Romania (-46%), followed by Bulgaria (-32%), Lithuania (-30%) and Cyprus (-25%).

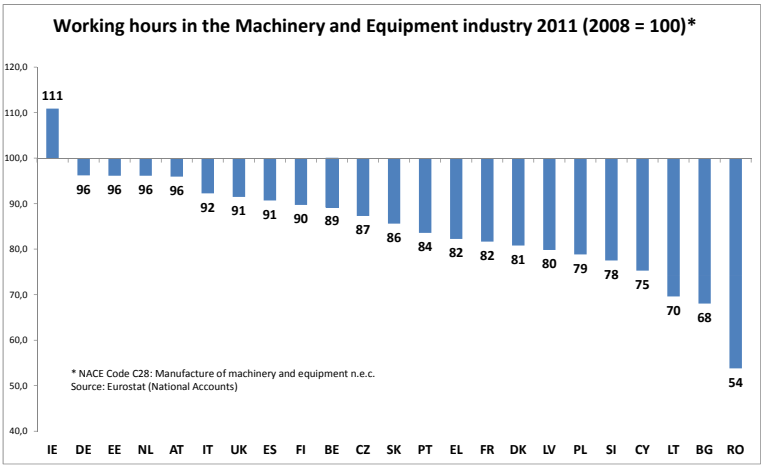
Main trends in hourly wages:

- Between 2008 and 2011, 19 out of the 23 European countries for which data is available saw an increase in nominal wages, ranging from 69% in Bulgaria to 1% in Spain. Only four countries witnessed a decline in nominal wages. The strongest decrease took place in Ireland (-32%), followed by Estonia (-15%), Lithuania (-4%) and Cyprus (-2%).

- Deflated by the development of consumer prices, real wages stagnated or decreased in 10 out of the 23 countries for which data was available. Real wages in another ten countries saw only small or moderate increases in real wages ranging between 1% in Poland and 8% in the Netherlands for the 3-year period under investigation. Finally, there were three countries with real wage increases of more than 10%: Bulgaria (57%), Lithuania (36%) and Slovenia (14%).

- In absolute terms, there are still enormous differences in wage levels in the European machinery and equipment industry. In 2011, as in many other sectors, the highest absolute wages were paid in Denmark (34.12€) and Germany (30.97€). The lowest absolute wages paid to employees in the machinery and equipment industry were recorded in Bulgaria (2.56€) and Romania (3.25€).


Employees in the Machinery and Equipment industry 2011 (2008 = 100)*
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
108
100 100
98 97 97 96 96 93 93 92 90 87 85 84 84 84 84 82 80 78 76 73 69 67 52
IE MT NO AT DE IT EE NL UK HU FI BE ES SK CZ EL PT SI FR PL DK BG LV LT CY RO
* NACE Code C28: Manufacture of machinery and equipment n.e.c.
Source: Eurostat (National Accounts)


Working hours in the Machinery and Equipment industry 2011 (2008 = 100)*
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
111
96 96 96 96 92 91 91 90 89 87 86 84 82 82 81 80 79 78 75 70 68 54
IE DE EE NL AT IT UK ES FI BE CZ SK PT EL FR DK LV PL SI CY LT BG RO
* NACE Code C28: Manufacture of machinery and equipment n.e.c.
Source: Eurostat (National Accounts)

Number of employees in the Machinery and Equipment industry (in thousands)*

	2008	2009	2010	2011	2012
Belgium	39,9	37,0	35,3	36,0	36,1
Bulgaria	46,4	37,0	34,1	35,4	35,2
Czech Republic	141,0	118,4	113,1	118,8	122,0
Denmark	68,0	59,0	53,0	53,0	52,0
Germany	1.036,0	1.021,0	982,0	1.003,0	-
Estonia	2,6	3,2	3,0	2,5	3,0
Ireland	25,8	27,9	27,4	27,9	27,8
Greece	17,0	16,0	15,8	14,3	-
Spain	140,3	122,3	114,1	122,7	-
France	205,5	185,4	171,9	168,3	169,3
Italy	487,9	481,0	469,6	471,2	469,1
Cyprus	0,6	0,5	0,5	0,4	0,4
Latvia	4,5	2,9	3,1	3,3	3,5
Lithuania	6,2	5,3	5,5	4,3	6,4
Luxembourg	-	-	-	-	-
Hungary	50,5	47,8	45,1	46,8	47,0
Malta	0,3	0,3	0,3	0,3	0,3
Netherlands	77,2	76,7	71,9	74,2	75,1
Austria	74,6	72,7	71,2	72,9	76,0
Poland	149,9	129,3	116,5	119,8	-
Portugal	24,0	21,7	20,4	20,1	-
Romania	131,5	89,3	69,3	68,9	-
Slovenia	16,5	14,6	13,6	13,8	13,6
Slovakia	43,6	33,1	33,7	36,9	39,0
Finland	53,8	49,7	46,5	49,4	50,3
Sweden	-	-	-	-	-
United Kingdom	190,0	182,0	174,0	177,0	177,0
EU 27	3,290.9	3,094.7	2,950.6	3,023.9	-

** NACE Code C28: Manufacture of machinery and equipment n.e.c.*

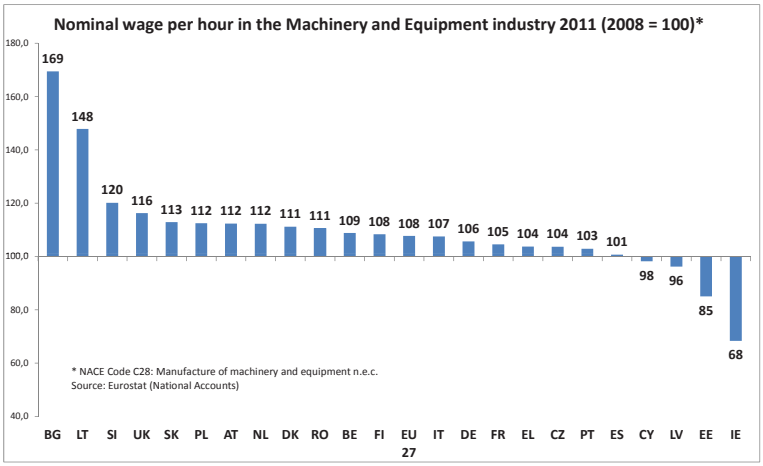
Source: Eurostat (National Accounts)

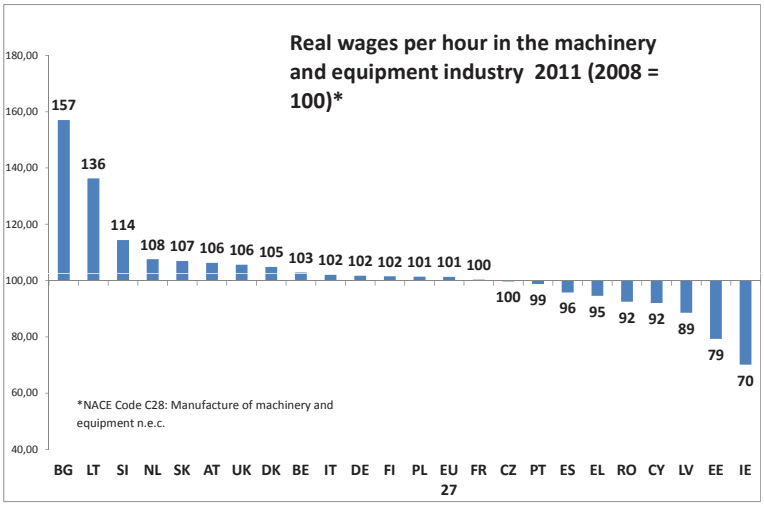
Number of working hours (in thousands) in the Machinery and Equipment industry*

	2008	2009	2010	2011	2012
Belgium	64,000	53,700	53,700	57,100	56,700
Bulgaria	88,655	63,113	58,137	60,335	60,027
Czech Republic	241,970	195,042	197,917	211,181	218,188
Denmark	110,203	96,273	87,016	89,025	87,970
Germany	1,495,000	1,343,000	1,372,000	1,438,000	-
Estonia	5,181	5,272	5,385	4,981	5,587
Ireland	49,484	53,190	53,701	54,858	54,432
Greece	34,790	31,581	29,966	28,610	-
Spain	224,009	194,026	184,444	203,139	-
France	308,429	266,639	253,632	251,856	-
Italy	832,920	743,804	742,700	768,467	768,778
Cyprus	1,011	921	897	761	668
Latvia	8,301	7,321	6,039	6,626	6,834
Lithuania	12,317	9,234	11,220	8,573	12,448
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	126,663	123,425	117,664	121,746	123,375
Austria	126,634	115,494	117,879	121,456	126,385
Poland	314,597	265,346	242,786	248,030	245,711
Portugal	42,154	38,240	36,236	35,227	-
Romania	253,004	170,290	132,312	136,087	-
Slovenia	26,804	21,342	21,133	20,776	20,572
Slovakia	74,380	51,151	58,445	63,681	66,422
Finland	85,500	73,400	71,800	76,700	77,000
Sweden	-	-	-	-	-
United Kingdom	368,472	341,016	336,908	337,012	338,000
EU 27	5,625,188	4,976,504	4,919,677	5,112,907	-

** NACE Code C28: Manufacture of machinery and equipment n.e.c.*

Source: Eurostat (National Accounts)


Nominal wage per hour in the Machinery and Equipment industry 2011 (2008 = 100)*
180,0
160,0
140,0
120,0
100,0
80,0
60,0
40,0
169
148
120
116
113
112
112
112
111
111
109
108
108
107
106
105
104
104
103
101
98
96
85
68
BG LT SI UK SK PL AT NL DK RO BE FI EU 27 IT DE FR EL CZ PT ES CY LV EE IE
* NACE Code C28: Manufacture of machinery and equipment n.e.c.
Source: Eurostat (National Accounts)


Real wages per hour in the machinery and equipment industry 2011 (2008 = 100)*
180,00
160,00
140,00
120,00
100,00
80,00
60,00
40,00
157
136
114
108
107
106
106
105
103
102
102
102
101
101
100
100
99
96
95
92
92
89
79
70
BG LT SI NL SK AT UK DK BE IT DE FI PL EU 27 FR CZ PT ES EL RO CY LV EE IE
*NACE Code C28: Manufacture of machinery and equipment n.e.c.

Wages per hour in EURO in the Machinery and Equipment industry*

	2008	2009	2010	2011	2012
Belgium	25.69	26.27	27.10	27.95	28.92
Bulgaria	1.51	1.66	2.32	2.56	3.06
Czech Republic	6.74	6.85	6.81	7.09	7.13
Denmark	30.67	31.59	34.05	34.12	34.53
Germany	29.30	29.94	30.04	30.97	-
Estonia	10.48	7.08	6.04	8.91	8.77
Ireland	10.70	8.34	7.63	7.31	7.28
Greece	9.37	9.91	10.12	9.71	-
Spain	18.33	18.69	18.49	18.45	-
France	21.54	22.52	22.52	22.52	-
Italy	17.78	17.99	18.68	19.11	19.33
Cyprus	9.10	9.34	8.70	8.94	9.58
Latvia	4.77	3.21	4.34	4.56	-
Lithuania	4.71	5.02	4.68	6.95	5.60
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	25.21	26.53	27.05	28.30	28.68
Austria	25.36	27.18	27.09	28.50	29.33
Poland	6.20	5.46	6.14	5.95	-
Portugal	8.53	8.56	8.57	8.78	-
Romania	3.39	2.19	3.00	3.25	-
Slovenia	11.14	12.66	12.20	13.39	13.69
Slovakia	5.79	6.50	6.28	6.79	7.03
Finland	24.48	25.42	25.71	26.52	27.70
Sweden	-	-	-	-	-
United Kingdom	23.77	21.60	23.63	25.36	-
EU 27	18.15	18.39	18.97	19.55	-

** NACE Code C28: Manufacture of machinery and equipment n.e.c.*

Source: Eurostat (National Accounts)

1.5 European Electrical Equipment Industry

Definition:

In the following, the electrical equipment industry is defined as the "Manufacture of electrical equipment" (NACE Code C27).

Main trends in employment:

- Since the start of the economic crisis in 2008 employment in the electrical equipment industry has declined significantly. Between 2008 and 2011, the total number of employees decreased by 136,700 or 8.5%.

- In 2011, there were around 1.4 million workers in the European electrical equipment industry. Of these, about one-third (468,000) worked in Germany. A comparatively large number of employees also worked in the electrical equipment industry in Italy (182,800), Poland (118,300), France (86,700) and the UK (84,000).

- In 21 out of the 25 European countries for which data is available, the number of employees in the electrical equipment industry declined between 2008 and 2011. In three countries the number of employees remained roughly the same. The number of workers in this industry increased in just two countries: Ireland (25%) and the Czech Republic (with a minimal increase of 1%).

- The sharpest decline in the number of employees could be observed in Lithuania, which was faced by a drop of 43%, followed by Estonia (-36%) and Spain and Hungary, with a drop of 23% each.

Main trends in working hours:

- Between 2008 and 2011, the total number of working hours in the electrical equipment industry in the European Union (EU 27) decreased by approximately 186 million (roughly 7%).

- In 2011, the total amount of hours worked in the European electrical equipment industry was almost 2.5 billion. Of these, 669 million hours (or approximately 27%) were worked in Germany, followed by around 288 million hours in Italy and 242 million hours in Poland.

- Out of the 23 European countries for which data is available, the number of working hours in the electrical equipment industry declined in 20 countries between 2008 and 2011, while the

total amount of hours worked increased in only two countries: Ireland (22%) and the Czech Republic (6%). In the UK, the total number of hours worked in 2011 was roughly the same as it was in 2008.

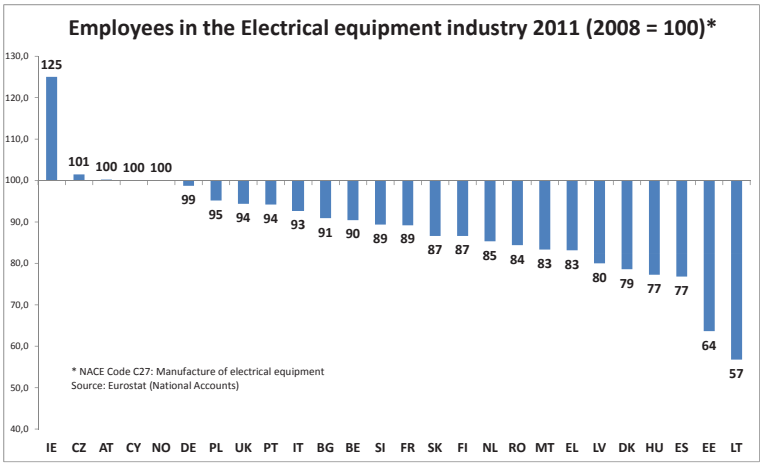
- The three Baltic states and Spain saw the sharpest decline in the number of working hours: Lithuania (-47%), Estonia (-38%), Spain (-25%) and Latvia (--22%).

Main trends in hourly wages:

- Between 2008 and 2011, out of the 23 European countries for which data is available, only five countries saw a decrease in nominal wages, ranging from 2% in Greece and Cyprus to more than 50% in Ireland. However, nominal wages in Ireland increased substantially between 2011 and 2012. Hence, if one calculates the decline of nominal wages for the period 2008-2012, this is down to approximately 28%, which is still an enormous drop but not as dramatic as the decline for the period 2008-2011. The remaining 18 countries saw an increase in nominal wages ranging from 62% in Estonia, and 55% in Lithuania, to a modest 3% in Finland and the Netherlands.

- Deflated by the development of consumer prices, real wages decreased in eight out of the 23 countries for which data was available. Another ten countries saw only small or moderate increases in real wages of 10% or less for the 3-year period. Five countries, however, achieved significant real wage increases of more than 10% ranging from 51% in Estonia to Slovakia with 14%.

- Despite these substantial wage increases in some CEE countries, there are still enormous differences in wage levels in the European electrical equipment industry in absolute terms. In 2011, the highest hourly wages were paid in Denmark (31.50€), closely followed by France (30.27€) and Germany (29.04€). By contrast, the lowest hourly wages - Romania (2.89€) and Bulgaria (3.05€) - are not even one-tenth of the wages paid in Denmark.


Employees in the Electrical equipment industry 2011 (2008 = 100)*
130,0
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
125
101
100
100
100
99
95
94
94
93
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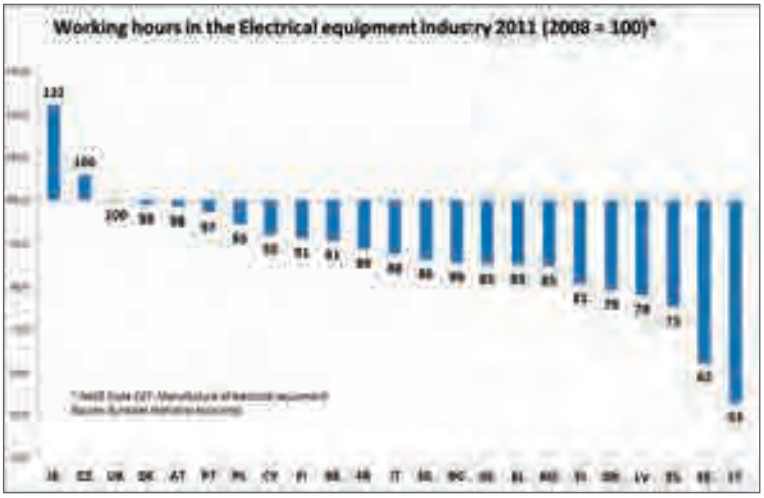
83
80
79
77
77
64
57
IE CZ AT CY NO DE PL UK PT IT BG BE SI FR SK FI NL RO MT EL LV DK HU ES EE LT
* NACE Code C27: Manufacture of electrical equipment
Source: Eurostat (National Accounts)


Working hours in the Electrical equipment industry 2011 (2008 = 100)*

Number of employees (in thousands) in the Electrical equipment industry*

	2008	2009	2010	2011	2012
Belgium	19.9	19.6	18.4	18.0	17.3
Bulgaria	19.8	17.8	17.6	18.0	18.3
Czech Republic	88.1	78.7	81.0	89.4	88.4
Denmark	14.0	11.0	10.0	11.0	10.0
Germany	474.0	464.0	458.0	468.0	-
Estonia	7.7	6.1	4.2	4.9	5.1
Ireland	2.0	1.8	1.6	2.5	1.5
Greece	8.9	8.2	7.8	7.4	-
Spain	85.8	74.4	72.5	65.9	-
France	97.2	92.7	89.0	86.7	85.3
Italy	197.1	185.9	183.9	182.8	179.2
Cyprus	0.3	0.3	0.3	0.3	0.3
Latvia	3.5	2.5	2.3	2.8	3.0
Lithuania	7.4	5.8	3.6	4.2	4.0
Luxembourg	-	-	-	-	-
Hungary	70.4	58.5	58.2	54.4	54.0
Malta	0.6	0.5	0.5	0.5	0.5
Netherlands	18.4	16.4	14.9	15.7	15.4
Austria	43.2	42.1	41.5	43.3	43.3
Poland	124.3	118.5	109.0	118.3	-
Portugal	18.9	18.3	18.0	17.8	-
Romania	89.1	62.6	74.1	75.2	-
Slovenia	20.7	19.0	18.6	18.5	18.4
Slovakia	32.9	26.2	26.4	28.5	26.7
Finland	19.4	17.8	16.8	16.8	16.2
Sweden	Sweden	-	-	-	-
United Kingdom	89.0	81.0	86.0	84.0	86.0
EU 27	1,599.4	1,473.1	1,465.4	1,462.7	-

** NACE Code C27: Manufacture of electrical equipment*

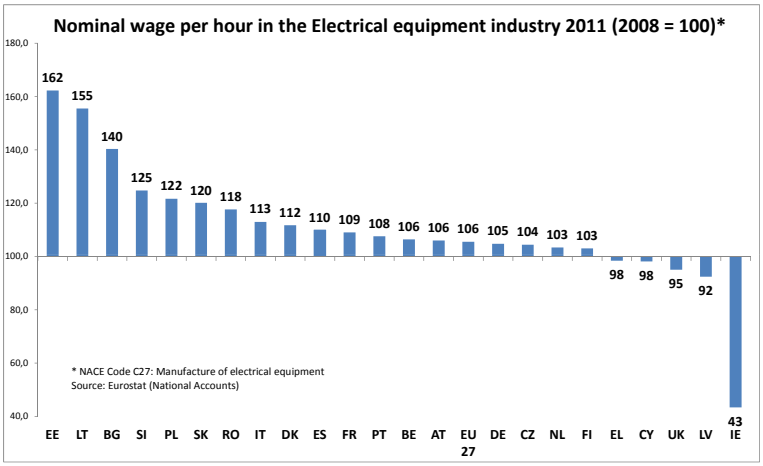
Source: Eurostat (National Accounts)

Number of working hours (in thousands) in the Electrical equipment industry*

	2008	2009	2010	2011	2012
Belgium	31,300	30,300	28,900	28,400	27,100
Bulgaria	36,075	30,593	30,084	30,901	31,367
Czech Republic	147,008	130,497	140,846	155,660	153,532
Denmark	20,694	17,499	15,697	16,374	15,938
Germany	676,000	618,000	645,000	669,000	-
Estonia	14,999	10,307	8,052	9,339	9,585
Ireland	3,949	3,418	3,085	4,824	2,916
Greece	17,899	16,813	15,601	15,221	-
Spain	142,953	122,683	119,152	107,641	-
France	144,699	134,097	130,804	128,533	-
Italy	328,668	286,129	289,701	288,100	276,712
Cyprus	571	570	573	526	539
Latvia	7,073	5,161	4,455	5,522	5,822
Lithuania	14,701	10,456	7,042	7,766	8,054
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	29,182	25,481	23,795	25,204	24,636
Austria	72,926	68,149	69,210	71,813	71,423
Poland	255,704	240,714	226,588	241,840	252,253
Portugal	33,671	32,896	32,869	32,739	-
Romania	175,730	119,087	141,601	149,004	-
Slovenia	32,677	25,849	26,728	26,372	25,648
Slovakia	56,226	42,879	45,107	47,862	45,279
Finland	30,000	28,300	27,700	27,400	26,700
Sweden	-	-	-	-	-
United Kingdom	162,604	150,072	164,060	162,396	162,448
EU 27	2,649,697	2,347,864	2,410,757	2,464,017	-

** NACE Code C27: Manufacture of electrical equipment*

Source: Eurostat (National Accounts)


Nominal wage per hour in the Electrical equipment industry 2011 (2008 = 100)*
180,0
160,0
140,0
120,0
100,0
80,0
60,0
40,0
162
155
140
125
122
120
118
113
112
110
109
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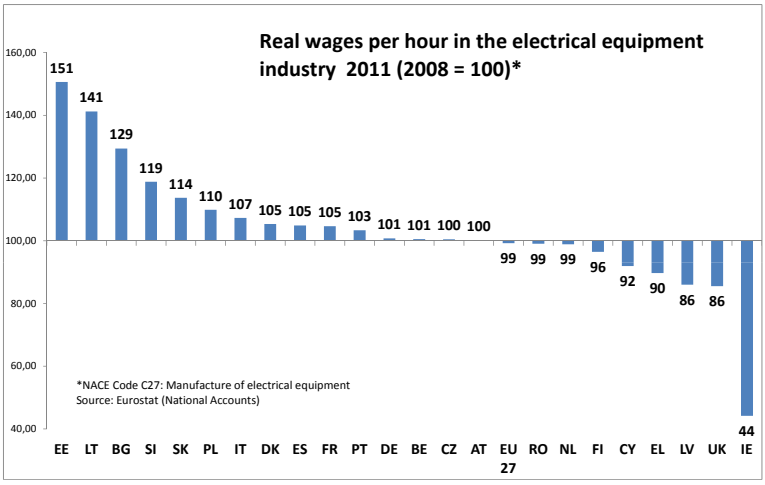
104
103
103
98
98
95
92
43
* NACE Code C27: Manufacture of electrical equipment
Source: Eurostat (National Accounts)
EE LT BG SI PL SK RO IT DK ES FR PT BE AT EU 27 DE CZ NL FI EL CY UK LV IE


Real wages per hour in the electrical equipment industry 2011 (2008 = 100)*
160,00
140,00
120,00
100,00
80,00
60,00
40,00
151
141
129
119
114
110
107
105
105
105
103
101
101
100
100
99
99
99
96
92
90
86
86
44
*NACE Code C27: Manufacture of electrical equipment
Source: Eurostat (National Accounts)
EE LT BG SI SK PL IT DK ES FR PT DE BE CZ AT EU 27 RO NL FI CY EL LV UK IE

Wages per hour in EURO in the Electrical equipment industry*

	2008	2009	2010	2011	2012
Belgium	26.05	26.86	26.64	27.71	29.13
Bulgaria	2.18	2.42	2.83	3.05	3.25
Czech Republic	6.47	6.00	6.31	6.85	7.07
Denmark	28.18	29.08	30.95	31.50	32.21
Germany	27.72	28.41	28.45	29.04	-
Estonia	3.82	4.63	6.22	6.20	5.32
Ireland	59.28	54.04	41.00	25.68	42.39
Greece	9.87	10.07	10.58	9.72	-
Spain	17.73	17.68	17.72	19.49	-
France	27.77	29.69	28.43	30.27	-
Italy	15.73	16.69	17.24	17.77	18.43
Cyprus	9.11	9.30	8.73	8.94	8.16
Latvia	5.63	4.82	5.21	5.16	-
Lithuania	2.78	2.55	4.39	4.33	5.24
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	24.26	25.16	25.05	25.08	24.96
Austria	26.89	28.00	27.81	28.49	29.34
Poland	4.26	3.53	4.38	4.42	-
Portugal	8.73	8.75	9.10	9.40	-
Romania	2.83	2.09	2.79	2.89	-
Slovenia	10.43	11.97	12.62	13.01	13.54
Slovakia	4.76	5.66	5.62	5.93	6.36
Finland	22.57	22.47	22.60	23.25	23.71
Sweden	-	-	-	-	-
United Kingdom	23.28	22.92	20.17	20.29	-
EU 27	16.84	17.42	17.34	17.77	-

** NACE Code C27: Manufacture of electrical equipment*

Source: Eurostat (National Accounts)

1.6 European Computer, Electronics and Optical Industry

Definition:

In the following, the computer, electronics and optical industry is defined as the "Manufacture of computer, electronic and optical products" (NACE Code C26).

Main trends in employment:

- The economic crisis in Europe had a significant impact on the number of employees in the European computer, electronics and optical industry. Between 2008 and 2011 the total number of employees decreased by approximately 176,800 or 11.5%. As in other sectors, the absolute low point was reached in 2010, while the European workforce in the computer, electronics and optical industry grew again by more than 20,000 employees in 2011.

- In 2011, a little more than 1.3 million workers were employed in the European computer, electronics and optical industry. The largest share worked in Germany with 381,000 employees (28%). A comparatively large proportion of the European computer, electronics and optical industry also worked in Italy (136,700), France (113,100) and the UK (109,000).

- Out of the 24 European countries for which data is available, 21 countries saw a decline in the number of employees between 2008 and 2011, while in two countries the number of workers increased: Estonia (37%) and Hungary (12%).

- The sharpest decline in the number of employees in the computer, electronics and optical industry took place in Romania, which was faced by a drop of 46%, followed by Greece (-38%), Slovenia (-27%) and the Czech Republic with a drop of 24%.

Main trends in working hours:

- Between 2008 and 2011, the total number of working hours in the computer, electronics and optical industry in EU 27 decreased by almost 330 million (roughly 13%). The fact that the decline in working hours was stronger than the decline in the overall number of employees suggests that the shortening of working time was a common tool to deal with the crisis.

- In 2011, the total amount of hours worked in the European computer, electronics and optical industry was approximately 2.1 billion. Of these, 540 million hours were worked in Germany, followed by around 217 million hours in both Italy and the UK.

- Out of the 23 European countries for which data is available, the total number of hours worked decreased in 21 countries between 2008 and 2011. Only Estonia (39%) and Cyprus (9%) saw an increase in the number of hours worked.

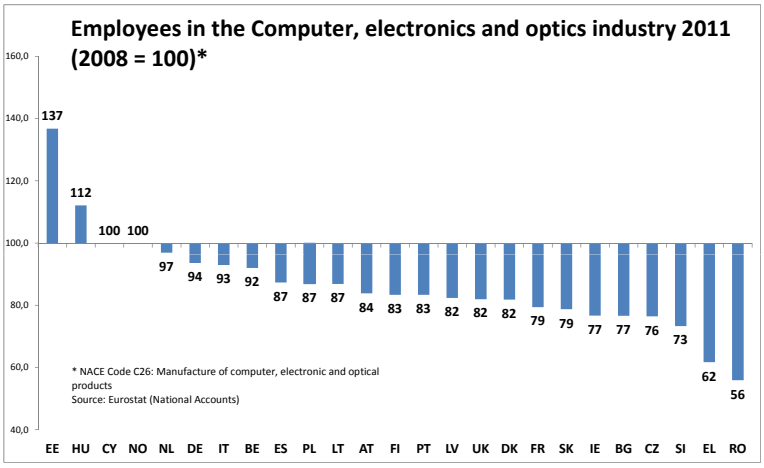
- The sharpest decline in the number of working hours could be observed in Romania (-43%), followed by Greece and Lithuania with a drop of 40% each.

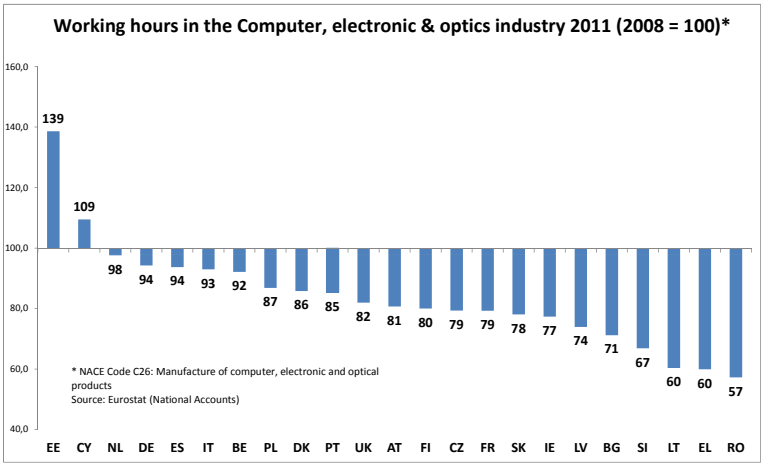
Main trends in hourly wages:

- Between 2008 and 2011, nominal wages decreased in only four countries out of the 23 European countries for which data is available,: Estonia (-31%), Romania (-26%), Ireland and Spain (-9% each). A majority of 17 countries witnessed an increase in nominal wages ranging from more than 60% in Lithuania (64%) and Romania (61%) to minor increases in Belgium (2%) and Germany and Greece (3% each).

- Deflated by the development of consumer prices, real wages decreased in ten out of the 23 countries for which data is available. Another seven countries saw only small or moderate increases in real wages ranging from 1% to 5% for the 3-year period, while five countries registered significant real wage increases of 10% and more: Lithuania (50%), Bulgaria (49%), the UK (16%), and Slovakia and Slovenia each with a 10% rise in real wages.

- In absolute terms, there are still enormous differences in wage levels in the European computer, electronics and optical industry. In 2011, the highest hourly wages existed in Denmark (40.32€) and Belgium (32.78€), while the lowest hourly wages were paid in Bulgaria (2.41€) and Romania (2.46€).


Employees in the Computer, electronics and optics industry 2011 (2008 = 100)*
160,0
140,0
120,0
100,0
80,0
60,0
40,0
137
112
100 100
97
94
93
92
87
87
87
84
83
83
82
82
82
79
79
77
77
76
73
62
56
* NACE Code C26: Manufacture of computer, electronic and optical products
Source: Eurostat (National Accounts)
EE HU CY NO NL DE IT BE ES PL LT AT FI PT LV UK DK FR SK IE BG CZ SI EL RO


Working hours in the Computer, electronic & optics industry 2011 (2008 = 100)*
160,0
140,0
120,0
100,0
80,0
60,0
40,0
139
109
98
94
94
93
92
87
86
85
82
81
80
79
79
78
77
74
71
67
60
60
57
* NACE Code C26: Manufacture of computer, electronic and optical products
Source: Eurostat (National Accounts)
EE CY NL DE ES IT BE PL DK PT UK AT FI CZ FR SK IE LV BG SI LT EL RO

Number of employees (in thousands) in the Computer, Electronic and Optical industry*

	2008	2009	2010	2011	2012
Belgium	15.0	14.6	13.9	13.8	13.0
Bulgaria	15.4	12.1	11.5	11.8	11.8
Czech Republic	51.4	43.3	38.4	39.3	38.9
Denmark	22.0	20.0	19.0	18.0	18.0
Germany	407.0	390.0	371.0	381.0	-
Estonia	6.8	7.1	6.8	9.3	6.8
Ireland	30.0	28.3	25.1	23.0	24.5
Greece	4.7	3.8	3.4	2.9	-
Spain	44.2	39.9	37.6	38.6	-
France	142.4	123.5	115.9	113.1	111.9
Italy	147.1	139.4	133.9	136.7	138.6
Cyprus	0.1	0.1	0.1	0.1	0.1
Latvia	1.7	1.4	1.3	1.4	1.5
Lithuania	3.8	3.8	3.4	3.3	3.2
Luxembourg	-	-	-	-	-
Hungary	87.0	78.5	86.7	97.5	88.7
Malta	-	-	-	-	-
Netherlands	47.9	46.3	46.9	46.4	45.2
Austria	24.7	24.4	20.5	20.7	21.4
Poland	94.8	87.2	84.4	82.4	-
Portugal	13.8	11.7	11.4	11.5	-
Romania	78.5	53.5	40.1	43.9	-
Slovenia	9.0	8.2	7.4	6.6	6.3
Slovakia	22.1	21.8	19.9	17.4	16.0
Finland	41.5	38.7	38.1	34.6	33.2
Sweden	-	-	-	-	-
United Kingdom	133.0	116.0	115.0	109.0	105.0
EU 27	1,535.5	1,404.4	1,337.6	1,358.7	-

** NACE Code C26: Manufacture of computer, electronic and optical products*

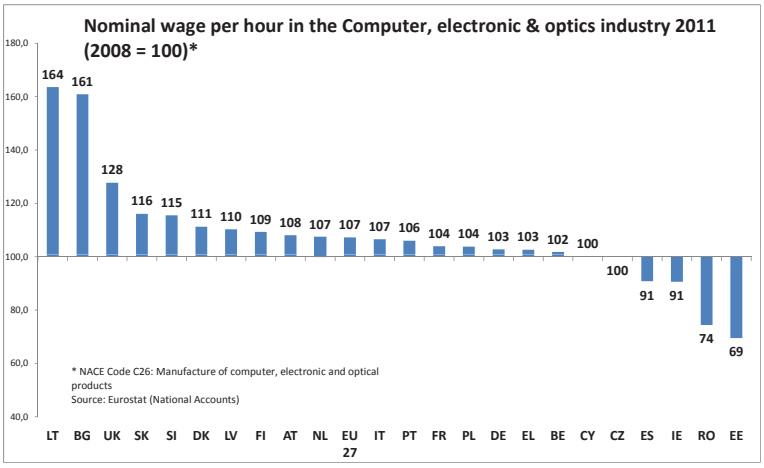
Source: Eurostat (National Accounts)

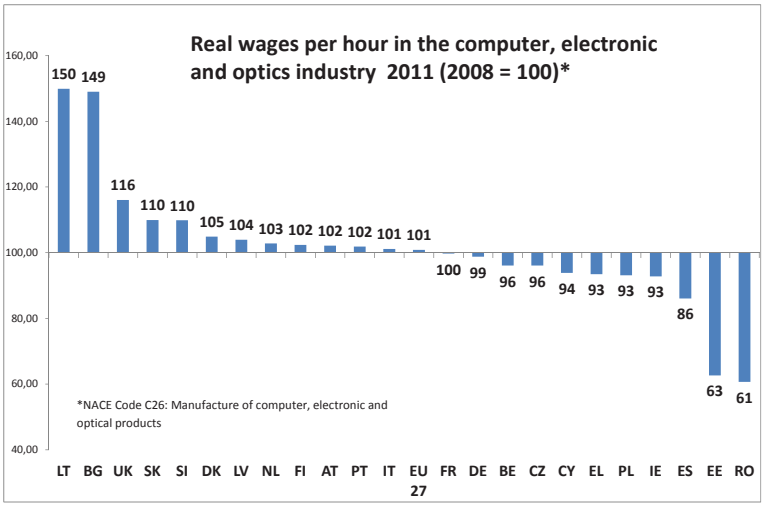
Number of working hours in the Computer, Electronic and Optical industry (in thousands)*

	2008	2009	2010	2011	2012
Belgium	24,200	23,000	22,400	22,300	21,000
Bulgaria	27,670	20,298	19,250	19,700	19,750
Czech Republic	86,366	73,052	67,394	68,505	68,318
Denmark	30,987	27,808	26,272	26,576	26,125
Germany	573,000	511,000	516,000	540,000	-
Estonia	14,041	12,949	13,119	19,467	12,887
Ireland	59,094	55,684	49,624	45,696	48,916
Greece	9,542	6,955	7,001	5,719	-
Spain	74,631	67,182	64,406	69,945	-
France	211,342	179,302	170,408	167,593	-
Italy	239,392	220,431	217,257	222,516	220,555
Cyprus	233	227	247	255	182
Latvia	3,604	2,542	2,535	2,664	2,969
Lithuania	7,549	7,092	6,150	4,556	5,707
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	76,325	73,049	75,309	74,492	72,725
Austria	40,754	38,540	32,797	32,888	33,890
Poland	196,496	179,858	178,088	170,598	172,779
Portugal	24,642	20,596	20,157	21,042	-
Romania	150,885	102,319	76,530	86,389	-
Slovenia	14,619	11,654	11,088	9,775	9,387
Slovakia	37,587	36,263	33,572	29,351	27,909
Finland	70,600	63,500	62,900	56,500	54,000
Sweden	-	-	-	-	-
United Kingdom	253,396	218,348	216,996	207,740	205,400
EU 27	2,449,648	2,167,944	2,096,782	2,121,414	-

** NACE Code C26: Manufacture of computer, electronic and optical products*

Source: Eurostat (National Accounts)


Nominal wage per hour in the Computer, electronic & optics industry 2011 (2008 = 100)*
180,0
160,0
140,0
120,0
100,0
80,0
60,0
40,0
164 161 128 116 115 111 110 109 108 107 107 107 106 104 104 103 103 102 100 100 91 91 74 69
LT BG UK SK SI DK LV FI AT NL EU 27 IT PT FR PL DE EL BE CY CZ ES IE RO EE
* NACE Code C26: Manufacture of computer, electronic and optical products
Source: Eurostat (National Accounts)


Real wages per hour in the computer, electronic and optics industry 2011 (2008 = 100)*
160,00
140,00
120,00
100,00
80,00
60,00
40,00
150 149 116 110 110 105 104 103 102 102 102 101 101 100 99 96 96 94 93 93 93 86 63 61
LT BG UK SK SI DK LV NL FI AT PT IT EU 27 FR DE BE CZ CY EL PL IE ES EE RO
*NACE Code C26: Manufacture of computer, electronic and optical products

Wages per hour in EURO in the Computer, Electronic and Optical industry*

	2008	2009	2010	2011	2012
Belgium	32.22	32.01	32.27	32.78	34.05
Bulgaria	1.50	1.74	2.11	2.41	2.71
Czech Republic	6.87	6.45	6.88	6.96	6.86
Denmark	36.51	38.05	40.32	40.64	41.49
Germany	30.77	31.84	31.63	31.61	-
Estonia	4.47	4.14	4.46	3.11	4.90
Ireland	20.58	18.40	17.53	18.64	16.92
Greece	9.49	10.09	10.00	9.74	-
Spain	17.53	17.76	17.92	15.91	-
France	23.45	23.74	25.26	24.36	-
Italy	19.02	19.01	19.63	20.27	20.88
Cyprus	9.01	9.25	8.91	9.02	12.09
Latvia	4.80	5.11	4.89	5.26	-
Lithuania	6.05	5.41	7.15	9.92	8.57
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	28.18	29.23	29.70	30.26	30.75
Austria	28.25	29.79	29.12	30.53	31.47
Poland	4.12	3.13	3.88	3.64	-
Portugal	10.81	10.89	10.82	11.46	-
Romania	3.81	2.20	2.19	2.46	-
Slovenia	11.11	12.50	12.18	12.83	13.32
Slovakia	5.16	5.64	5.78	6.21	6.37
Finland	29.69	31.45	31.88	32.44	33.76
Sweden	-	-	-	-	-
United Kingdom	24.16	26.21	27.47	28.30	-
EU 27	19.84	20.34	21.21	21.27	-

** NACE Code C26: Manufacture of computer, electronic and optical products*

Source: Eurostat (National Accounts)

1.7 European Basic Metals Industry

Definition:

In the following, the basic metals industry is defined as the "Manufacture of basic metals and fabricated metal products, except machinery and equipment" (NACE Code C24-C25).

Main trends in employment:

- Employment in the European basic metals industry has declined significantly since the beginning of the crisis. Between 2008 and 2011, the total number of employees in fact decreased by approximately 530,000 or 10.1%.

- In 2011, there were around 4.6 million workers in the European basic metals industry. Of these, almost one-quarter (1.1 million) worked in Germany, followed by Italy (673,000), France (431,000) and Poland (370,000 employees).

- Out of the 26 European countries for which data is available, the number of employees increased in only two countries: Malta with an increase of 33% and Estonia with an increase of 12%. In the remaining 24 countries, the number of employees in the European basic metals industry declined between 2008 and 2011.

- The sharpest decline took place in Ireland (-40%), followed by Lithuania (-29%), and Denmark and Spain with a decline of 22% each.

Main trends in working hours:

- Between 2008 and 2011, the total number of working hours in the basic metals industry in the European Union (EU 27) decreased by almost 1 billion (or roughly 11 %). The decline in working hours was a little stronger than the decline in the overall number of employees, which suggests that working time reductions were used as a tool to deal with the crisis.

- In 2011, the total amount of hours worked in the European basic metals industry was approximately 7.8 billion. Of these, almost one-fifth or 1.5 billion hours were worked in Germany, followed by a little more than 1 billion hours in Italy and 769 million hours in Poland.

- Out of the 26 European countries for which data are available, working hours in the basic metals industry increased in just one country: Estonia (10%). In all the other 25 countries, the number of working hours decreased between 2008 and 2011.

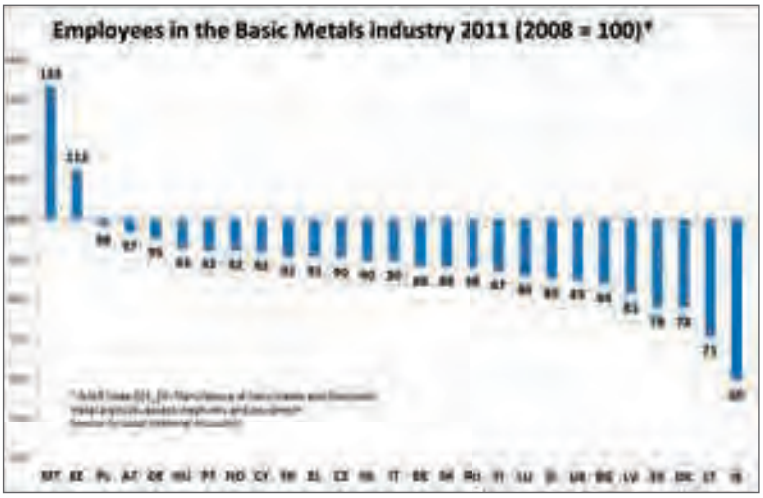
- The sharpest decline in the number of hours worked was to be seen in Ireland, with a massive drop of 42%, followed by the two Baltic states Lithuania (-35%) and Latvia (-25%).

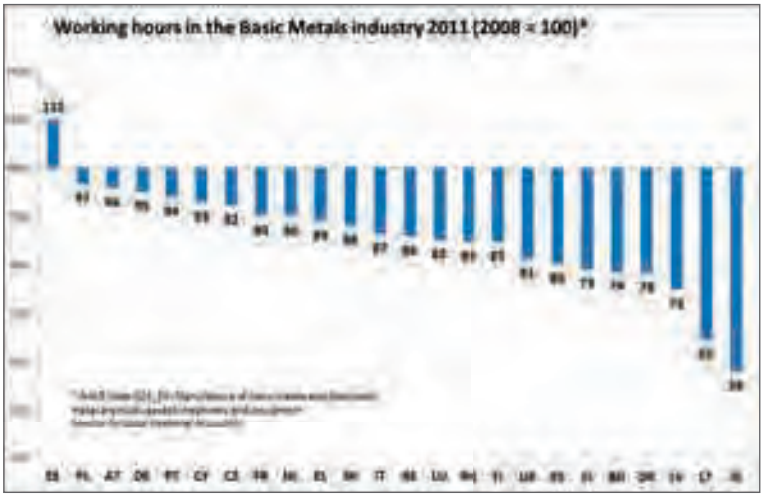
Main trends in hourly wages:

- Between 2008 and 2011, 19 out of the 24 European countries for which data is available saw an increase in nominal wages, ranging from 21% in Ireland to 2% in Portugal. Five countries witnessed a decline in nominal wages, whereas nominal wage levels in Greece in 2011 were the same as they were in 2008. The strongest decrease took place in Estonia with -22%, followed by Romania (-9%), Latvia (-4%) and Spain (-2%).

- Deflated by the development of consumer prices, real wages decreased in 11 out of the 24 countries for which data was available. While real wages remained the same in Slovakia and Finland, another ten countries saw small or moderate increases in real wages ranging between 1% and 8% for the 3-year period. Only two countries registered substantial real wage increases of more than 10%: Ireland (23%) and Slovenia (13%).

- In absolute terms, wage levels in the European basic metal industry varied considerably. In 2011, the highest hourly wages were paid in Denmark (32.31€) and Luxembourg (30.43€), while the lowest hourly wages existed in Bulgaria (2.50€) and Romania (3.10€).


Employees in the Basic Metals industry 2011 (2008 = 100)*


Working hours in the Basic Metals industry 2011 (2008 = 100)*

Number of employees (in thousands) in the Basic Metals industry*

	2008	2009	2010	2011	2012
Belgium	105.0	97.5	92.8	92.6	91.5
Bulgaria	76.7	69.3	66.6	64.4	63.0
Czech Republic	209.0	187.8	182.6	189.0	198.2
Denmark	50.0	42.0	38.0	39.0	39.0
Germany	1,140.0	1,078.0	1,052.0	1,087.,0	-
Estonia	13.8	11.6	12.8	15.5	15.0
Ireland	23.8	17.1	15.2	14.2	13.7
Greece	53.2	52.3	52.3	48.3	-
Spain	425.6	342.1	327.5	332.1	-
France	474.9	460.8	435.5	431.2	428.4
Italy	750.9	716.3	676.2	673.4	660.8
Cyprus	3.8	3.7	3.6	3.5	3.3
Latvia	15.1	10.8	10.8	12.3	13.4
Lithuania	18.1	13.0	11.3	12.8	12.6
Luxembourg	10.0	8.9	8.9	8.6	8.3
Hungary	100.1	95.7	87.2	92.8	92.3
Malta	1.2	1.3	1.5	1.6	1.7
Netherlands	115.4	106.9	103.6	103.5	101.8
Austria	107.8	104.4	102.0	104.6	106.8
Poland	376.1	379.4	360.9	370.4	-
Portugal	104.5	98.8	96.4	96.5	-
Romania	218.3	216.6	201.2	192.2	-
Slovenia	42.5	38.6	36.4	36.2	36.1
Slovakia	78.2	67.0	65.4	68.9	70.6
Finland	67.4	60.7	57.8	58.7	58.2
Sweden	-	-	-	-	-
United Kingdom	381.0	366.0	335.0	323.0	330.0
EU 27	5,203.4	4,836.6	4,620.9	4,674.1	-

** NACE Code C24-C25: Manufacture of basic metals and fabricated metal products, except machinery and equipment*

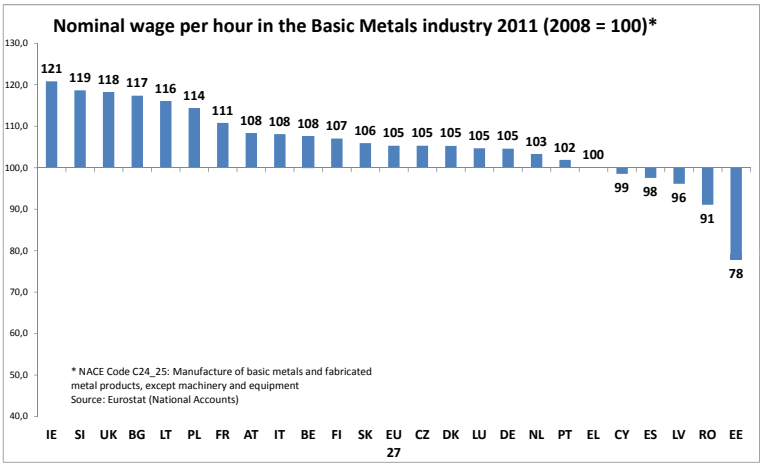
Source: Eurostat (National Accounts)

Number of working hours (in thousands) in the Basic Metals industry*

	2008	2009	2010	2011	2012
Belgium	166,000	142,300	140,900	142,800	140,600
Bulgaria	139,370	118,157	113,397	109,541	107,095
Czech Republic	353,285	305,787	316,164	325,966	343,299
Denmark	73,187	61,447	55,569	57,418	57,222
Germany	1,612,000	1,390,000	1,457,000	1,532,000	-
Estonia	28,288	21,225	24,832	31,124	29,056
Ireland	47,302	32,105	29,244	27,420	26,560
Greece	111,252	96,963	104,671	99,300	-
Spain	703,246	562,278	551,196	564,825	-
France	725,670	674,939	653,906	654,245	-
Italy	1,238,057	1,088,247	1,048,446	1,071,900	1,029,205
Cyprus	6,899	6,852	6,589	6,411	6,120
Latvia	31,940	19,419	21,366	23,962	26,306
Lithuania	36,373	25,048	21,026	23,483	24,208
Luxembourg	16,115	13,557	13,896	13,746	13,241
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	180,985	156,056	160,185	163,021	160,701
Austria	179,346	163,079	167,365	171,711	173,873
Poland	794,835	793,024	755,875	768,796	753,415
Portugal	196,380	186,649	183,032	184,455	-
Romania	422,202	413,362	384,260	358,412	-
Slovenia	68,870	56,216	54,708	54,583	53,994
Slovakia	131,797	105,292	110,271	116,362	119,123
Finland	105,300	91,700	86,700	89,300	88,500
Sweden	-	-	-	-	-
United Kingdom	738,608	681,304	640,224	601,276	627,016
EU 27	8,856,963	7,786,987	7,706,552	7,883,448	-

** NACE Code C24-C25: Manufacture of basic metals and fabricated metal products, except machinery and equipment*

Source: Eurostat (National Accounts)


Nominal wage per hour in the Basic Metals industry 2011 (2008 = 100)*
130,0
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
121 119 118 117 116 114 111 108 108 108 107 106 105 105 105 105 105 103 102 100 99 98 96 91 78
* NACE Code C24_25: Manufacture of basic metals and fabricated metal products, except machinery and equipment
Source: Eurostat (National Accounts)
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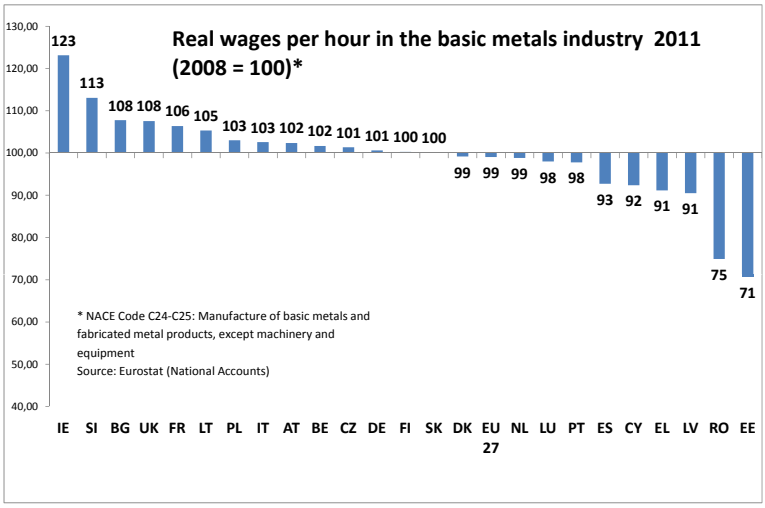

Real wages per hour in the basic metals industry 2011 (2008 = 100)*
130,00
120,00
110,00
100,00
90,00
80,00
70,00
60,00
50,00
40,00
123 113 108 108 106 105 103 103 102 102 101 101 100 100 99 99 99 98 98 93 92 91 91 75 71
* NACE Code C24-C25: Manufacture of basic metals and fabricated metal products, except machinery and equipment
Source: Eurostat (National Accounts)
IE SI BG UK FR LT PL IT AT BE CZ DE FI SK DK EU 27 NL LU PT ES CY EL LV RO EE

Wages per hour in EURO in the Basic Metals industry*

	2008	2009	2010	2011	2012
Belgium	24.45	24.91	25.42	26.30	27.28
Bulgaria	2.13	2.16	2.27	2.50	2.72
Czech Republic	6.35	6.14	6.28	6.79	6.68
Denmark	30.67	31.23	32.24	32.31	32.75
Germany	24.58	25.09	25.20	25.71	-
Estonia	5.57	5.92	4.95	4.33	4.84
Ireland	14.91	17.24	17.25	18.01	18.00
Greece	9.64	9.55	9.39	9.64	-
Spain	16.04	16.07	16.01	15.65	-
France	20.63	21.64	22.41	22.85	-
Italy	14.89	14.98	15.79	16.10	16.74
Cyprus	9.10	9.30	8.74	8.97	8.84
Latvia	4.57	4.69	4.17	4.37	-
Lithuania	4.45	3.91	4.71	5.17	5.28
Luxembourg	31.01	32.49	30.43	32.45	33.20
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	23.54	25.61	24.50	24.32	24.57
Austria	23.07	25.01	23.89	25.00	25.94
Poland	4.58	3.44	4.19	4.46	-
Portugal	6.99	6.94	7.03	7.13	-
Romania	3.92	2.14	2.93	3.10	-
Slovenia	10.56	11.16	11.91	12.54	12.78
Slovakia	6.24	6.74	6.60	6.86	7.03
Finland	21.45	21.70	22.24	22.96	23.49
Sweden	-	-	-	-	-
United Kingdom	19.92	17.39	19.46	21.61	-
EU 27	15.16	14.98	15.55	15.97	-

** NACE Code C24-C25: Manufacture of basic metals and fabricated metal products, except machinery and equipment*

Source: Eurostat (National Accounts)

1.8 European Chemical Industry

Definition:

In the following, the chemical industry is defined as the "Manufacture of chemicals and chemical products" (NACE Code C20).

Main trends in employment:

- The economic crisis in Europe has led to a significant decline of employment in the European chemical industry. Between 2008 and 2011 the total number of employees decreased by approximately 110,000 or 8.4%.

- In 2011, there were still around 1.2 million workers in the European chemical industry. About one fourth of them (324,000) work in Germany. More than 100,000 employees also work in the chemical sector in Poland, France, Italy and the UK.

- Out of the 25 European countries for which data are available, 19 countries saw a decline in the number of employees between 2008 and 2011. In three countries the number of workers remained roughly stable, while another three countries saw a slight increase in the number of employees in the chemical industry.

- The sharpest decline in the number of employees could be observed in Greece and Lithuania, which were faced by a drop of 31% and 30% respectively, followed by Hungary with a drop of 19%.

- A slight increase in the number of employees in the chemical industry of between 3% and 4% took place in Latvia, Poland and Estonia, while the number of workers remained roughly stable in Austria, Cyprus and Luxembourg.

Main trends in working hours:

- Between 2008 and 2011, the total number of working hours in the chemical industry in the European Union (EU 27) decreased by more than 130 million hours (approximately 6%). The decline in working hours was somewhat slower than the decline in the overall number of employees, which indicates that more part-time workers than full-time workers lost their jobs.

- In 2011, the total amount of hours worked in the European chemical industry was nearly 2.1 billion. Of these, 485 million hours were worked in Germany, followed by around 213 million hours in Italy and 207 million hours in Poland.

- Out of the 23 European countries for which data are available, 21 countries saw a decline in the number of working hours between 2008 and 2011, while only 2 countries (Poland and the Czech Republic) were able to increase the total amount of working hours in the chemical industry.

- In a majority of 13 countries, the decline in the overall number of working hours was between 2% and 10%. In eight countries, the decline was even higher than 10%.

- The sharpest decline in the number of working hours could be observed in Lithuania, which was faced by a drop of 32%, followed by Greece (31%) and Slovenia (23%).

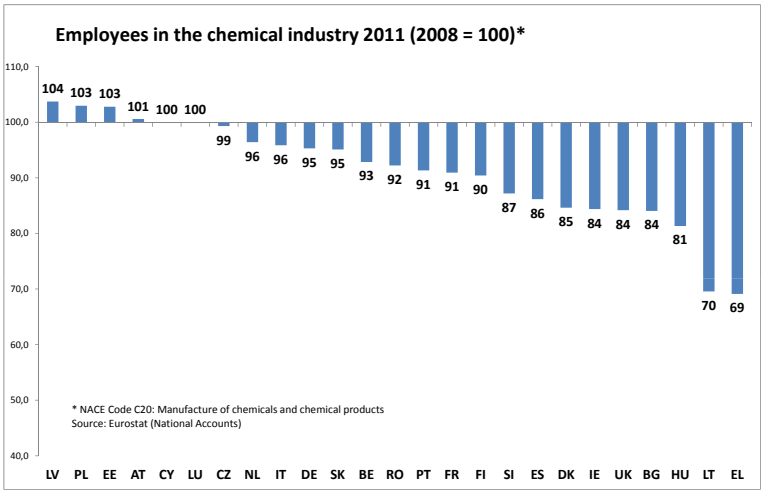
Main trends in hourly wages:

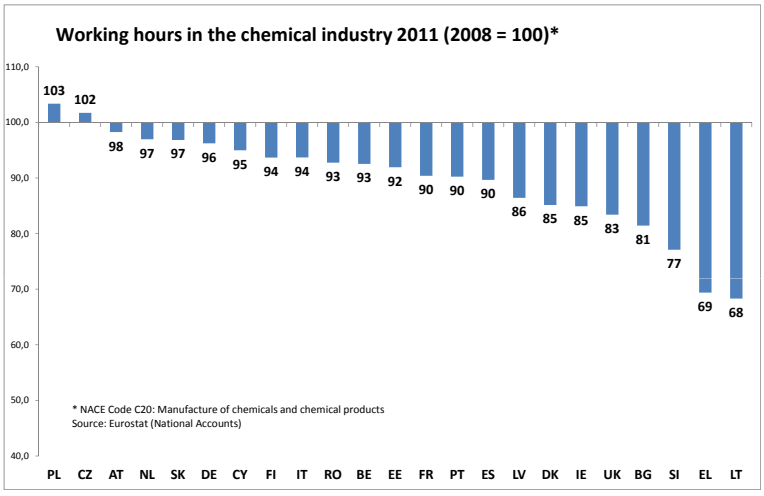
- Between 2009 and 2011, 16 out of the 22 European countries for which data are available saw an increase in nominal wages, ranging from 34% in Lithuania to 1% in Slovakia. Six countries witnessed a decline in nominal wages, with the strongest decrease taking place in Romania with -51%, followed by Ireland (-33%) and Spain (-5%).

- Deflated by the development of consumer prices, eight out of 22 countries for which data were available faced a decrease in real wages. Another nine countries saw only small or moderate increases in real wages ranging between 1% and 4% for the 3-year period. Finally, there were three countries with rather significant real wage increases of more than 20%: Slovenia, Bulgaria and Lithuania.

- A decline in wage levels is often the result of wage freezes or wage cuts. It could also be influenced by changes in the composition of the workforce within the chemical industry.

- In absolute terms, there are still enormous differences in the average wage levels in the European chemical industry. In 2011, the highest hourly wages existed in Denmark (39.84€), followed by Belgium (36.57€) and the Netherlands (34.90€). The lowest hourly wages could be found in Bulgaria (3.29€) and Romania (3.37€).


Employees in the chemical industry 2011 (2008 = 100)*
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
104 103 103 101 100 100 99 96 96 95 95 93 92 91 91 90 87 86 85 84 84 84 81 70 69
LV PL EE AT CY LU CZ NL IT DE SK BE RO PT FR FI SI ES DK IE UK BG HU LT EL
* NACE Code C20: Manufacture of chemicals and chemical products
Source: Eurostat (National Accounts)


Working hours in the chemical industry 2011 (2008 = 100)*
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
103 102 98 97 97 96 95 94 94 93 93 92 90 90 90 86 85 85 83 81 77 69 68
PL CZ AT NL SK DE CY FI IT RO BE EE FR PT ES LV DK IE UK BG SI EL LT
* NACE Code C20: Manufacture of chemicals and chemical products
Source: Eurostat (National Accounts)

Number of employees (in thousands) in the Chemical industry*

	2008	2009	2010	2011	2012
Belgium	47.5	44.7	43.8	44.1	43.6
Bulgaria	16.3	14.5	13.7	13.7	13.5
Czech Republic	28.3	29.1	28.4	28.1	26.3
Denmark	13.0	12.0	12.0	11.0	11.0
Germany	340.0	329.0	322.0	324.0	-
Estonia	3.6	3.1	2.1	3.7	3.7
Ireland	3.2	2.7	2.9	2.7	2.9
Greece	13.6	12.5	10.5	9.4	-
Spain	104.1	92.7	91.5	89.7	-
France	132.2	126.2	121.2	120.2	119.2
Italy	137.6	132.9	131.7	131.9	132.1
Cyprus	0.8	0.8	0.8	0.8	0.7
Latvia	2.7	2.6	2.7	2.8	2.6
Lithuania	6.9	8.0	6.2	4.8	4.9
Luxembourg	-	-	-	-	-
Hungary	22.5	24.3	21.7	18.3	17.9
Malta	0.3	0.3	0.3	0.3	0.3
Netherlands	50.1	47.8	47.9	48.3	48.7
Austria	17.4	16.7	17.1	17.5	17.7
Poland	97.8	87.5	92.7	100.7	-
Portugal	15.0	14.2	13.8	13.7	-
Romania	42.4	38.0	37.9	39.1	-
Slovenia	7.8	7.1	6.7	6.8	6.8
Slovakia	10.2	9.5	9.0	9.7	9.5
Finland	14.6	13.3	13.2	13.2	12.4
Sweden	-	-	-	-	-
United Kingdom	120.0	112.0	102.0	101.0	103.0
EU 27	1,319.4	1,254.9	1,214.8	1,208.1	-

** NACE Code C20: Manufacture of chemicals and chemical products*

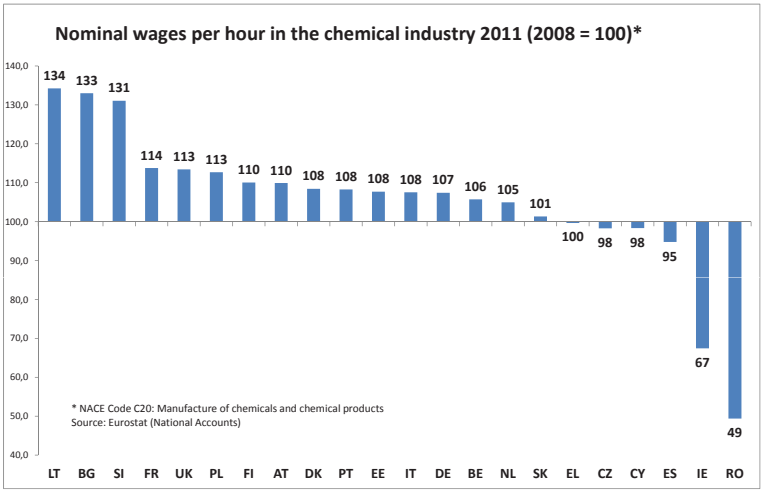
Source: Eurostat (National Accounts)

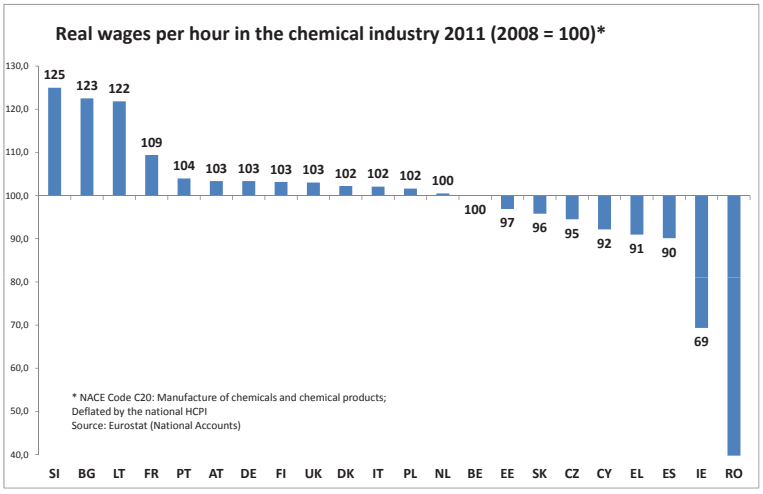
Number of working hours (in thousands) in the Chemical industry*

	2008	2009	2010	2011	2012
Belgium	77,700	72,300	71,600	71,900	71,300
Bulgaria	28,631	24,729	23,360	23,315	22,925
Czech Republic	47,576	48,406	48,802	48,392	45,386
Denmark	20,936	19,273	17,964	17,826	17,349
Germany	504,000	461,000	476,000	485,000	-
Estonia	7,168	5,216	3,636	6,589	7,211
Ireland	6,259	5,129	5,291	5,314	5,506
Greece	28,119	26,137	21,043	19,513	-
Spain	172,167	157,645	158,117	154,368	-
France	190,164	178,701	172,855	171,891	-
Italy	226,805	213,414	212,065	212,492	210,252
Cyprus	1,492	1,438	1,442	1,417	1,287
Latvia	6,306	3,861	5,369	5,450	5,191
Lithuania	13,714	16,005	12,868	9,369	9,564
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	79,474	74,389	76,401	77,067	77,811
Austria	28,424	26,265	27,390	27,930	28,162
Poland	200,173	179,110	193,187	206,911	187,062
Portugal	28,400	26,639	25,923	25,628	-
Romania	81,970	72,398	72,390	76,029	-
Slovenia	12,988	10,655	10,033	10,013	9,968
Slovakia	16,750	15,279	15,071	16,219	16,207
Finland	22,100	19,900	20,800	20,700	19,300
Sweden	-	-	-	-	-
United Kingdom	220,688	209,144	191,672	184,028	199,784
EU 27	2,205,180	2,062,785	2,036,261	2,074,062	-

** NACE Code C20: Manufacture of chemicals and chemical products*

Source: Eurostat (National Accounts)


Nominal wages per hour in the chemical industry 2011 (2008 = 100)*
140,0
130,0
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
134 133 131 114 113 113 110 110 108 108 108 108 107 106 105 101 100 98 98 95 67 49
LT BG SI FR UK PL FI AT DK PT EE IT DE BE NL SK EL CZ CY ES IE RO
* NACE Code C20: Manufacture of chemicals and chemical products
Source: Eurostat (National Accounts)


Real wages per hour in the chemical industry 2011 (2008 = 100)*
130,0
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
125 123 122 109 104 103 103 103 103 102 102 102 100 100 97 96 95 92 91 90 69
SI BG LT FR PT AT DE FI UK DK IT PL NL BE EE SK CZ CY EL ES IE RO
* NACE Code C20: Manufacture of chemicals and chemical products;
Deflated by the national HCPI
Source: Eurostat (National Accounts)

Wages per hour in EURO in the Chemical industry*

	2008	2009	2010	2011	2012
Belgium	34.59	33.91	34.65	36.57	38.01
Bulgaria	2.48	2.60	3.07	3.29	3.53
Czech Republic	8.39	7.76	7.91	8.37	8.43
Denmark	36.71	37.37	39.21	39.84	40.71
Germany	30.77	31.95	31.43	33.05	-
Estonia	4.16	4.91	7.18	4.48	4.70
Ireland	-	-	-	-	-
Greece	11.62	11.65	13.88	11.58	-
Spain	21.52	20.86	20.30	20.39	-
France	29.41	29.93	30.91	33.45	-
Italy	20.61	20.72	21.52	22.16	22.67
Cyprus	9.12	9.32	8.74	8.96	9.32
Latvia	-	-	4.19	4.35	-
Lithuania	7.18	5.10	5.99	9.64	9.49
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	33.26	33.55	33.85	34.90	34.88
Austria	28.36	29.75	29.99	31.17	31.99
Poland	4.97	4.55	4.94	4.78	-
Portugal	10.91	11.28	11.44	11.81	-
Romania	7.84	4.08	3.21	3.37	-
Slovenia	12.08	13.40	15.24	15.83	15.70
Slovakia	6.72	6.87	6.71	7.07	7.43
Finland	27.96	28.94	29.52	30.77	32.28
Sweden	-	-	-	-	-
United Kingdom	25.25	22.59	23.91	26.28	-
EU 27	21.28	20.79	21.28	21.95	-

** NACE Code C20: Manufacture of chemicals and chemical products*

Source: Eurostat (National Accounts)

1.9 European Pharmaceutical Industry

Definition:

In the following, the pharmaceutical industry is defined as the "Manufacture of basic pharmaceutical products and pharmaceutical preparations" (NACE Code C21).

Main trends in employment:

- The European pharmaceutical industry is one of the few sectors in which employment slightly increased since the start of the crisis in 2008. Between 2008 and 2011, the total number of employees in the EU 27 grew by approximately 3,600 (or 0.61%).

- In 2011, companies in the European pharmaceutical employed almost 600,000 workers. The largest share of these work in Germany (130,000 employees or 21.9%), followed by France (73,100), Italy (58,000), the United Kingdom (43,000) and Spain (42,800).

- In 15 European countries out of the 24 for which data is available, the total number of employees in the pharmaceutical industry increased or remained at least stable between 2008 and 2011. The largest increase by far, from 28,800 to 39,300 employees (36%), took place in Poland.

- In nine countries, the total number of employees decreased between 2008 and 2011. The sharpest decline in the number of pharmaceutical sector employees could be observed in Romania, where 23% of the jobs were lost, followed by Lithuania and Slovakia, with a drop of 12% each, and France with a drop of 10%.

Main trends in working hours:

- Between 2008 and 2011, the total number of working hours in the pharmaceutical industry in the EU 27 increased by approximately 13 million (or 1.4%). The number of working hours grew slightly more than the number of employees, which suggests that upwards fluctuations in demand have largely been dealt with by working longer hours.

- In 2011, the total amount of hours worked in the European pharmaceutical industry was almost 960 million. Of these, almost 200 million hours were worked in Germany, followed by around 103 million hours in France and approximately 95 million hours in Italy.

- Out of the 24 European countries for which data is available, the total number of working hours between 2008 and 2011 increased in 12 countries. The largest increase took place in

Poland (33%), followed by more modest increases in Austria (12%) and the Czech Republic and Denmark, with an 11% increase each in the total number of hours worked.

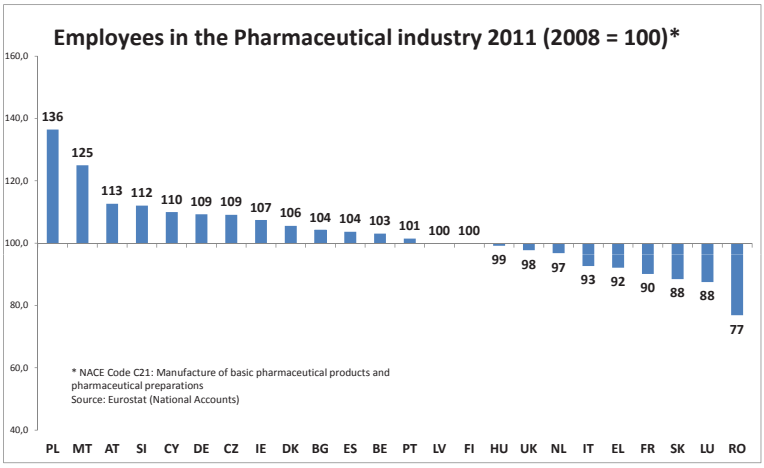
- The other 12 countries saw a decline in the total amount of hours worked. The sharpest decline in the number of working hours could be observed in the CEE countries Lithuania (-23%), Latvia (-22%) and Romania (-21%).

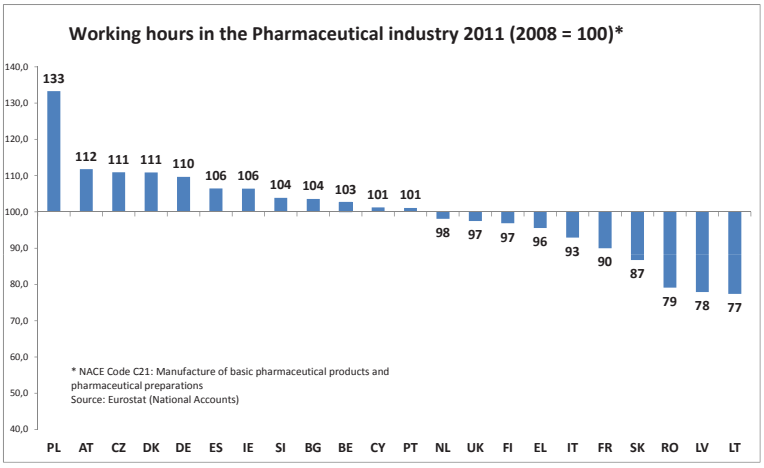
Main trends in hourly wages:

- Between 2008 and 2011, 17 out of the 22 European countries for which data is available saw an increase in nominal wages, ranging from a massive 85% in Lithuania to 2% in the Czech Republic. Nominal wages declined in five countries. The strongest decline took place in Poland with -24%, followed by Spain (-7%), Romania (-6%) and Slovenia (-3%).

- Deflated by the development of consumer prices, real wages decreased in 10 out of the 22 countries for which data was available. Eleven countries saw an increase in real wages in the European pharmaceutical industry, with the highest increase in Lithuania (67%), followed by Bulgaria (26%), Ireland (17%) and Slovakia (16%). In Austria, real wages in the pharmaceutical industry in 2011 were at the same level as in 2008.

- In absolute terms, there is however still a great divergence between wage levels in the European pharmaceutical industry. In 2011, the highest hourly wages by far were paid in the United Kingdom (67.62€), followed by Denmark (48.58€) and Belgium (38.08€). The lowest hourly wages existed in Bulgaria (3.75€), Poland (4.57€) and Romania (5.25€).


Employees in the Pharmaceutical industry 2011 (2008 = 100)*
160,0
140,0
120,0
100,0
80,0
60,0
40,0
136
125
113
112
110
109
109
107
106
104
104
103
101
100
100
99
98
97
93
92
90
88
88
77
PL MT AT SI CY DE CZ IE DK BG ES BE PT LV FI HU UK NL IT EL FR SK LU RO
* NACE Code C21: Manufacture of basic pharmaceutical products and pharmaceutical preparations
Source: Eurostat (National Accounts)


Working hours in the Pharmaceutical industry 2011 (2008 = 100)*
140,0
130,0
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
133
112
111
111
110
106
106
104
104
103
101
101
98
97
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93
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87
79
78
77
PL AT CZ DK DE ES IE SI BG BE CY PT NL UK FI EL IT FR SK RO LV LT
* NACE Code C21: Manufacture of basic pharmaceutical products and pharmaceutical preparations
Source: Eurostat (National Accounts)

Table: Number of employees (in thousands) in the Pharmaceutical industry*

	2008	2009	2010	2011	2012
Belgium	22.9	23.0	23.0	23.6	24.1
Bulgaria	7.2	6.6	7.1	7.5	7.8
Czech Republic	8.8	9.9	9.6	9.6	9.6
Denmark	18.0	19.0	19.0	19.0	20.0
Germany	119.0	124.0	131.0	130.0	-
Estonia	-	-	-	-	-
Ireland	28.2	27.2	30.9	30.3	29.4
Greece	14.0	13.4	13.8	12.9	:
Spain	41.3	39.8	41.3	42.8	:
France	81.1	77.4	75.3	73.1	72.6
Italy	62.6	59.9	58.3	58.0	57.3
Cyprus	1.0	1.0	1.0	1.1	1.2
Latvia	2.1	2.1	2.1	2.1	2.2
Lithuania	0.8	0.9	0.4	0.7	0.9
Luxembourg	-	-	-	-	-
Hungary	23.7	21.1	23.1	23.5	23.3
Malta	0.8	0.8	1.0	1.0	1.0
Netherlands	15.5	15.6	15.4	15.0	13.2
Austria	11.1	11.6	12.1	12.5	13.4
Poland	28.8	34.1	32.8	39.3	:
Portugal	6.8	6.7	6.9	6.9	:
Romania	9.5	8.9	7.4	7.3	:
Slovenia	5.8	6.0	6.2	6.5	6.9
Slovakia	2.6	2.4	2.3	2.3	2.3
Finland	4.4	4.4	4.1	4.4	4.5
Sweden	Sweden	-	-	-	-
United Kingdom	44,0	43,0	44,0	43,0	46,0
EU 27	590,7	583,3	595,3	594,3	-
Norway	-	-	-	-	-

** NACE C21: Manufacture of basic pharmaceutical products and pharmaceutical preparations*

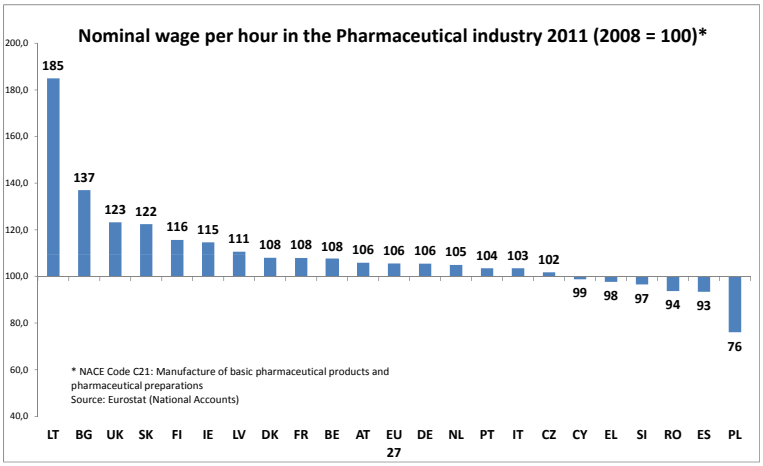
Source: Eurostat (National Accounts)

Number of working hours (in thousands) in the Pharmaceutical industry*

	2008	2009	2010	2011	2012
Belgium	37,500	37,700	37,800	38,500	39,500
Bulgaria	12,291	11,262	12,135	12,731	13,284
Czech Republic	14,955	16,851	16,541	16,587	16,529
Denmark	26,495	29,231	28,438	29,378	30,162
Germany	176,000	174,000	191,000	193,000	-
Estonia	-	-	-	-	-
Ireland	55,705	65,705	60,626	59,284	58,399
Greece	28,070	27,190	28,277	26,820	:
Spain	69,296	67,152	69,852	73,769	:
France	114,783	108,285	105,972	103,294	:
Italy	102,418	97,480	95,531	95,162	93,210
Cyprus	1,892	1,824	1,828	1,915	2,158
Latvia	4,970	2,652	3,726	3,873	4,089
Lithuania	1,589	1,733	836	1,230	1,120
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	23,034	23,185	23,216	22,598	19,878
Austria	18,237	19,006	19,981	20,387	22,248
Poland	61,041	71,400	68,526	81,366	90,253
Portugal	13,026	12,856	13,064	13,168	:
Romania	18,154	16,561	14,250	14,362	:
Slovenia	9,443	9,231	9,716	9,809	10,261
Slovakia	4,306	3,983	3,728	3,735	3,865
Finland	6,400	6,100	5,900	6,200	6,400
Sweden	-	-	-	-	-
United Kingdom	78,520	77,272	78,572	76,544	84,136
EU 27	945,331	943,631	954,689	958,405	-

** NACE C21: Manufacture of basic pharmaceutical products and pharmaceutical preparations*

Source: Eurostat (National Accounts)


Nominal wage per hour in the Pharmaceutical industry 2011 (2008 = 100)*
200,0
180,0
160,0
140,0
120,0
100,0
80,0
60,0
40,0
185
137
123
122
116
115
111
108
108
108
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98
97
94
93
76
* NACE Code C21: Manufacture of basic pharmaceutical products and pharmaceutical preparations
Source: Eurostat (National Accounts)
LT
BG
UK
SK
FI
IE
LV
DK
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EU 27
DE
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CY
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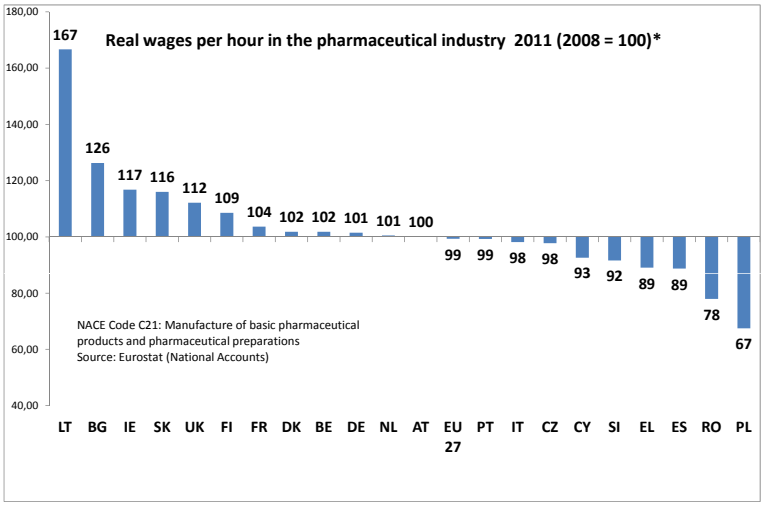
PL


Real wages per hour in the pharmaceutical industry 2011 (2008 = 100)*
180,00
160,00
140,00
120,00
100,00
80,00
60,00
40,00
167
126
117
116
112
109
104
102
102
101
101
100
99
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98
93
92
89
89
78
67
NACE Code C21: Manufacture of basic pharmaceutical products and pharmaceutical preparations
Source: Eurostat (National Accounts)
LT
BG
IE
SK
UK
FI
FR
DK
BE
DE
NL
AT
EU 27
PT
IT
CZ
CY
SI
EL
ES
RO
PL

Wages per hour in EURO in the pharmaceutical industry*

	2008	2009	2010	2011	2012
Belgium	35.42	34.72	34.17	38.08	40.83
Bulgaria	2.74	2.98	3.57	3.75	3.72
Czech Republic	9.59	9.01	10.77	9.90	9.97
Denmark	44.94	45.43	48.61	48.58	50.08
Germany	31.48	33.10	32.88	33.21	-
Estonia	-	-	-	-	-
Ireland	17.76	18.45	20.33	20.36	20.73
Greece	10.92	11.08	12.47	10.66	-
Spain	26.12	25.45	26.53	24.40	-
France	26.53	27.87	27.41	28.64	-
Italy	26.74	26.66	27.09	27.67	28.15
Cyprus	9.09	9.27	8.75	8.98	7.51
Latvia	6.58	-	-	7.23	-
Lithuania	6.92	6.00	15.07	12.85	12.23
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	32.13	31.92	32.52	33.72	34.21
Austria	27.73	26.85	28.65	29.37	30.12
Poland	7.05	5.48	5.75	4.57	-
Portugal	13.63	13.99	14.14	14.12	-
Romania	6.45	4.93	5.01	5.25	-
Slovenia	25.75	26.78	24.58	24.88	25.45
Slovakia	7.22	8.41	8.53	9.18	9.50
Finland	25.94	27.21	28.14	30.00	30.78
Sweden	-	-	-	-	-
United Kingdom	59.82	51.78	63.60	67.62	-
EU 27	26.30	25.81	27.28	27.77	-

** NACE C21: Manufacture of basic pharmaceutical products and pharmaceutical preparations*

Source: Eurostat (National Accounts)

1.10 European Rubber and Plastics Industry

Definition:

In the following, the rubber and plastics industry is defined as the "Manufacture of rubber and plastic products and other non-metallic mineral products" (NACE Code C22-C23).

Main trends in employment:

- The European rubber and plastics industry was particularly hard hit by the crisis. With the exception of Luxembourg, where the total number of employees stayed roughly the same between 2008 and 2011, all the other countries experienced a decline in employment. In the EU 27, the total number of employees decreased by approximately 400,000 or 12.5%. The absolute low point was reached in 2010, while employment in the European rubber and plastics industry started to grow slowly again in 2011.

- In 2011, there were around 2.8 million workers in the European rubber and plastics industry. A little over one-fifth of them (593,000) work in Germany. A comparatively large number of employees also work in the rubber and plastics industry in Italy (365,200), Poland (305,600), France (275,100) and the United Kingdom (225,000).

- The sharpest decline in the number of employees could be observed in the two Baltic states Latvia (-39%) and Lithuania (-37%), followed by Ireland, with a drop of 36%, and Spain, where the number of employees decreased by 30%.

Main trends in working hours:

- The development as regards the total number of working hours between 2008 and 2011 was even more dramatic, with a 13.7% decline in the EU 27, which in absolute terms amounts to a drop of almost 750 million hours.

- In 2011, the total amount of hours worked in the European rubber and plastics industry was almost 4.7 billion. Of these, the largest proportion was worked in Germany (887 million hours), followed by around 641 million hours in Poland and 567 million hours in Italy.

- All the 24 European countries for which data is available saw a decline in the number of working hours between 2008 and 2011. Even in Luxembourg, where the number of employees stayed roughly the same, the number of working hours declined by 5%.

- The sharpest decline in the number of working hours could be observed in Latvia, which was faced by a drop of 39%, followed by Ireland (-38%), Spain (-31%) and Bulgaria (-26%).

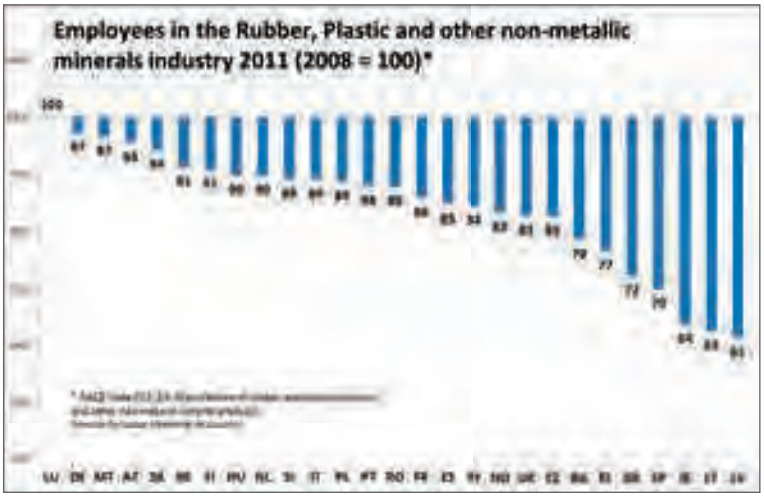
- The lowest drop in the number of working hours in the European rubber and plastics industry took place in Germany (-2%), Luxembourg (-5%) and Slovakia and Austria (-6% each).

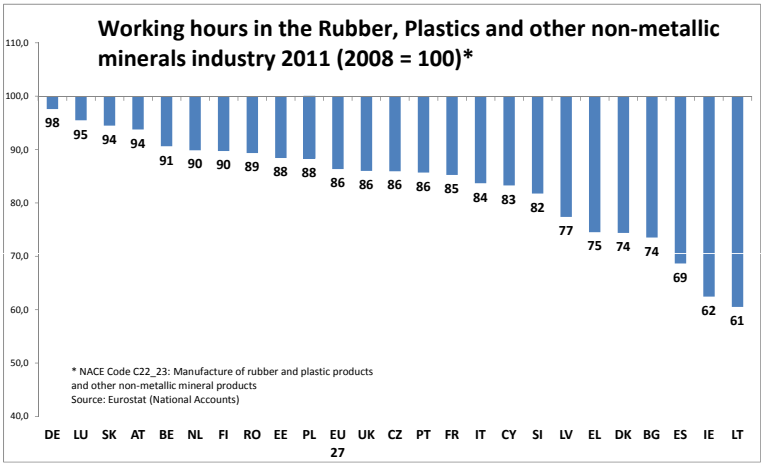
Main trends in hourly wages:

- Between 2008 and 2011, 19 out of the 23 European countries for which data is available saw an increase in nominal wages in the European rubber and plastics industry, ranging from 44% in Bulgaria to 3% in United Kingdom. Nominal wages declined in four countries. The strongest decline took place in Romania (-31%), followed by Latvia (-18%), Greece (-12%) and Cyprus (-1%).

- Deflated by the development of consumer prices, real wages stagnated or decreased in 8 out of the 23 countries for which data was available. Eleven countries saw a relatively moderate real wage growth of below 10% and three countries registered substantial real wage increases of more than 10%: Bulgaria (33%), Slovenia (16%) and Poland with an increase of 12%.

- In absolute terms, the European rubber and plastics industry is however still characterized by considerable differences in wage levels. In 2011, the highest wages existed in Denmark (33.55€), followed with a difference of almost 5€ by Ireland (28.58€) and Luxembourg (28.25€). The lowest hourly wages were paid in Bulgaria (2.27€), Romania (2.64€) and Poland (4.54€).


Employees in the Rubber, Plastic and other non-metallic minerals industry 2011 (2008 = 100)*


Working hours in the Rubber, Plastics and other non-metallic minerals industry 2011 (2008 = 100)*
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
98
95
94
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91
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74
74
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62
61
DE
LU
SK
AT
BE
NL
FI
RO
EE
PL
EU 27
UK
CZ
PT
FR
IT
CY
SI
LV
EL
DK
BG
ES
IE
LT
* NACE Code C22_23: Manufacture of rubber and plastic products and other non-metallic mineral products
Source: Eurostat (National Accounts)

Number of employees (in thousands) in the Rubber and Plastics industry*

	2008	2009	2010	2011	2012
Belgium	55.3	53.0	50.5	50.4	49.5
Bulgaria	58.7	52.7	47.8	46.1	43.9
Czech Republic	155.4	135.6	125.8	128.4	131.8
Denmark	36.0	30.0	26.0	26.0	26.0
Germany	610.0	581.0	574.0	593.0	-
Estonia	11.1	7.3	8.7	9.4	7.7
Ireland	16.0	11.5	9.4	10.2	10.5
Greece	41.4	40.2	36.9	31.7	-
Spain	302.6	245.8	221.8	211.6	-
France	320.9	291.3	278.9	275.1	270.3
Italy	410.4	393.5	372.3	365.2	349.9
Cyprus	4.5	4.5	4.3	3.8	3.3
Latvia	11.4	7.2	7.0	7.0	7.5
Lithuania	21.9	20.4	14.4	13.7	16.2
Luxembourg	6.9	7.0	6.8	6.9	6.8
Hungary	82.2	71.8	70.7	73.8	72.7
Malta	2.9	2.5	2.7	2.8	2.8
Netherlands	63.0	60.0	57.0	56.5	56.0
Austria	64.3	61.2	60.0	61.4	61.2
Poland	344.7	323.5	304.8	305.6	-
Portugal	82.6	75.5	73.2	72.6	-
Romania	127.6	136.6	109.2	112.0	-
Slovenia	22.9	20.8	20.2	20.4	19.7
Slovakia	51.6	47.1	44.7	48.6	47.8
Finland	33.8	30.7	29.7	30.7	30.0
Sweden	Sweden	-	-	-	-
United Kingdom	272.0	251.0	234.0	225.0	224.0
EU 27	3,202.5	2,950.8	2,786.7	2,800.6	-

** NACE Code C22-C23: Manufacture of rubber and plastic products and other non-metallic mineral products*

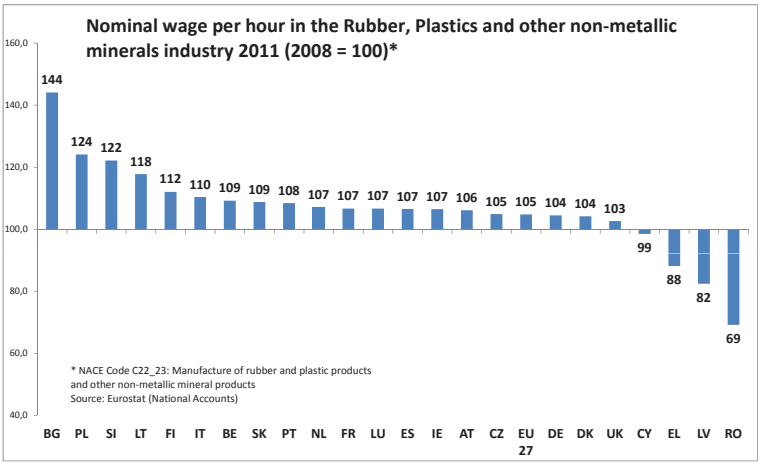
Source: Eurostat (National Accounts)

Number of working hours (in thousands) in the Rubber and Plastics industry*

	2008	2009	2010	2011	2012
Belgium	87,300	80,400	78,100	79,100	77,300
Bulgaria	106,327	89,539	81,148	78,153	74,582
Czech Republic	260,006	226,030	219,507	223,412	230,728
Denmark	52,709	43,280	37,043	39,204	38,935
Germany	909,000	815,000	849,000	887,000	:
Estonia	21,096	12,931	17,296	18,648	15,079
Ireland	31,236	21,755	17,610	19,502	20,170
Greece	86,087	77,153	71,374	64,152	:
Spain	480,164	376,905	344,692	329,629	:
France	475,477	415,963	407,706	405,343	:
Italy	678,372	597,948	576,899	567,674	530,651
Cyprus	8,186	8,186	7,700	6,816	5,927
Latvia	18,344	17,608	13,849	14,196	15,122
Lithuania	43,528	37,626	27,960	26,345	32,370
Luxembourg	11,859	10,771	11,048	11,322	10,903
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	102,668	96,866	92,664	92,267	91,555
Austria	106,755	98,216	98,931	100,083	99,206
Poland	725,317	685,421	644,064	640,699	650,850
Portugal	151,035	137,191	133,506	129,428	:
Romania	245,907	260,137	208,441	219,655	:
Slovenia	37,667	30,832	31,071	30,798	29,197
Slovakia	87,818	77,534	76,845	82,984	80,919
Finland	53,500	46,200	46,800	48,000	47,300
Sweden	-	-	-	-	-
United Kingdom	504,712	454,324	457,028	433,940	425,828
EU 27	5,437,828	4,825,593	4,682,733	4,694,546	-

** NACE Code C22-C23: Manufacture of rubber and plastic products and other non-metallic mineral products*

Source: Eurostat (National Accounts)


Nominal wage per hour in the Rubber, Plastics and other non-metallic minerals industry 2011 (2008 = 100)*
160,0
140,0
120,0
100,0
80,0
60,0
40,0
144
124
122
118
112
110
109
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108
107
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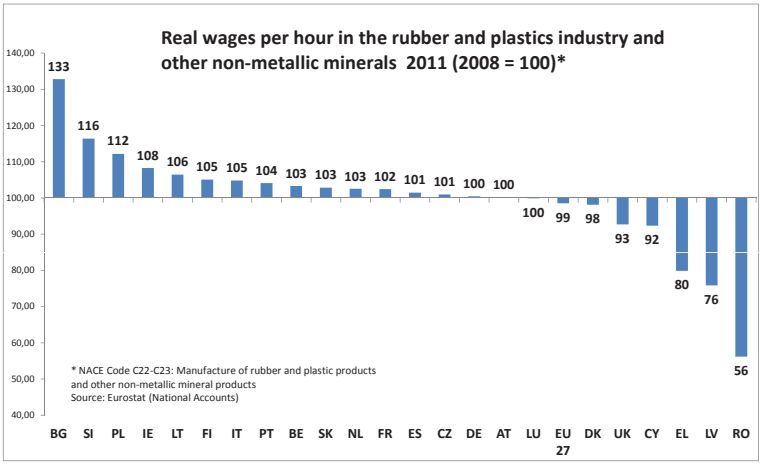
105
104
104
103
99
88
82
69
BG PL SI LT FI IT BE SK PT NL FR LU ES IE AT CZ EU 27 DE DK UK CY EL LV RO
* NACE Code C22_23: Manufacture of rubber and plastic products and other non-metallic mineral products
Source: Eurostat (National Accounts)


Real wages per hour in the rubber and plastics industry and other non-metallic minerals 2011 (2008 = 100)*
140,00
130,00
120,00
110,00
100,00
90,00
80,00
70,00
60,00
50,00
40,00
133
116
112
108
106
105
105
104
103
103
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102
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101
100
100
100
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93
92
80
76
56
BG SI PL IE LT FI IT PT BE SK NL FR ES CZ DE AT LU EU 27 DK UK CY EL LV RO
* NACE Code C22-C23: Manufacture of rubber and plastic products and other non-metallic mineral products
Source: Eurostat (National Accounts)

Wages per hour in EURO in the Rubber and Plastics industry*

	2008	2009	2010	2011	2012
Belgium	24.50	25.00	25.75	26.76	27.77
Bulgaria	1.58	2.09	2.17	2.27	2.63
Czech Republic	6.68	6.20	6.45	7.11	6.85
Denmark	32.18	32.93	33.63	33.55	34.08
Germany	21.53	22.38	22.30	22.49	-
Estonia	5.00	6.06	4.51	4.76	6.31
Ireland	26.83	29.61	32.32	28.58	27.58
Greece	10.42	10.96	10.26	9.19	-
Spain	16.91	17.32	17.77	18.02	-
France	21.30	22.09	21.97	22.72	-
Italy	15.42	16.12	16.61	17.03	17.71
Cyprus	9.11	9.30	8.75	8.98	9.72
Latvia	5.95	3.94	4.74	4.87	-
Lithuania	4.58	3.52	4.65	5.39	4.72
Luxembourg	26.48	28.02	28.01	28.25	29.30
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	23.09	23.98	24.41	24.73	25.20
Austria	22.08	22.78	22.78	23.43	24.18
Poland	4.29	3.49	4.30	4.54	-
Portugal	7.54	7.73	7.93	8.18	-
Romania	4.39	2.54	2.79	2.64	-
Slovenia	10.68	11.77	12.65	13.05	13.16
Slovakia	5.68	6.13	6.23	6.41	6.58
Finland	20.90	21.75	22.35	23.42	24.16
Sweden	-	-	-	-	-
United Kingdom	21.65	20.85	20.72	20.39	-
EU 27	14.99	14.99	15.46	15.71	-

** NACE Code C22-C23: Manufacture of rubber and plastic products and other non-metallic mineral products*

Source: Eurostat (National Accounts)

1.11 European Textile Industry

Definition:

In the following, the textile industry is defined as the "Manufacture of textiles, wearing apparel, leather and related products" (NACE Code C13-C15).

Main trends in employment:

- The economic crisis in Europe has led to a significant decline of employment in the European textile industry. Between 2008 and 2011, the total number of employees decreased by nearly 500,000 or 18%.

- In 2011, there were still around 2.2 million workers in the European textile industry. About one quarter of them (522,000) worked in Italy. A comparatively high number of textile workers could also be found in Romania (385,000) and Poland (233,000).

- Out of the 26 European countries for which data are available, 24 countries saw a decline in the number of textile employees between 2008 and 2011. Only two countries (Luxembourg and Romania) saw a slight increase.

- The sharpest decline in the number of employees could be observed in Ireland, with a drop of 53%, followed by Cyprus with a reduction of 47% and Slovenia with 42%.

- In a relative majority of 15 countries, the decrease in the number of employees was between 10% and 25%.

Main trends in working hours:

- Between 2008 and 2011, the total number of working hours in the textile industry of the European Union (EU 27) decreased by more than 600 million hours (approximately 14.5 %). The decline in working hours was somewhat slower than the decline in the overall number of employees, which indicates that more part-time workers than full-time workers lost their jobs.

- In 2011, the total amount of hours worked in the European textile industry was nearly 3.9 billion. Of these, 774 million hours were worked in Romania, followed by around 758 million hours in Italy and 475 million hours in Poland.

- Out of the 24 European countries for which data are available, 22 countries saw a decline in

the number of working hours between 2008 and 2011, while only two countries (Romania and Luxembourg) were able to increase the overall amount of working hours in the textile industry.

- In a relative majority of 15 countries, the overall number of working hours declined between 10% and 30%.

- The sharpest decline in the number of working hours could be observed in Ireland, with a drop of 58%, followed by Cyprus (-45%) and Slovenia (-44%). A strong decline could also be observed in Bulgaria, Estonia and Greece, where the number of working hours decreased by between 33% and 35%.

Main trends in hourly wages:

- Between 2008 and 2011, out of the 21 European countries for which data are available, 17 countries saw an increase in hourly nominal wages, ranging from 16% in Slovenia to 3% in France. Four countries saw a decline in nominal wages. The strongest decrease took place in Romania (-25%), followed by the UK (-6%), Greece and Cyprus (-1% each).

- Deflated by the development of consumer prices, real wages decreased in 6 out of the 21 countries for which data were available. Another 13 countries saw only small or moderate increases in real wages, ranging between 0% and 8% for the 3-year period. Finally, there were two countries with a somewhat stronger increase in hourly real wages: Slovenia (16%) and Poland (14%).

- A decline in wage levels is frequently the result of wage freezes or wage cuts. It could also be influenced by changes in the composition of the workforce within the textile industry.

- In absolute terms, there are still enormous differences in the average wage levels in the European textile industry. In 2011, the highest hourly wages existed in Luxembourg (34.27€), followed by Denmark (30.72€) and Belgium (23€). The lowest hourly wages were paid in Bulgaria (1.50€) and Romania (1.79€).


Employees in the textile industry 2011 (2008 = 100)*
120
110
100
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89
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88
87
86
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82
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78
77
77
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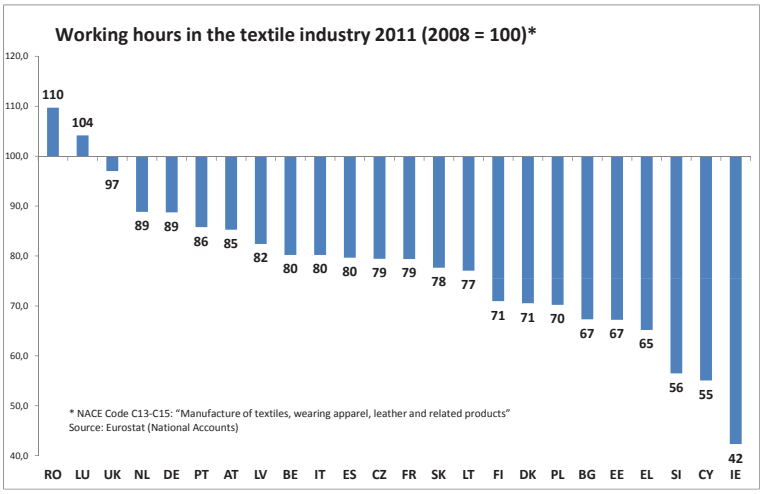
72
71
71
70
64
58
53
47
LU RO UK HU DE NL MT IT AT PT FI LT BE FR CZ SK ES LV BG DK PL EE EL SI CY IE
* NACE Code C13-C15: "Manufacture of textiles, wearing apparel, leather and related products"
Source: Eurostat (National Accounts)


Working hours in the textile industry 2011 (2008 = 100)*
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
110
104
97
89
89
86
85
82
80
80
80
79
79
78
77
71
71
70
67
67
65
56
55
42
RO LU UK NL DE PT AT LV BE IT ES CZ FR SK LT FI DK PL BG EE EL SI CY IE
* NACE Code C13-C15: "Manufacture of textiles, wearing apparel, leather and related products"
Source: Eurostat (National Accounts)

Number of employees (in thousands) in the Textile industry*

	2008	2009	2010	2011	2012
Belgium	35.5	31.9	29.6	28.7	26.7
Bulgaria	222.5	182.9	159.3	159.1	159.0
Czech Republic	66.2	56.5	51.6	51.6	49.0
Denmark	7.0	6.0	5.0	5.0	5.0
Germany	167.0	155.0	148.0	148.0	-
Estonia	20.8	15.2	15.1	14.6	13.7
Ireland	7.3	5.3	4.9	3.4	3.8
Greece	47.6	41.6	36.7	30.5	-
Spain	194.7	151.5	146.1	149.3	-
France	144.2	126.9	119.1	115.3	112.0
Italy	598.8	552.7	520.3	522.1	513.8
Cyprus	1.5	1.2	1.0	0.8	0.8
Latvia	16.5	11.8	11.8	12.4	12.4
Lithuania	39.8	36.6	32.9	32.8	29.2
Luxembourg	1.3	1.4	1.4	1.4	1.4
Hungary	68.4	64.3	67.3	62.9	62.5
Malta	0.8	0.7	0.7	0.7	0.7
Netherlands	18.2	16.8	16.2	16.1	15.9
Austria	23.4	21.3	20.5	20.2	19.8
Poland	326.2	274.1	235.5	232.8	-
Portugal	217.9	197.1	185.0	187.0	-
Romania	370.5	285.4	377.0	384.6	-
Slovenia	21.6	17.5	13.5	12.6	12.0
Slovakia	46.5	39.8	34.1	35.8	36.0
Finland	9.9	9.3	8.2	8.2	7.5
Sweden	-	-	-	-	-
United Kingdom	96.0	88.0	93.0	91.0	97.0
EU 27	2,636.4	2,308.8	2,282.6	2,162.8	-

** NACE Code C13-C15: Manufacture of textiles, wearing apparel, leather and related products*

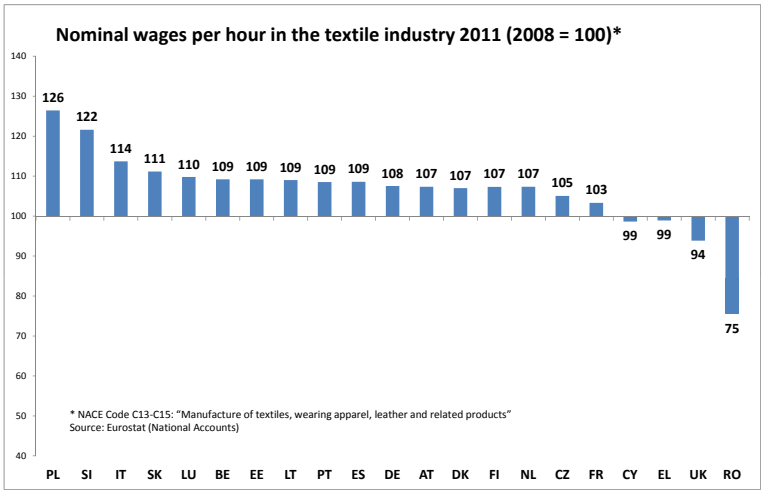
Source: Eurostat (National Accounts)

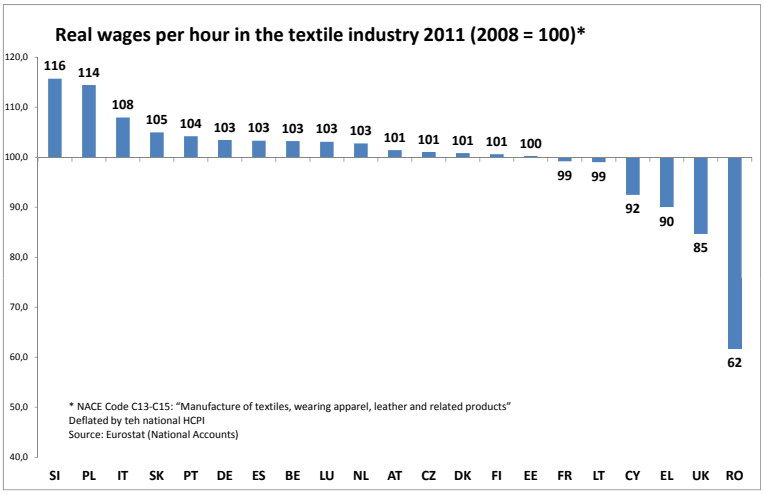
Number of working hours (in thousands) in the Textile industry*

	2008	2009	2010	2011	2012
Belgium	48,500	41,100	40,000	38,900	36,400
Bulgaria	373,710	289,265	251,915	251,561	251,408
Czech Republic	108,646	91,403	85,341	86,308	82,833
Denmark	10,372	8,250	7,248	7,315	7,229
Germany	231,000	202,000	202,000	205,000	-
Estonia	40,171	24,768	27,962	27,002	25,927
Ireland	13,646	9,281	8,640	5,775	6,741
Greece	92,269	84,359	72,447	60,146	-
Spain	321,475	253,058	247,643	256,076	-
France	209,670	179,027	170,918	166,476	-
Italy	945,461	790,631	749,594	758,395	739,207
Cyprus	2,423	2,004	1,658	1,334	1,212
Latvia	28,805	25,809	22,453	23,741	23,716
Lithuania	79,106	64,025	59,185	60,960	54,538
Luxembourg	2,252	2,207	2,226	2,346	2,233
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	25,725	23,366	22,824	22,855	22,538
Austria	35,572	31,120	30,729	30,331	29,316
Poland	676,127	555,363	484,647	474,697	449,669
Portugal	404,983	366,125	344,142	347,446	-
Romania	705,884	541,603	719,491	774,435	-
Slovenia	33,479	23,551	20,414	18,906	17,820
Slovakia	76,427	63,339	56,836	59,348	57,959
Finland	14,800	12,100	10,800	10,500	9,700
Sweden	-	-	-	-	-
United Kingdom	162,708	149,292	156,468	157,872	162,188
EU 27	4,557,064	3,836,556	3,843,350	3,897,410	-

** NACE Code C13-C15: Manufacture of textiles, wearing apparel, leather and related products*

Source: Eurostat (National Accounts)


Nominal wages per hour in the textile industry 2011 (2008 = 100)*
140
130
120
110
100
90
80
70
60
50
40
126
122
114
111
110
109
109
109
109
109
108
107
107
107
107
105
103
99
99
94
75
* NACE Code C13-C15: "Manufacture of textiles, wearing apparel, leather and related products"
Source: Eurostat (National Accounts)
PL SI IT SK LU BE EE LT PT ES DE AT DK FI NL CZ FR CY EL UK RO


Real wages per hour in the textile industry 2011 (2008 = 100)*
120,0
110,0
100,0
90,0
80,0
70,0
60,0
50,0
40,0
116
114
108
105
104
103
103
103
103
103
101
101
101
101
100
99
99
92
90
85
62
* NACE Code C13-C15: "Manufacture of textiles, wearing apparel, leather and related products"
Deflated by teh national HCPI
Source: Eurostat (National Accounts)
SI PL IT SK PT DE ES BE LU NL AT CZ DK FI EE FR LT CY EL UK RO

Wages per hour in EURO in the Textile industry

	2008	2009	2010	2011	2012
Belgium	21.07	21.92	21.95	23.00	23.96
Bulgaria	0.92	1.07	1.36	1.50	1.51
Czech Republic	4.40	4.26	4.53	4.69	4.72
Denmark	28.68	29.72	30.49	30.72	30.70
Germany	19.91	20.99	20.79	21.41	-
Estonia	2.60	3.27	2.83	2.84	3.02
Ireland	9.42	12.20	9.72	14.23	11.97
Greece	7.71	7.57	7.10	7.63	-
Spain	10.99	11.90	12.14	11.93	-
France	17.13	17.38	17.27	17.70	-
Italy	12.27	13.18	13.66	13.95	14.30
Cyprus	9.12	9.28	8.75	9.00	9.32
Latvia	-	2.66	3.12	3.25	-
Lithuania	2.78	2.54	2.78	3.02	3.50
Luxembourg	31.22	30.86	33.78	34.27	35.02
Hungary	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	20.95	22.00	22.21	22.49	22.98
Austria	17.07	17.76	17.97	18.32	19.27
Poland	2.04	1.87	2.20	2.20	-
Portugal	4.55	4.66	4.82	4.94	-
Romania	2.73	1.86	1.62	1.79	-
Slovenia	7.60	9.17	9.08	9.24	9.49
Slovakia	3.58	4.00	4.16	4.13	4.40
Finland	19.26	19.26	19.35	20.67	21.44
Sweden	-	-	-	-	-
United Kingdom	23.40	19.58	19.89	20.15	-
EU 27	8.39	8.50	8.38	8.48	-

** NACE Code C13-C15: Manufacture of textiles, wearing apparel, leather and related products*

Source: Eurostat (National Accounts)

2 Qualitative developments in collective bargaining

2.1 Overview of collectively-agreed wages

The analysis of collectively-agreed wages in Europe has to come to terms with the fact that there are still no official European statistics providing an overview of developments in different European countries. Therefore, all European comparisons are based on national data which are *not harmonised* and show great differences regarding data-gathering and calculation, coverage, accuracy, frequency of the data, etc.[3]. There are also a significant number of EU countries that provide no data on collectively-agreed wages at all. The gathering of data on collectively-agreed wages has to tackle numerous difficulties, in particular, when it comes to ***sectoral-level data***:

- Definition of the sector: There is no clear-cut definition of sectors, because sectoral collective agreements are the result of historical developments and might cover various sub-sectors.

- Consideration of different bargaining systems: In general, there is no single collective agreement but various agreements within a sector. In countries with more decentralised bargaining systems there are often only company-level agreements. Other countries have multi-level bargaining systems with sectoral agreements and additional company-level agreements. All this contributes to the difficulties in calculating exact sectoral data.

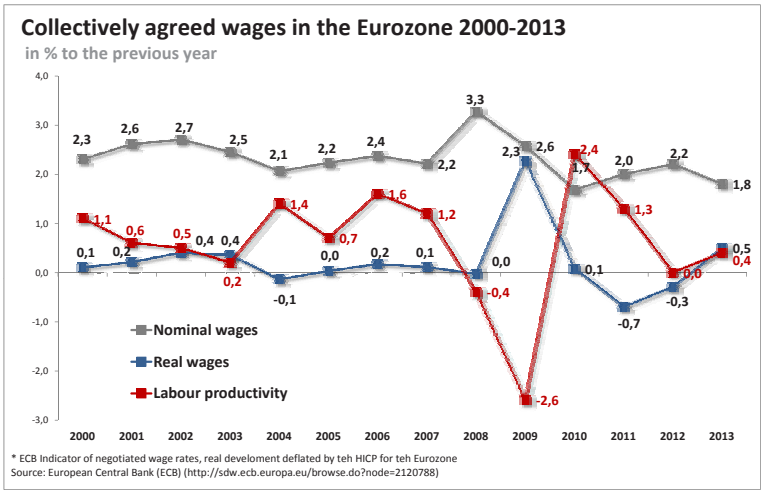
- Calculation of collectively-agreed wages: There are different methods to calculate collectively-agreed wage developments on a year-to-year basis. The latter is needed for meaningful comparisons because collective agreements often have a longer duration and cover more than one year. There is, furthermore, the additional problem of appropriately taking into account other payments than simply basic pay, such as bonuses, extra social benefits, etc.

- Comparison with official wage statistics: In order to understand the influence of collective bargaining on actual wages, it is necessary to analyse wage drift, i.e. the difference in the development of collectively-agreed and actual wages. However, as a general rule, the sectoral coverage of collective agreements does not exactly match the classification of sectors in official statistics, and wage drift at sectoral level can therefore only be calculated at an approximate level.

[3] For a detailed analysis of different national data sources on collectively agreed wages see Van Gyes 2012

Collectively-agreed wage developments in Europe - an overview

In order to get an overview of the development of collectively-agreed wages in Europe there is only one official indicator which provides data at a more aggregate level and this is the "indicator of negotiated wage rates" provided by the European Central Bank (ECB). The ECB indicator is created on the basis of the non-harmonised national data of ten countries, which includes all larger countries and covers more than 95% of the Euro area (Schulten 2013).[4]



Although there are some serious methodological data restrictions, the ECB indicator of negotiated wage rates does at least provide a rough overview of the development of collectively-agreed wages in the Euro area. Assessing the period between 2000 and 2013, the collectively-agreed wage increases have shown a rather stable pattern. In most years the nominal wage growth varied between 2.2 and 2.7%. One major exception was the year 2008, with a wage growth of 3.3% reflecting a stronger growth in inflation in this particular year. Following the economic crisis in 2009, collectively-agreed wage developments reacted but with a certain time lag, leading to a somewhat lower growth rate of 1.7% in 2010. In the following years, collectively-agreed wages started to increase faster again: by 2.0% in 2011 and by 2.2% in 2012. In 2013, however, the growth of collectively-agreed wages slowed down again with a growth rate of 1.8%.

[4] The ECB does not publish the underlying national data, unfortunately, which means that the creation of the indicator is not very transparent. As the official ECB indicator covers the whole economy, the ECB is also calculating an indicator for manufacturing, which, is only used for internal purposes and is not published however.

Adjusted by the development of the harmonized index of consumer prices (HIVP) for the Euro area, the real development of collectively-agreed wages has been extremely moderate with only minor increases during the 2000s. The only exception was the crisis year 2009 when a sharp drop of inflation resulted in a relatively high real wage increase, although this was followed by a decrease in real wages in the following years. Due to a significant fall in inflation rates, the real value of collectively-agreed wages started to increase again in 2013. In most years of the 2000s, increases in real wages clearly lag behind productivity growth, the exception again being the crisis year 2009 with its sharp fall in labour productivity.

Collectively-agreed wage developments in Europe in the industriAll Europe sectors

Most national data sources on collectively-agreed wage developments have only a rather broad sectoral coverage and often provide data for the whole manufacturing sector and not for the various branches within manufacturing. Official statistics are therefore not a sufficiently reliable source for an analysis and comparison of the development of collectively-agreed wages in the various branches represented by industriAll Europe.

More recently, the European Foundation for the Improvement of Living and Working Conditions (Eurofound) in Dublin set up a new database on collectively-agreed wages, which also contains comparative data for the European metalworking and the European chemical industry.[5] The Eurofound data, however, also has some important limitations which have to be taken into consideration when working with these data. First of all, the data only covers a limited number of countries. Secondly, the data has been collected by drawing on different kinds of national sources and, therefore, is not comparable in a strictly scientific sense. Thirdly, there are also significant differences in the national data concerning the definition of the metalworking and chemical industry and which sub-sectors are covered by the data. Finally, for many countries, the Eurofound database covers only wage increases determined at sectoral level, but not additional wage increases agreed at company level. In particular, in countries with a two-tier bargaining system (e.g. Denmark), there might be a tendency to underestimate collectively-agreed wage increases.

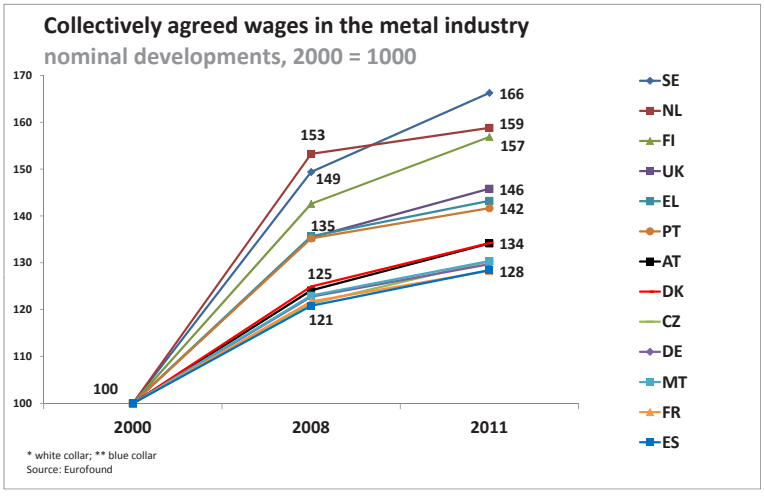
[5] The database is available here: http://www.eurofound.europa.eu/eiro/cwb/. For a more recent evaluation of that data by Eurofound see: Aumayr-Pintar et.al. 2014.

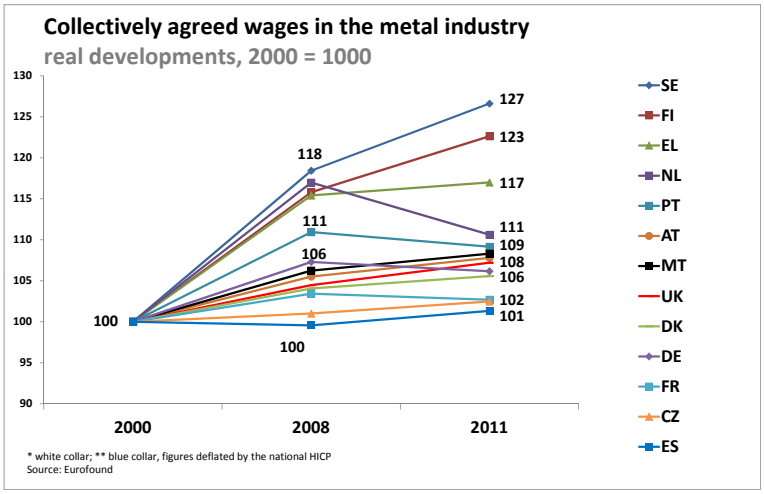
Collectively-agreed wages in the European metalworking industry

All countries covered by the Eurofound database showed a steady increase in collectively-agreed wages in the metalworking industry since the year 2000, which also continued after the beginning of the crisis in 2008. Across countries, however, there were significant differences in the rate of wage growth.

The highest growth rate in the European metalworking industry could be observed in Sweden, Finland and the Netherlands, where nominal wages grew between 57% and 66% in the period 2000-2011. A second group of countries includes Portugal, Greece and the UK where nominal wages increased by between 42% and 46%. Finally, a third group of countries made up of Austria, Denmark, Germany, Malta, France, the Czech Republic and Spain had an overall wage growth of between 28% and 34%.

Adjusted for inflation, collectively-agreed wages also grew significantly in real terms in most countries during the pre-crisis period 2000-2008. The only exceptions were Spain, where real wages were almost stagnating, and France and the Czech Republic with only a minor increase in real wages. However, real wages dropped in a couple of countries, such as in particular the Netherlands and Portugal, but also to a lesser extent Germany and France, after the beginning of the crisis in 2008.

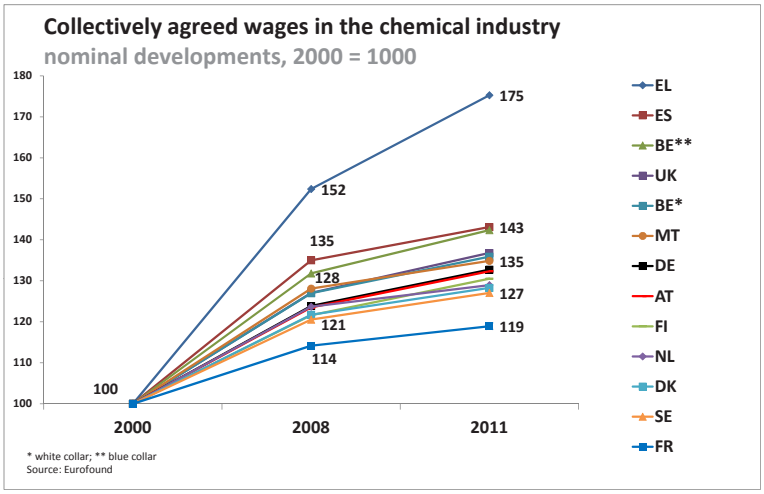




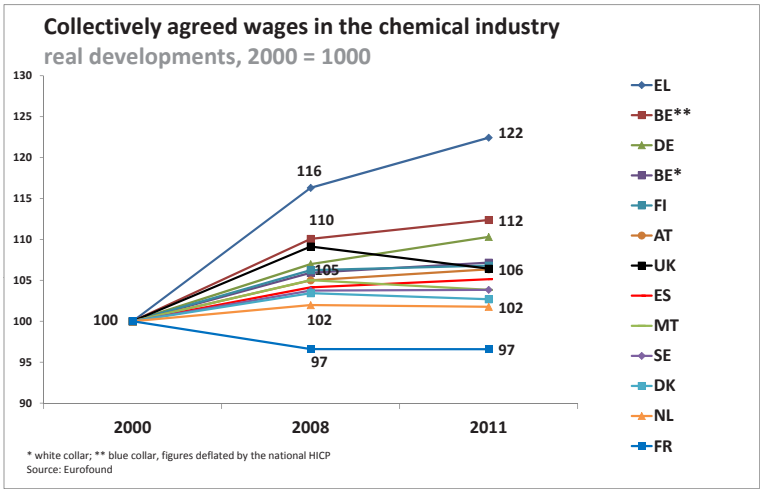
Collectively-agreed wages in the European chemical industry

The development of collectively-agreed wages in the European chemical industry shows a rather similar picture to the one in metalworking. In nominal terms, all countries covered by the Eurofound database featured a steady wage increase which also continued after 2008. Surprisingly, the strongest wage increase of 75% for the whole period 2000-2011 could be observed in Greece, which also seems to be relatively unaffected by the crisis. Relatively high growth rates of around 43% also existed in Belgium and Spain, while France came in last with a wage growth of only 19%.

In real terms, France has been the only country in the whole period 2000-2011 where workers in the chemical industry had to face a slight decrease of wages of around 3%. All the other countries showed real wage increases – albeit with significant differences in the growth rates. In a few other countries, among them in particular the UK, real wages have shown a downward trend since the beginning of the crisis in 2008.



Due to the lack of accurate data, it is not possible to calculate an exact wage drift for the European metalworking and chemical industry. However, the development of actual wages in the various industriAll Europe branches (see above) seems to be much more affected by the crisis than collectively-agreed wages. This indicates that there has been a negative wage drift in some sectors and countries, while generally workers covered by collective agreements have been less hard hit by the crisis than workers with no collective agreements.



Collectively-agreed wages in the Metalworking sector

in % compared to the previous year*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Austria	3.7	3.7	2.2	2.1	2.1	2.5	3.1	2.6	3.6	3.9	1.5	2.5	5.3
Belgium (white collar)	5.0	1.5	4.9	2.0	3.4	1.5	2.3	1.7	2.3	5.0	0.9	1.4	3.0
Belgium (blue collar)	4.0	2.4	5.2	2.8	2.6	2.7	2.9	2.3	1.7	5.0	0.9	1.4	3.0
Cyprus			3.1	3.1	2.0	2.0	2.0	2.4	2.4	2.4	0.0	1.1	0.0
Czech Rep.	5.1	5.3	5.2	4.1	3.8	3.9	4.0	4.2	5.8	4.0	2.8	2.9	2.8
Denmark	2.4	2.4	2.4	2.3	2.5	2.5	2.5	2.8	2.5	2.4	1.2	1.7	1.3
Finland	3.1	2.7	2.2	2.6	2.2	2.3	2.5	1.9	4.4	4.1	0.5	1.0	2.5
France	3.7	3.4	0.0	7.2	0.0	0.0	0.0	0.0	22.4	2.1	0.0	3.4	3.4
Germany	2.5	1.7	3.6	2.4	2.3	1.9	2.6	3.8	2.7	3.6	0.7	1.6	3.3
Greece	4.2	3.3	5.4	3.9	6.5	6.5	6.0	5.8	6.5	1.8	1.8	0.0	0.0
Italy							3.7	2.5	3.7	3.2	2.9	2.4	2.3
Malta		3.7	4.1	4.6	2.5	5.1	5.2	4.0	1.6	1.7	2.5	0.5	
Netherlands		3.9	3.3	2.7	1.8	1.0	1.3	1.0	4.2	3.8	1.0	1.4	2.2
Portugal	7.1	6.0	8.6	3.9	3.1	4.7	7.5	3.9	3.6	3.3	4.0	3.6	1.9
Romania		26.7	31.6	28.0	25.0	20.0	12.5	11.1	15.0	10.1	0.0	11.8	0.0
Slovakia					7.0	7.0	5.8	6.5	7.1	5.0	3.5	3.7	3.6
Slovenia							2.1	2.8	5.1	6.6	5.0	2.9	
Spain	3.9	3.8	3.9	3.8	3.6	4.1	3.9	3.9	3.9	2.1	2.2	3.2	1.5
Sweden	2.4	2.6	2.4	2.2	1.9	2.0	2.2	2.8	2.8	2.7	1.1	1.5	3.4
UK	3.5	3.5	3.2	3.5	3.0	3.5	3.0	4.0	4.0	3.0	1.8	4.8	4.0

**Most countries covers only increase determined by sectoral agreements, but not by (additional) company agreements*
Source: Eurofound Collective Wage Bargaining Database (/context)

Collectively-agreed wages in the Chemical sector

% change to previous year*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Austria	1.9	2.9	1.3	2.3	2.2	3.1	2.8	2.9	3.9	2.6	1.2	3.2	4.5
Belgium (white collar)	3.7	4.0	3.9	2.0	1.1	2.7	3.3	2.0	5.3	2.0	0.9	4.0	2.3
Belgium (blue collar)	0.9	6.4	2.8	2.0	2.4	2.5	3.8	2.6	5.7	2.0	1.8	4.0	4.8
Cyprus				2.5	3.0	3.0	3.0	3.0	3.0	2.9	1.0	1.0	
Czech Rep.	4.7	5.5	3.6	3.6	3.6	4.6	4.5	5.0	6.0		3.1	2.9	2.7
Denmark	2.4	2.4	2.4	2.3	2.5	2.5	2.5	2.8	2.5	2.4	1.2	1.7	1.3
Finland	3.8	3.1	2.3	2.6	2.1	2.1	2.4	1.8	3.4	3.8	2.9	0.5	2.5
France	0.4	1.0	1.0	1.0	1.0	1.0	4.2	1.9	2.3	1.5	0.5	2.1	1.7
Germany	2.3	2.1	3.6	2.7	2.5	1.6	3.4	2.2	3.6	2.8	2.2	2.0	2.9
Greece	5.0	3.1	5.8	4.5	5.9	6.5	6.0	6.0	5.5	6.7	6.1	1.6	1.6
Italy							2.6	3.9	3.4	3.0	2.6	2.8	2.6
Malta	2.8	5.2	2.8	4.6	2.5	2.5	3.1	2.0	2.5	1.9	2.8	0.5	
Netherlands	4.5	5.1	2.6	1.3	1.8	2.8	1.8	1.8	4.4	1.1	1.4	1.7	1.7
Romania		30.8	29.8	16.9	13.0	9.5	9.5	6.3	7.3	4.4	6.0	5.9	2.8
Slovakia					6.0	5.0	4.7	5.2	4.2	4.1	2.9	2.4	2.3
Slovenia	3.9	3.5	1.8	1.8				2.5	3.9	3.5		1.8	1.8
Spain	2.8	3.9	4.9	3.5	3.7	4.0	3.2	4.8	2.6	2.1	2.1	1.7	0.7
Sweden	2.4	2.6	2.4	2.2	1.9	2.0	2.2	2.8	2.8	2.7	1.1	1.5	3.4
UK	3.0	3.2	2.2	3.0	3.0	3.3	3.0	3.0	3.6	1.3	2.7	3.5	3.0

**Most countries covers only increase determined by sectoral agreements, but not by (additional) company agreements*
Source: Eurofound Collective Wage Bargaining Database (http://www.eurofound.europa.eu/eiro/cwb/context)

2.2 Main trends and features in collective bargaining systems

The neoliberal transformation of industrial relations involving processes of decentralisation and de-collectivisation of collective bargaining systems is not a new phenomenon. It can be traced back, in different guises, to the early 1980s – with the most far-reaching implications in the UK where Margaret Thatcher initiated a fundamental change from multi-employer to single-employer bargaining (Baccaro and Howell 2011). Leaving this extreme case aside, multi-employer bargaining nonetheless remained the dominant mode of determining wages and terms and conditions in the majority of western European countries. However, the recent crisis - and in particular the crisis management pursued by European and national policy-makers - provided new impetus to the decentralisation of collective bargaining. The more or less open interventions in the bargaining autonomy of the social partners, which undermine and in some cases dismantle historically grown multi-employer bargaining structures, played a pivotal role in this context s, (Schulten 2013).

However, decentralisation can mean different things in different contexts. Traxler (1995, 2002) distinguishes two basic types of decentralisation: organised and disorganised decentralisation. In the case of the former, collective agreements at (inter-)sectoral level define the conditions under which regulatory competences are delegated to lower levels; whereas in the case of the latter, multi-employer bargaining arrangements at (inter-)sectoral level are increasingly replaced by single-employer bargaining as the dominant mode of determining wages and terms and conditions. The crucial distinction between the two types of decentralisation is, however, that in a process of organised decentralisation bargaining tasks have been deliberately delegated to the lower level in a way that enables the central actors to retain a certain degree of control over bargaining processes taking place at the lower level. By contrast, disorganised decentralisation is forced upon the trade unions for different reasons. Important factors triggering disorganised decentralisation are direct state intervention through far-reaching legislative changes affecting the institutional framework of collective bargaining and the defection of employers' associations from multi-employer bargaining arrangements.

However, in order to assess the impact of the crisis, it is important to take into account not only the differences in the national collective bargaining structures at the beginning of the crisis but also the extent to which the various countries were affected by the crisis, because it can be assumed that the implications were less far-reaching in those countries that were less hard-hit by the crisis. Concerning the different features of national collective bargaining systems, one general distinction can be made with respect to the significance of the various levels of negotiation – or more specifically with respect to whether multi-employer bargaining at (inter-) sectoral level or single-employer bargaining at the company level is the dominant mode of negotiations. Providing a stylized overview for the EU27, the table below illustrates that in 2010

multi-employer bargaining still was the dominant form of collective bargaining. However, the table also illustrates the great institutional variety as regards the significance of the various levels.

Levels of collective bargaining in the EU

	Intersectoral	Sectoral	Company	Predominance MEB[a] or SEB[b]
Austria		XXX	X	MEB
Belgium	XXX	XX	X	MEB
Bulgaria		X	XXX	SEB
Cyprus		XX	XX	MEB
Czech Republic		X	XXX	SEB
Denmark	X	XXX	XX	MEB
Estonia		X	XXX	SEB
France		XX	XXX	MEB
Finland	XXX	XX	X	MEB
Germany		XXX	X	MEB
Greece	X	XX	X	MEB
Hungary		X	XXX	SEB
Ireland			XXX	SEB
Italy		XXX	X	MEB
Latvia		X	XXX	SEB
Lithuania		X	XXX	SEB
Luxembourg		XX	XX	MEB
Malta		X	XXX	SEB
Netherlands		XXX	X	MEB
Poland		X	XXX	SEB
Portugal		XXX	X	MEB
Romania		X	XXX	SEB
Slovakia	X	XX	XX	SEB
Slovenia	XX	XX	X	MEB
Sweden		XXX	X	MEB
United Kingdom		X	XXX	SEB

Note: XXX = most important level, XX = important level, X = existing but marginal level;
' blank' = level is non-existent

[a] = Multi-employer bargaining

[b] = Single-employer bargaining

Source: Authors' compilation based on Glassner et al. 2011: 321

Closely related to the structure of collective bargaining in terms of multi- or single-employer bargaining is the coverage rate of the various national systems, i.e. the proportion of the workforce covered by a collective agreement. The table below illustrates that collective bargaining coverage is markedly higher in multi-employer systems than under single-employer systems. With the exception of the Czech Republic and Ireland, the adjusted collective bargaining coverage (i.e. excluding the self-employed) is below 30% in all the other countries with single-employer arrangements and significantly lower than in all the other countries with multi-employer arrangements. Another important feature of collective bargaining systems that are potentially affected by the crisis are the various mechanisms of coordination both vertically (i.e. across different levels) and horizontally (i.e. across different sectors and regions). The table on the main features of collective bargaining in the EU also illustrates that the degree of coordination also tends to be higher in multi-employer bargaining arrangements than in countries dominated by single-employer bargaining.

Main features of collective bargaining in EU countries

Austria	97	0.93	MEB
Belgium	96	0.46	MEB
France	92	0.20	MEB
Slovenia	92	0.45	MEB
Sweden	91	0.51	MEB
Finland	90	0.40	MEB
Denmark	85	0.44	MEB
Italy	85	0.34	MEB
Netherlands	84	0.57	MEB
Norway	74	0.51	MEB
Greece	65	0.33	MEB
Germany	58	0.48	MEB
Luxembourg	58	0.30	MEB
Ireland	42	0.46	SEB
Czech Republic	41	0.25	SEB
Spain	37*	0.38	MEB
Slovakia	35	0.50	MEB
Hungary	34	0.24	SEB
Portugal	32	0.35	MEB
United Kingdom	31	0.12	SEB
Poland	29	0.23	SEB
Estonia	25	0.37	SEB
	Collective bargaining coverage %	Bargaining coordination	Bargaining structure (MEB or SEB)

*Source: Marginson et al; 2014, 42; data for collective bargaining coverage based on Visser 2013: ICTWSS Database Version 4.0; * according to figures provided for by the national Ministry of Labour for 2013.*

All these are important framework conditions shaping the strategic options available for handling the crisis. The following analysis of the impact of the crisis on collective bargaining systems and processes in the European manufacturing industry will divide the EU countries into three geographical clusters depending on the extent of the impact. The first cluster comprises the northern European countries which have been less hard hit by the crisis. The analysis will focus in particular on developments in Germany and Sweden as the two main examples of dealing with the crisis by a process of controlled decentralisation of collective bargaining. The second cluster includes the southern European crisis countries Greece, Spain, Portugal and Italy, where the crisis led to major changes in collective bargaining. And the third cluster is made up of the central and eastern European (CEE) countries, which include both types of countries: those which have been hard hit by the crisis and those which came through the crisis fairly smoothly with little implications for collective bargaining. The analysis of CEE countries will therefore focus in more detail on developments in Romania (first type of hard-hit countries) and the Czech Republic (second type - which came through the crisis relatively unscathed).

2.3 Disorganised decentralisation in the southern European crisis countries

The group of southern European crisis countries consists of Greece, Italy, Portugal and Spain, which represent the 'Mediterranean model' of labour relations marked by a long tradition of well-established sectoral bargaining structures (Meardi 2012). All Mediterranean countries have enjoyed comparatively high levels of collective bargaining coverage of 80 to 90%, backed by direct – or in the case of Italy indirect – erga omnes regulations and extensions of collective agreements (Schulten 2012). As illustrated by the above table, collective bargaining coverage in most southern European countries decreased significantly as a consequence of the crisis, ranging now from 65% in Greece to a mere 37% in Spain and 34% in Portugal. The exception is Italy where collective bargaining coverage remained high at 85%.

The main driver of changes to the collective bargaining system in the southern European countries was the political intervention from European level as part of the European crisis management. The political intervention into wage policies was most obvious in Greece and Portugal. In exchange for financial assistance, these countries had to introduce far-reaching reforms of their collective bargaining systems that were laid down in so-called 'Memorandums of Understanding' with the Troika of the European Commission, ECB and IMF. The same applies to Spain, which received financial assistance for its financial sector that was also linked to a 'Memorandum of Understanding' in which the Spanish government had to commit itself to implementing structural reforms, including fundamental changes in labour market regulation (European Commission 2012). Italy was subjected to a less direct and more unofficial form of political intervention through the ECB, which made the purchase of government bonds conditional on policy reforms. In autumn 2011, a confidential letter from the ECB was leaked to the public, in which the Italian government was requested to carry out structural reforms, including the radical decentralisation of collective bargaining (Meardi 2012).

However, with respect to the impact of the crisis on collective bargaining processes, Italy must be distinguished from the three countries that were directly affected by 'Memorandums of Understanding'. While, in the latter, the measures imposed by the Troika triggered a process of disorganised decentralisation, in Italy the measures introduced in response to the crisis followed the pattern of organised decentralisation, thereby reinforcing underlying trends which were already under way before the beginning of the crisis. Since the beginning of the crisis, various measures have been introduced that have strengthened the trend towards a more decentralised system of collective bargaining. These measures include the 2009 collective bargaining reform introducing the possibility of 'opening clauses', the 2011 inter-sectoral agreement defining rules for derogations from industry-wide agreements, and the inter-confederal agreement on productivity of November 2012, which further specifies the rules for derogations and envisages an increase in the autonomy of company-level agreements on issues such as work organisation

and working time (Pedersini 2013). However, the key point is that all these measures are taking place within the context of the traditional two-tier system of collective bargaining in Italy and therefore follow the pattern of controlled decentralisation.

This stands in stark contrast to the situation in Greece, Portugal and Spain, where even though the multi-employer bargaining structures remained formally intact, their scope and actual operation were increasingly undermined by the various legal changes that have been introduced in response to the demands placed upon these countries by the Troika. The political intervention into national collective bargaining set in motion a process of disorganised decentralisation as defined above: single-employer bargaining processes are increasingly replacing multi-employer negotiation processes as the dominant mode of determining wages and other terms and conditions. Another key characteristic is the fact that this transfer of regulatory capacity is state-imposed and outside the control of central collective bargaining actors. As a matter of fact, some of the changes explicitly aim at undermining and reducing the wage-setting power of trade unions.

The central actor behind this process of disorganised decentralisation is the Troika, with its demands for 'structural reforms' in return for financial support. The master plan for the intended 'structural reforms' has been formulated by the European Commission's DG ECFIN in its report 'Labour Market Developments in Europe 2012' (European Commission 2012b). Under the heading 'employment-friendly reforms', DG ECFIN presents a long list of required 'structural reforms' which, apart from various issues of labour market deregulation (such as a decrease in unemployment assistance, a reduction of employment protection, increasing the retirement age, etc.), also includes a sub-section on the 'wage bargaining framework' that includes the following suggestions:

- "decrease statutory and contractual minimum wages",
- "decrease the bargaining coverage",
- "decrease (automatic) extension of collective agreements",
- "reform the bargaining system in a less centralised way, i.e. by removing or limiting the "favourability principle",
- introduce/extend" the possibility to derogate from higher level agreements or to negotiate company-level agreements",
- promote measures which "result in an overall reduction in the wage-setting power of trade unions" (European Commission 2012b: 103-104).

The key objective of DG ECFIN's catalogue of 'structural reforms' is the radical decentralisation of collective bargaining and reduction of the regulatory power of collective agreements and hence of the power of trade unions. A comparison with the measures that have been implemented in the southern European countries suggests that DG ECFIN's catalogue served as the blueprint for the changes in the collective bargaining systems in Greece, Spain and Portugal.

Measures promoting disorganised decentralisation in southern European countries

Measures:	Affected countries
Facilitating derogation of company-level agreements from sectoral agreements or legislative (minimum) provisions	Greece, Portugal, Italy, Spain
General priority of company agreements/ abolition of the favourability principle	Greece, Spain
More restrictive criteria for extension of collective agreements	Greece, Portugal
Reduction of the 'after-effect' of expired collective agreements	Greece, Spain
Possibilities to conclude company agreements by non-union groups of employees	Greece, Portugal, Spain

Source: Schulten and Müller (2013)

The changes introduced in the southern European countries in response to the political pressure from the Troika comprise the following three elements:

First, giving company agreements priority over sectoral agreements so that company agreements can in practice undermine standards defined by sectoral agreements. This is what happened in Greece and Spain where the 'favourability principle' was also abolished. In Italy and Portugal, by contrast, the possibilities for downward derogation from sectoral standards at company level still remain dependent upon the commitment of the bargaining parties at sectoral level. However, in Italy, the case of Fiat has shown that companies are able to withdraw from the sectoral bargaining system and set up their own company agreement, which in turn can represent an influential precedent fostering the decentralisation of collective bargaining (Tomassetti 2013).

The second key element of the institutional changes introduced in the southern European countries is the far-reaching withdrawal or dismantling of legal support for collective bargaining, such as regulations on the extension or the 'after-effect' of collective agreements. In Portugal, for instance, the bargaining system has been weakened by the introduction of more restrictive criteria for the extension of collective agreements. Before the reform, all major collective agreements were declared generally binding in a quasi-automatic way.

And finally, the third key element of the changes in all three 'Troika countries' has been more wide-ranging possibilities for non-union groups of employees to negotiate and conclude company-level agreements.

The far-reaching implication of these measures as regards the neoliberal transformation of collective bargaining systems in the 'Troika countries' manifests itself in the significant drop in the number of collective agreements and in the proportion of employees covered by a collective agreement.

Collective agreements and collective bargaining coverage in Greece, Portugal and Spain 2008-2013

	2008	2009	2010	2011	2012	2013
Greece*						
Sectoral agreements	202	103	91	55	31	14
Company-level agreements	462	347	352	241	978	408
Portugal						
Sectoral agreements	200	164	166	115	46	
Company-level agreements	95	87	64	55	39	
Coll. Agreements (total)	**295**	**251**	**230**	**170**	**85**	
Number of extension of Coll. Agreements	137	102	116	17	12	
Employees covered by Coll. Agreements (in millions)	1,9	1,4	1,4	1,2	0,3	
Spain						
Sectoral agreements	1.448	1.366	1.265	1.163	982	543
Company-level agreements	4.539	4.539	3.802	3.422	2.781	1.281
Coll. Agreements (total)	**5.987**	**5.689**	**5.067**	**4.585**	**3.763**	**1.824**
Employees covered by Coll. Agreements (in millions)	12,0	11,6	10,8	10,7	9,1	5,7

** Newly-concluded collective agreements in the respective year*

Sources: Ministries of Labour of Spain, Portugal and Greece

In Greece, the number of newly-concluded sectoral collective agreements decreased from 202 in 2008 to only 14 in 2013. The strong increase in company-level agreements in 2012 can mainly be explained by the fact that many companies used the new rules introduced in October 2011 to negotiate company-level wages which stayed below the existing sectoral wage level (Daouli et.al. 2013).

In Portugal, both the number of sector-level collective agreements and the number of company-level collective agreements have decreased since the beginning of the crisis so that the significance of collective agreements as a regulatory tool has decreased significantly. Within only one year, the number of employees covered by collective agreements dropped by three-quarters: from 1.2 million in 2011 to a mere 300,000 in 2012.

Similar processes can be observed in Spain where, as a consequence of the far-reaching legal changes between 2011 and 2013, the number of sectoral collective agreements was more than halved. Company-level agreements declined even more - by roughly two-thirds. As a consequence, collective bargaining coverage decreased as well from 10.7 million employees covered by a collective agreement in 2011 to 5.7 million employees in 2013.

The above description highlights the detrimental impact of the Troika-imposed 'structural reforms' on collective bargaining systems in the southern European countries Greece, Portugal and Spain. These reforms led to a fundamental change in the collective bargaining systems, which are now much closer to the single-employer bargaining systems that exist in the CEE countries than they are to the multi-employer bargaining system typical of northern European countries – even though formally there were only minor changes to the existing multi-employer systems. This de facto system change implies not only a decentralisation but also a de-collectivisation of labour relations, since collective bargaining coverage is usually much higher in countries with strong multi-employer bargaining than it is in countries with mainly company-level bargaining.

Even though, these processes of decentralisation and de-collectivisation are thus far particularly pronounced in the 'Troika countries', increased pressure to decentralise their collective bargaining systems is also being put on other countries with a well-functioning multi-level bargaining structure. Belgium, for instance, received a country-specific recommendation to facilitate the use of opening clauses in order to ensure that wage developments are more in line with local-level productivity developments. Another example is France, where the inter-professional agreement of January 2013 provides the possibility for company-level agreements to deviate temporarily from sectoral standards in return for employment protection (Turlan and Cette 2013).

2.4 Organised decentralisation in the less hard-hit northern European countries

In the less hard-hit northern European countries, the crisis was mainly dealt with by a process of controlled decentralisation by which (cross-)sectoral agreements define the conditions under which regulatory competences are transferred to the company level. The paradigmatic examples for this type of crisis management are the developments in manufacturing industry in Germany and the Nordic countries, whose collective bargaining systems – despite important differences in the institutional settings – share the following key characteristic: multi-employer bargaining is traditionally the dominant mode to determine wages and other terms and conditions in all these countries. Within the multi-employer bargaining arrangement, the countries do however vary with respect to the significance of and the articulation between the various levels of negotiation. Whereas in Finland the inter-sectoral level traditionally plays the most important role in the context of a centralised national incomes policy model, collective bargaining mainly takes place at the sectoral level in Germany and Sweden, for instance.. Another common feature is the high

degree of both horizontal and vertical bargaining coordination. This means that negotiations at company level do exist, but they take place within the parameters and competences defined by the agreements concluded at (inter-)sectoral level. A third commonality is the relatively high degree of collective bargaining coverage, which ranges from 82% in Sweden to a more modest 55% in Germany (see earlier table). While in Finland high collective bargaining coverage is ensured by a mechanism to legally extend the majority of collective agreements, high collective bargaining coverage in Sweden and Denmark rests essentially on the organisational strength of employers' federations and in particular trade unions (Schulten 2012, 491). And finally, particularly in all the Nordic countries with their small and open economies that heavily rely on exports and international trade, the agreements concluded in the manufacturing sector traditionally set the pattern for negotiations in the other sectors.

Against this background, the impact of the crisis on collective bargaining in the manufacturing industry in Germany and the Nordic countries manifests itself in two key processes: first, in a shift in the bargaining levels and second, in the increased importance of company-level processes of exchanging employment security for concessions on wages and working time within the parameters defined by central-level agreements.

Shift in bargaining levels

The procedural pattern of crisis management in the German metalworking industry was set by the so-called 'Pforzheim Accord' concluded in 2004. This sectoral-level agreement for the whole metalworking industry established a set of common rules and procedures for the use of opening clauses allowing deviations from agreed standards for a limited time in order to achieve improvements in employment (Dribbusch and Bispinck 2013). With this agreement, IG Metall not only managed to regain control over company-level developments but turned a process of increasingly uncontrolled decentralisation during the first part of the 2000s into a process of controlled decentralisation since then. The agreement also provided the basis for the use of various anti-crisis measures in the field of working time and pay defined in company-specific 'derogation agreements'. In doing so, the Pforzheim agreement provided an important precedent for the handling of the more recent crisis: through the conclusion of company-level 'employment pacts' exchanging concessions on pay and working time for employment security within the conditions specified by sectoral collective agreements.

As in Germany, one common implication of the crisis in all Nordic countries was a shift in the relationship between different bargaining levels. This trend was by no means unidirectional however. The two extreme examples were Sweden, with processes of controlled decentralisation, and Finland where a re-centralisation of negotiations took place. The controlled decentralisation of collective bargaining in Sweden is based on the so-called 'crisis agreement' concluded by IF Metall and Teknikföretagen in 2009 in response to the dramatic job losses when the crisis hit the

Swedish manufacturing sector. One important factor leading to the 'crisis agreement' in 2009 was the lack of a state-sponsored temporary lay-off scheme, which in the other Nordic countries was one of the key mechanisms used to deal with the crisis. In Finland, for instance, the state-funded temporary lay-off scheme involved almost 4% of the workforce (90,000 workers) in 2009 (Svalund et al. 2013: 7).

The innovative feature of this 'crisis agreement' is that it defines the conditions for local/company-level 'crisis agreements' allowing for 20% reductions in working time without pay compensation and for temporary lay-offs with a corresponding cut in pay. This possibility for negotiating local agreements has been widely used. According to information from IF Metall, almost a third of its local unions signed a local crisis agreement in 2009 allowing for unpaid temporary lay-offs in order to save jobs. These agreements covered 60,000 workers or 38% of IF Metall's membership (Svalund et al. 2013: 7). A further 138 crisis agreements covering 14,000 members were signed in 2009 by local branches of the white-collar manufacturing union, Unionen.

This pattern of organised decentralisation of negotiating competences was repeated in the 2010 bargaining round with the prolongation of the 'crisis agreement' until October 2010 – under the condition that re-employment of formerly redundant workers would be given priority over the use of temporary agency workers (Svalund et al. 2013: 7). Moreover, in 2012, the unions and employers in manufacturing signed a new agreement on how to tackle the crisis allowing for larger working time cuts – this time, however, contingent on partial pay compensation (Dølvik et al. 2014). A precondition for the 2012 agreement was the introduction of a public short-time work and training scheme in cases of severe recession, so that the state, employers and employees share the costs (Svalund et al. 2013: 7).

In contrast to the organised decentralisation in the other countries, developments in Finland went in the other direction, with a re-centralisation of collective bargaining in response to the crisis. The cross-sectoral tripartite agreement signed in October 2011 marked the return of the traditional model of central-level incomes policy, which had last been applied in Finland in the 2005-2007 bargaining round. In the light of the crisis, the employers agreed to a return to centralised cross-sectoral bargaining in order to ensure stability and predictability (Jokivuori 2012). Thus, the key feature of the cross-sectoral agreement is that it represents a framework agreement on wages and other terms and conditions, defining in particular a global pay increase, the specificities of which then need to be regulated by sectoral agreements.

Similar tendencies can be observed in Belgium where, in the context of the crisis, the government put pressure on the social partners to negotiate so-called 'inter-professional agreements' at central level in order to strike a balance between considerations of competitiveness, purchasing power and employment levels (Vermandere 2013). These central-level negotiations essentially set the framework for sectoral negotiations. However, since in the light of the crisis the central

government in effect imposed a wage freeze, with no options to deviate from this centrally-imposed wage norm, the social partners could not agree on an inter-professional agreement in the bargaining rounds 2011-2012 and 2013-2014. Thus, the consequences of the crisis in the field of collective bargaining were firstly more centralised bargaining - as the legislative wage norm for 2011-2012 and for 2013-2014 did not leave any room for sectoral differentiation in wage rises - and secondly, an increase in government intervention into collective bargaining processes.

Company-level concession bargaining: employment security in exchange for moderate wage increases and working time flexibility

With regard to the bargaining agenda, another key feature of the crisis management in Germany and the Nordic countries was the priority given to employment security. The unions therefore considered any temporary measure of increasing internal flexibility to be preferable to dismissals. The measures employed to safeguard employment can broadly be divided into three categories: company-level measures to increase internal flexibility, measures of increased external (i.e. numerical) flexibility and finally supportive action by the state. In Germany, the latter involved in particular the extension of the legal duration of short-time working schemes to a maximum of 24 months in order to minimise the costs for employers and at the same time limit the income losses for employees. The short-time work scheme was widely used: in May 2009, more than 900,000 employees in the German metalworking industry (i.e. almost 25%) were on short-time work (Dribbusch and Bispinck 2013). In Finland and Denmark, the functional equivalent was the widely used state-funded temporary lay-off scheme.

The second key tool to safeguard employment was the conclusion of company-level 'employment pacts', which were based on the unions' acceptance of the employers' need to reduce costs in return for the exclusion of forced dismissals. In the German metalworking industry, this involved, on the one hand, measures to increase working time flexibility, through the introduction of working time corridors and the use of long-term working time accounts, and, on the other, different methods of pay concessions, such as reduced additional bonuses or so-called 'on-top payments' and the deferral or partial application of collectively-agreed pay rises. Similar measures of increased internal flexibility through temporary working time adjustments and wage moderation were implemented at company level in manufacturing industry in the Nordic countries. Even though employment security was the unions' top priority in all the Nordic countries, the issue was framed differently reflecting different national traditions (Ibsen et al. 2011). In Denmark, for instance, employment security was primarily framed in terms of securing income security through specific anti-social dumping provisions and severance pay schemes. In Sweden, by contrast, employment security was primarily framed in terms of job protection, putting major emphasis on provisions against agency work and hiring priority.

Even though the unions' main objective in Germany and the Nordic countries was to secure employment, it soon became clear in the light of the extent of the crisis that some concessions needed to be made with respect to the increase of external (i.e. numerical) flexibility. The key tool used in this context was to reduce the amount of external labour, such as temporary agency workers and workers on a fixed-term contract. These were the main measures used in particular in German manufacturing industry. However, since the amount of external labour was usually low in the Nordic countries, additional measures were used to increase numerical flexibility: voluntary redundancies with severance pay and early retirement.

The above description shows that in Germany in particular the crisis had only minor implications for collective bargaining structures and processes in manufacturing industry. Decentralisation of collective bargaining was already under way well before the crisis, i.e. since the beginning of the 1990s. Since manufacturing industry was repeatedly confronted with cyclical crises and fluctuations of demand, the collective bargaining actors developed a set of tools over time to deal with cyclical crises. This well-established toolbox of various measures to increase internal (and to some extent external) flexibility for employers in return for employment security was then also applied after the start of the crisis in 2008.

Nor did the crisis have a major impact on bargaining processes in the Nordic countries. Rather than leading to transformative changes, the crisis prompted some innovative adjustments concerning both bargaining procedure and the bargaining agenda pursued (Dølvik et al. 2014). One novelty, however, were the 'crisis agreements' concluded in the Swedish manufacturing sector in which internal working time flexibility was given priority over external (numerical) flexibility as the key mechanism to deal with the crisis. This, in turn, prompted some observers to speak of a "significant departure from the traditional Rehn-Meidner model with its emphasis on external flexibility as a means of adjustment" (Svalund 2013: 14). However, by defining the key parameters of negotiations at company level, the sectoral 'crisis agreements' enabled the Swedish manufacturing trade unions to preserve the regulatory and coordinating function of sectoral multi-employer bargaining and, in this specific case, also the norm-setting role of the manufacturing sector.

2.5 From hardly any impact to complete dismantling in the Central and Eastern European countries

The CEE countries are a very diverse group both with respect to the impact of the crisis and to the institutional framework conditions. However, one overarching institutional feature they all share – with the exception of Slovenia – is the fact that single-employer bargaining at company level is the dominant mode of determining wages and other terms and conditions. With respect to the impact of the crisis on collective bargaining, it is possible to distinguish three groups of countries.

The first group comprises the Baltic countries, which were severely hit by the crisis at a fairly early stage reporting a double-digit fall of GDP in 2008-2009 (ETUC and ETUI 2014: 15) – but where the crisis did not lead to dramatic changes in collective bargaining arrangements. In order to cope with the crisis, all three countries adopted drastic austerity measures which mainly hit the public sector. These included wage cuts and freezes, as well as the elimination of supplementary payments for public sector employees. Further measures included the liberalisation of employment legislation by easing dismissal procedures for instance. Collective bargaining in all three countries was already highly decentralised before the start of the crisis, with the lowest collective bargaining coverage rates among all EU28 countries. As there was only limited scope for further decentralisation, the reforms implemented in response to the crisis did not directly target collective bargaining institutions and procedures. Instead, the key focus was on numerical flexibility as witnessed by the large-scale dismissals in the manufacturing sector. As a consequence, trade union density further declined (in Latvia by 29% between 2007 and 2011) and so did the already low collective bargaining coverage. Between 2007 and 2011, the number of collective agreements in Latvia, for instance, decreased by 35% (from 2007 to 2011) and the number of workers covered by collective agreements dropped by 43% (from 179,027 to 101,647) (Karnite 2013).

The second group of countries consists of Poland, Slovakia and the Czech Republic, which as regards the development of GDP and unemployment were much less affected by the crisis than the other CEE countries. In these three countries, the crisis mainly manifested itself in declining export opportunities with a corresponding fall in production, in particular in the metalworking industry. In 2009, for instance, industrial production in the Polish metalworking industry declined by 34.1% (GUS 2010). The crisis was mainly dealt with by company-specific measures such as temporary production stoppages, short-time working schemes and the extension of working time reference periods.

The concrete implications of the crisis on collective bargaining were however very limited as the following example of the Czech Republic will illustrate. In the Czech Republic, collective bargaining is traditionally conducted at sectoral and company level with the main emphasis being put on the latter. All in all, the number of collective agreements concluded at the sectoral and company level has remained fairly stable since the beginning of the crisis. In 2013, there were 19 collective agreements at sectoral level including three agreements in the metalworking industry: the electro technical sector covering approximately 6,000 employees, the aeronautics sector covering 2,400 workers and finally the foundry sector covering 13,000 employees. In the Czech Republic, collective agreements at sectoral level only apply to those companies which are members of the relevant employers' federation and not for the sector as a whole. Legal extension mechanisms do exist, but are usually not applied in the metalworking industry. As the following table illustrates, the number of collective agreements at company level officially recorded by

the Czech Ministry of Labour and Social Affairs also remained roughly the same during the crisis.

Collective agreements (CAs) recorded by the Czech Ministry of Labour and Social Affairs and the numbers of agreements containing provisions on wage increases and working time accounts (called ***flexikonto*** in the Czech Republic).

Category	2007	2008	2009	2010	2011
Total no. of CAs	1180	1448	1337	1316	1301
CAs with reference to pay increases	783	1071	752	558	730
CAs with working time accounts	278	443	415	472	479

Source: Myant (2013)

The above table also shows the significance of more flexible working time schemes such as working time accounts in dealing with fluctuations of demand during the crisis. Working time accounts – or 'flexikonto'– were introduced into Czech labour law in 2007 and have since been widely used in manufacturing industry. In 2011, 25% of the collective agreements concluded by OS Kovo in the metalworking industry contained provisions on the introduction of 'flexikonto'. The fact that 87% of the collective agreements in the metalworking sector contained provisions on shorter working time in 2013 furthermore shows that mechanisms to increase working time flexibility remain one of the most important tools for dealing with the crisis.

The third group of countries comprises Hungary and Romania as the two countries that were the hardest hit by the crisis and introduced the most far-reaching changes to their collective bargaining systems. Romania, in particular, is a prime example of how crisis-induced government decisions and pressure from international institutions led to the complete breakdown of collective bargaining. The basis for the far-reaching reform of Romania's collective bargaining institutions was the 'Social Dialogue Act' adopted in May 2011, which in effect abolished the national collective agreement that until then used to be a reference point for negotiations in public and private sectors. This new law not only did away with negotiations at national level, but it also declared all the sector-level collective agreements then in force to be null and void as of the end of 2011, and stated that new agreements were to be negotiated within newly-defined industrial branches. The Act also abolished statutory extension mechanisms, making sector-level agreements applicable only to companies belonging to business associations that had signed a given agreement (Trif, 2013). Alongside these decentralisation mechanisms, the Act introduced stricter criteria for the representativeness of trade unions. In order to be a representative organisation at company level, a given union must represent 50% of the employees + 1, and not, as before, one-third of the workforce. As a corollary, only one union at a given firm may have

a representative status. In the absence of representative trade unions at the company level, negotiations on a collective agreement can be led by employee representatives.

These provisions of the Social Dialogue Act have profoundly changed the collective bargaining landscape in Romania. Before the crisis, collective agreements were negotiated in 20 out of 32 sectors (Trif, 2013). However, at the end of 2012, there existed only two branch-level agreements and seven agreements for groups of undertakings (Ciutacu, 2013). Since, in particular, the trade unions in manufacturing industry found it very difficult to fulfil the new representativeness criteria, not a single branch-level collective agreement has been concluded in manufacturing industry since the new Act was passed. The new legislation not only effectively stalled bargaining processes at national and sectoral level, plant-level bargaining was on the retreat as well: between the end of 2008 and the end of 2011, the number of plant-level collective agreements decreased by nearly 56%. In fact, collective bargaining institutions in Romania were not only decentralised, they were essentially completely dismantled.

Initiatives by the new centre-left government in May 2012 to modify the Social Dialogue Act, which aimed at restoring the extension mechanism and improving trade union protection, were torpedoed by the IMF and the European Commission. In a joint statement on a government proposal, the two institutions strongly urged the government to limit any changes to the existing law in order to fulfil the conditions for further financial support by the two institutions (Clauwaert and Schömann, 2013). In particular, Romania had to refrain from restoring national-level collective agreements, easing the representativeness criteria for social partners and restoring the obligation for annual re-negotiation of collective agreements. As a result of the intervention, and despite repeated calls for reforms formulated by the International Labour Organisation (see e.g. Chivu et al., 2013), no changes have yet been implemented in the country's labour and social dialogue laws.

In the absence of strong national and/or sectoral level collective bargaining structures, social dialogue at national level traditionally played a very important role in the CEE countries. Participation in tripartite arrangements was often the only opportunity for trade unions in these countries to have their voice heard. During the crisis, a clear trend towards the weakening or side-lining of national social dialogue was discernible across the majority of CEE countries, since many of the crisis-induced austerity measures have been taken unilaterally by governments without involving trade unions in the framework of existing tripartite dialogue structures.

2.6 Crisis-induced company-level employment pacts in the automotive industry

Despite the variety of country-specific responses to the crisis illustrated in the previous three chapters, one overarching development in order to deal with the crisis is the increasing tendency to conclude so-called 'employment and competitiveness pacts' at company level. These company-level agreements follow a logic of 'give-and-take', which means that in return for safeguarding employment the employee-side is prepared to make concessions by accepting different measures aimed at cutting costs and improving the company's competitiveness. One prime example of this development is the automotive industry, which shows certain sector-specific characteristics making it particularly prone to intensified cross-border competition: It has been particularly hard hit by a drop in demand at the beginning of the crisis. It is a sector with one of the most internationalised and integrated production systems, with only a few large production sites, which in turn enabled management to initiate competitive 'beauty competitions' amongst the different production sites – both across different countries as well as within countries.

In the German automotive industry, the conclusion of company-level 'employment and competitiveness pacts' is a well-established practice for dealing with cyclical crises since the beginning of the 1990s (Dribbusch and Bispinck 2013). However, this practice seems to have spread across Europe during the current crisis. The following table contains a (non-exhaustive) list with examples from different countries of where company-level 'employment and competitiveness pacts' in the automobile industry have been concluded.

Across the whole of Europe, the concessions made by the employees' side as part of the political exchange can be grouped into three broad categories. The first category comprises measures aiming at the reduction of wage costs, such as wage freezes, the reduction of bonus payments for holidays and night shifts and agreement on lower wages for new recruits. Other measures employed are the deferral of wage increases stipulated by sectoral collective agreements, accepting moderate wage increases which only cover the increase in inflation or a reduction in working time without pay compensation. The second category of concessions comprised different measures aimed at increasing working time flexibility, for example through the annualisation of working time arrangements or the introduction of long-term working time accounts. And the third category of concession concerns the increase of numerical flexibility, through the non-replacement of voluntary redundancies and through early retirement schemes.

In return, the unions received the companies' commitment that there would be no compulsory redundancies or plant closures for a specified period of time. Further concessions from the employers' side included the commitment to new investments or to giving permanent jobs to workers who had previously been employed on a temporary basis.

Crisis-induced company-level employment pacts in the automotive industry

Country/Company/Year	Content	Source
France PSA Peugeot-Citroën 2012	**Accord de Compétitivité** Collective agreement between the PSA management and three trade unions CFE-CGC, CGT-FO and SPI-GSEA for the PSA car factory Sevelnord. The CGT has not signed the agreement. The core issues of the agreement are: • A wage freeze in 2013 and 2014. However, this freeze can be re-examined in the event of an undue rise in inflation. • Negotiations in 2015 and 2016 to determine which criteria will be considered in order to arrive at a general wage increase. • Wage negotiations from 2017 onwards which will compensate for the wage freeze, taking into account general increases implemented since 2013 within the PSA group and the metalworking industry. • More working time flexibility. In return PSA agreed to make no compulsory redundancies for three years.	http://www.lemonde.fr/economie/article/2012/07/26/sevelnord-trois-syndicats-ont-signe-l-accord-de-competitivite_1738880_3234.html http://www.fo-metaux.org/content/cms_medias/pdf/SEVELNORD.pdf
France PSA Peugeot-Citroën 2013	**Nouveau Contrat Social** Collective agreement between the PSA management and four trade unions CFE-CGC, CGT-FO, CFTC and SPI-GSEA for the whole PSA group in France. The CGT and CFDT have not signed the agreement. The core issues of the agreement are: • A wage freeze in 2014 • Reduction of bonuses • Loss of 2,000 jobs by non-replacement of employees who leave voluntarily • More working time flexibility (annualisation of working time arrangements) In return PSA accepted there would be no compulsory redundancies and plant closures and agreed to make new investments until 2016.	http://www.liberation.fr/economie/2013/10/24/le-nouveau-contrat-social-de-psa-bientot-signe_942050

Country/ Company/Year	Content	Source
France Renault 2013	**Accord Renault -« Contrat pour une nouvelle dynamique de croissance et de développement social de Renault en France »** Collective agreement between the Renault management and three trade unions CFE-CGC, CFDT, CGT-FO which represent 65% of the total votes in the last workplace elections The CGT has not signed the agreement. The core issues of the agreement are: • Commitment by Renault to maintain its activities at all production sites in France, including the company's engineering, sales and marketing activities, and its service departments. No plant closures. • Loss of 7,500 jobs, by non-replacement of employees leaving voluntarily. The company predicts savings of up to €500 million per year as a result of the implementation of the agreement. • Harmonisation and increase of working time to 35 hours per week on average over the year (in shifts or standard working hours), making a total of 1,603 hours per year for each worker at all Renault sites in France. (Previously, working time was on average less than 35 hours at some sites.) The agreement also introduces greater flexibility in working time. • Wage freeze for 2013, a commitment to wage moderation in 2014 and 2015.	http://www.eurofound.europa.eu/eiro/2013/03/articles/fr1303011i.htm http://www.fo-renault.com/documents/pdf/2013-03-13-accord-contrat-nouvelle-dynamique.pdf
Germany Opel/GM 2013	**Tarifvertrag zur Beschäftigungssicherung und Sanierung bei Opel** Company agreement between the Opel management and IG Metall. The agreement is valid for the Opel sites in Rüsselsheim, Kaiserslautern, Dudenhofen and Eisenach where a majority of the IG Metall members voted in favour of the agreement. It is not valid for the Opel plant in Bochum, as it did not get approved by a majority of the IG Metall members. The core issues of the agreement are: • Opel continues to be covered by the German metalworking sectoral collective agreement. • No compulsory redundancies until the end of 2016. • Agreement on the distribution of new investment. • Temporary postponement of wage increases determined by the sectoral collective agreement (usually for one year). Opel workers at the GM division's plants in Rüsselsheim, Kaiserslautern and Dudenhofen voted by majorities of over 83% to keep pay at current levels through 2015 in exchange for job security.	http://www.igmetall.de/pressemitteilungen-2013-11461.htm http://www.labournet.de/wp-content/uploads/2013/03/Tarifvertrag-2013.pdf

Country/Company/Year	Content	Source
Italy Fiat 2011	Withdrawal from the metalworking sectoral agreements and conclusion of a new company agreement between Fiat management and the two Italian unions Fim-Cisl and Uilm-Uil, but not by the Fiom-Cgil.	http://www.eurofound.europa.eu/eiro/2011/11/articles/it1111029i.htm
Spain Ford 2013	**Acuerdo de Competitividad y de Empleo Ford España 2014-2018** Collective agreement between Ford und UGT and CC.OO, approved by 69% of the Ford workers. The core issues of the agreement are: • Wage freeze in 2014. • Between 2015 and 2017, wages will be increased by the official inflation rate plus 0.5%, and in 2018 by inflation plus 1%. • Unions accept the loss of 985 of the 6,500 jobs at the plant through an early retirement scheme. In return Ford agreed to the creation of about 1,000 new jobs in the next few months with the reinstatement of the night shift. The new workers will be hired on lower wages. The company has also made a commitment to give permanent jobs to temporary workers.	hhttp://www.eurofound.europa.eu/eiro/2013/05/articles/es1305011i.htm http://mca-ugtpv.org/bd/archivos/archivo2069.pdf
Spain Opel/GM 2013	Collective agreement between Opel/GM und UGT and CC.OO approved by almost 65% of the workers participating in the ballot. The core issues of the agreement are: • Wage freeze for 2013 and 2014 for workers at the Opel plant in Zaragoza. • Maximum wage increase of 1.5% in 2015. • 10% cut in holiday and other bonuses, as well as bonuses for night work. In return, Opel agreed to refrain from compulsory redundancies of workers with permanent contracts. The company also confirmed its intention to make new investments.	http://europe.autonews.com/article/20130409/ANE/304099812/gm-workers-in-spain-accept-wage-freeze-to-boost-competitiveness http://economia.elpais.com/economia/2013/04/08/agencias/1365441845_286074.html

Country/ Company/Year	Content	Source
Sweden Volvo 2009	Company agreement between the Volvo Group's unit for engine and gearbox production, Volvo Powertrain, with the local IF Metall trade unions. The agreement has been approved by 86% of the workers at the Volvo plant in Skövde and 93% in Köping. The core issues of the agreement are: • The shortening of working hours by 20% for the period 1 June 2009 to 31 March 2010. • A pay reduction of maximum 8% during the same period. • Withdrawal of the layoff notices to 600 employees.	http://www.volvogroup.com/group/global/en-gb/newsmedia/pressreleases/previous/2009/_layouts/CWP.Internet.VolvoCom/NewsItem.aspx?News.ItemId=63931&News.Language=en-gb
UK Vauxhall/GM 2009	Collective agreement between Magna (at that time the potential buyer of Vauxhall) and Unite (which later on was confirmed by GM). The core issue of the agreement is: • A wage freeze for 2010 and 2011. In return Magna agreed to refrain from compulsory redundancies and agreed on new investments.	http://archive.unitetheunion.org/news__events/archived_news_releases/2009_archived_press_releases/unite_strikes_deal_with_magna.aspx
UK Vauxhall/GM 2012	Collective agreement between Vauxhall and Unite, approved by 94% of the workforce in a ballot. The core issues of the agreement are: • A wage freeze for 2013 and 2014; wage increases by inflation plus 1% for 2015 and 2016. • New recruits will receive 70% of normal basic pay, rising in stages to the full rate over five years. Pension arrangements will also differ for new recruits. • A flexible working week will be introduced, with increased hours at times of high demand and lower hours during slacker periods. • The plant will operate for 51 weeks a year, with the current summer shutdown abolished. • A new 'advanced' operator grade will be introduced, with an increased maintenance role, while maintenance staff will work more flexibly. • The pay premium for shift working will be increased by around a third. In return, GM agreed on new investment at the Vauxhall plant in Ellesmere Port and secured 2,100 jobs, while the company plans to create 700 new positions.	http://www.eurofound.europa.eu/eiro/2012/05/articles/uk1205019i.htm

Summary and Conclusions

The objective of this study was to describe the impact of the crisis on wage developments and collective bargaining in European manufacturing industry. The study, therefore, consists of two parts. The first part provided a quantitative analysis of the development of employment, working hours and wages in three main sectors and some major sub-sectors covered by industriAll Europe. The second part focused on the impact of the crisis on collective bargaining both in terms of collectively-agreed wages as well as in terms of bargaining arrangements. The aim of this last section is to summarise the key quantitative and qualitative tendencies in collective bargaining within industriAll Europe's organisational ambit and to make some concluding remarks on the prospects for collective bargaining in Europe.

Employment

Even though employment in manufacturing industry already declined by approximately two million before the crisis in the first half of the 2000s, the crisis led to another sharp drop in employment with the loss of another 2.4 million jobs in 2009 and 2010. A comparison of the three main sectors covered by industriAll Europe under review illustrates that the textile sector experienced the sharpest decline of employment. In the period 2000-2011, the number of employees in the textile industry declined by 47% and the crisis further accelerated the already existing trend of job losses in the European textile and related industries. By contrast, developments in both the metalworking and related industries and the chemical and related industries have been more stable. In the pre-crisis period 2000-2008, the number of employees remained almost the same. However, both sectors experienced a substantial decline in employment in 2009 and 2010, so that in 2011 the number of employees in metalworking was in fact 10% lower than it had been in 2000 and in the chemical industry it was even 15% lower than it had been in 2000. A comparison by countries shows that in the pre-crisis period employment in the industriAll Europe sectors declined in the majority of countries. The only exceptions with substantial increases are the Czech Republic and Slovakia where employment grew by 9.4% and 13.4 % respectively. After the beginning of the crisis in 2008, employment decreased in all the EU countries. The only exception is again Slovakia, where the employment level is slightly (1.1%) above the level in the year 2000. In all the other countries, employment in 2011 was below the level of the year 2000, with the sharpest decline in the UK (-40.6%) and Spain (-33.1%).

Working Hours

The downward trend in working hours in these three main sectors of industriAll Europe was very similar to the development of employment. In 2009, however, the number of working hours in these sectors dropped significantly faster than the number of employees. This can be seen as an indicator that the use of short-time working schemes and other forms of temporary working

time reductions was a preferred tool to cope with the crisis. This development was particularly marked in the European automotive industry where, in 2009, the decrease in the number of working hours was twice that of the decrease in the number of employees.

Wages

Between 2000 and 2011, nominal average wages in all the three main sectors of industriAll Europe under review increased by approximately one-third. However, adjusted for developments in consumer prices, real wages in the metalworking and the chemical sectors stagnated between 2000 and 2011 and even declined by 3% in the European textiles industry. Developments in the textiles sector were particularly volatile. The sharp decrease in the first half of the 2000s was followed by an equally sharp increase in the pre-crisis period 2004-2008. Since 2009, however, real wages are decreasing again. A closer look at the various branches illustrates that the pharmaceutical industry is the major exception with significant real wage increases compared to the beginning of the decade. In all the other branches, real wages in 2011 were slightly above or below the level of 2000. This moderate overall development of real wages in the industriAll Europe sectors also means that real wages did not match the overall development of productivity. Thus, in total, the wage developments in the industriAll Europe sectors were not in line with the industriAll European Wage Coordination Rule.

Collectively-agreed wages

Based on the data provided by Eurofound on collectively-agreed wages in the metalworking and chemical sector – and bearing in mind the methodical limitation of the data – the following main tendencies can be identified. In both sectors there has been a steady increase of nominal collectively-agreed wages since the beginning of the decade continuing even after the start of the crisis in 2008 – even though at a slower rate. In real terms, however, i.e. adjusted for consumer prices, the picture looks different. In the metalworking sector, collectively-agreed wages grew significantly in real terms in most of the countries in the pre-crisis period 2000-2008. The only exceptions, with stagnating or only slightly increasing real wages during the pre-crisis period, were Spain, France and the Czech Republic. During the crisis period, more countries were affected by decreasing real wages such as, in particular, the Netherlands and Portugal and, to a lesser extent, also Germany and France. In the chemical sector, France has been the only country in which collectively-agreed wages decreased in real terms since the beginning of the decade. In a number of other countries, such as the UK in particular, the crisis led to a drop in real wages.

Overall, one can conclude that the development of actual wages in the various industriAll Europe sub-sectors seemed to have been much more negatively affected by the crisis than collectively-agreed wages. This in turn suggests a negative wage drift in some sectors and countries. It furthermore confirms the protective role of collective agreements because employees covered

by a collective agreement seem in general to have been less negatively affected by the crisis than workers whose wages and terms and conditions have not been determined by a collective agreement.

Changes in collective bargaining systems

With respect to the development of collective bargaining structures in European manufacturing industry, one key trend was that the crisis reinforced processes of decentralisation in many countries. As a consequence of these decentralisation processes, company-level bargaining became more and more important.

However, since this is no universal trend, this statement needs to be qualified. First of all, there are also countries with quite opposite developments. In Finland (and to some extent in Belgium) the crisis actually led to a (re-)centralisation of collective bargaining structures. Secondly, in countries with an already highly decentralised collective bargaining system – such as many Central and Eastern European (CEE) countries and in particular the Baltic states – there was only limited scope for further decentralisation. Thirdly, decentralisation denotes different processes in different countries depending on the existing bargaining structures. Here it is possible to distinguish between processes of organised or controlled decentralisation in the northern European countries, which were less hard hit by the crisis, and processes of disorganised decentralisation in the southern European crisis countries.

The key characteristic of controlled decentralisation in the northern European countries is that the conditions for the transfer of bargaining competences from the (inter)sectoral level to company level has been defined by central collective agreements, concluded by trade unions and employers' associations, which retained some degree of control over bargaining processes at company level. Within the scope defined by central-level agreements, specific tool sets have been developed for company-level employment pacts involving the exchange of employment security for moderate wage increases and increased working time flexibility. Another important element of the crisis management in the northern European countries was the supportive role of the state in providing state-sponsored schemes for temporary working time reductions or lay-offs, which essentially ensured that the costs of dealing with the crisis are partly shared by the state, employers and employees. As a consequence, the impact of the crisis on bargaining structures has been limited and consisted of path-dependent adjustments of the existing system. By contrast, developments in the southern European crisis countries are characterized by politically-driven processes of disorganised decentralisation by which multi-employer bargaining arrangements at central level are increasingly replaced by single-employer bargaining as the dominant mode of determining wages and terms and conditions. The major driving force behind this process in Greece, Spain and Portugal was the Troika and its demands for 'structural reforms' in return for financial assistance. The key measures driving the process of disorganised

decentralisation were: (1) measures giving company-level agreements priority over sectoral agreements; (2) the far-reaching withdrawal of legal support for multi-employer bargaining and (3) wide-ranging possibilities for non-union actors to conclude company-level agreements. The result of this Troika-imposed policy of disorganised decentralisation is a dramatic decline in the number of collective agreements and collective bargaining coverage. Thus, despite the limited formal changes to the existing multi-employer bargaining arrangements, this crisis-induced direct political intervention led de-facto to a fundamental transformation from multi-employer to single-employer bargaining as the dominant mode of determining wages and terms and conditions.

Another important trend that deserves to be highlighted is the fact that despite the great variety of country-specific implications of the crisis, there is an increasing tendency across Europe to conclude company-level employment and competitiveness pacts as a tool to deal with the crisis. While this phenomenon was previously restricted to only a few countries, developments in the automotive industry in particular illustrate that, in the light of the crisis, this particular form of concession bargaining seems to be spreading to more and more European countries.

Prospects for collective bargaining in Europe

The crisis has had a major impact on collective bargaining in Europe in many respects. On the one hand, it has accelerated the long-term trend towards a declining manufacturing sector leading to a further significant reduction of employment. Closely linked to this, the economic crisis has further weakened the bargaining power of many European trade unions, which were often unable to prevent decreases in real wages.

However, there were also important national differences in how the crisis was tackled. Many of the countries that performed relatively well have had rather strong collective bargaining traditions, with comprehensive systems of multi-employer bargaining and a comparatively high bargaining coverage. In those countries, the unions were often able to negotiate innovative agreements on (temporary) working time reductions in order to diminish the number of job losses. Moreover, countries with more comprehensive bargaining systems were less affected by cyclical fluctuations and, instead, have often achieved a more stable wage development, which at least safeguarded real wage levels and therefore functioned as an economic stabiliser.

Although strong collective bargaining structures proved to be an effective way to reduce the negative social consequences of the crisis and to stabilise economic development in many countries, others - especially countries in southern Europe - have been faced by a radical reconstruction of their collective bargaining systems, which led to a dismantling of multi-employer bargaining and to a sharp decline in bargaining coverage. In these countries, the development has been heavily influenced by the EU-level institutions and policy-makers and the Troika. As part

of the new system of European economic governance, which was developed after the beginning of the crisis in order to guarantee closer and more binding economic policy coordination, a new "European interventionism" in the area of wage policy has emerged (Schulten and Müller 2013). By using new policy instruments such as the "European Semester", the "Macroeconomic Imbalance Procedure" or the so-called "Memorandums of Understanding" for the countries in need of financial assistance, the EU more or less directly influences not only current wage developments but also the more far-reaching reconstruction of collective bargaining systems.

In order to reduce labour costs and to increase the downward flexibility of wages at company level, the so-called "structural reforms" promoted by the EU openly aim at the weakening of collective bargaining in general, and the trade unions in particular. These reforms also include open offences against European and international labour standards, as confirmed by official statements from the International Labour Organisation (ILO) and the Council of Europe. As the EU policy follows a rather narrow 'one-size-fits-all' approach, it has already become obvious that the current neoliberal reform measures introduced in southern Europe might also be promoted in other European countries sooner or later.

In order to counter this new European interventionism in the area of wage policy for European trade unions, it is obviously not sufficient to only defend their national collective bargaining autonomy. Moreover, one of the key challenges for European trade unions is to intensify their autonomous coordination of collective bargaining at European level. This also includes the promotion of an alternative concept of a European 'solidaristic' wage policy, which is based on strong collective bargaining institutions and equitable wage developments in order to promote a more sustainable economic development.

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