



**Labour Market Monitor 2017**  
**A Europe-wide Labour Market Monitoring**  
**System Updated Annually**  
**Executive Summary**

**Ulrike Huemer, Helmut Mahringer**

Research assistance: Anna Albert



# Labour Market Monitor 2017

## A Europe-wide Labour Market Monitoring System Updated Annually Executive Summary

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**March 2018**

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Commissioned by the Chamber of Labour: Vienna

Internal review: Hedwig Lutz • Research assistance: Anna Albert

### **Abstract**

The report is an update of a set of labour market indices first developed and tested in 2010 in collaboration with experts of the Vienna Chamber of Labour (AK). The Austrian labour market is examined relative to the other 27 EU countries according to the following key dimensions: overall labour market performance, participation of different groups of people, exclusion risks on the labour market, distribution of earnings and redistribution by the welfare state. The present report summarises the current results of the five dimensions and contains a cartographic overview.

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2018/146-2/S/WIFO-Projektnummer: 9017

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1030 Wien, Arsenal, Objekt 20 • Tel. (+43 1) 798 26 01-0 • Fax (+43 1) 798 93 86 • <http://www.wifo.ac.at/> • Verlags- und Herstellungsort: Wien

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## 1. Introduction

The assessment of the labour market situation in the European Union is often carried out by Eurostat on the basis of a few regularly updated key indicators. In particular much emphasis is placed on the unemployment rate. However, focusing on a single indicator captures only a certain aspect of the labour market. Employment opportunities and national labour markets are diverse. Against this background, the Vienna Chamber of Labour (AK) aims to more closely examine a broader spectrum of labour market issues within a European context. In 2010, in collaboration with WIFO, a team of AK experts identified five key labour market dimensions:

1. Overall labour market performance
2. Participation
3. Exclusion risks on the labour market
4. Distribution of earnings
5. Redistribution by the Welfare State

Based on a series of indicators, an index was created for each of these five dimensions and applied to all EU member countries. The labour market monitor therefore consists of five separate indices (dimensions). Each index can have a value between 1 and 10, with 10 representing the best and 1 the worst possible outcome. Per index, the countries are sorted in ascending order based on the point value of their score in the index achieved and then categorized into groups. In a first variant, four equally performing groups of countries are shown: the "top" field, the "upper middle" field, the "lower middle" field and the "bottom" field. In a second variant, those countries are grouped together whose point values lie close together while displaying a marked difference to the neighbouring group.

The labour market monitor should represent a monitoring system that condenses significant aspects of labour market development from a multitude of indicators. Indicators that are comparable and regularly available throughout Europe are used. This facilitates regular updates of these indices and allows for monitoring over time. The present edition represents the seventh update of the labour market monitor.

The advantage of this set of instruments lies in the

- bundling of complex economic, political and social contexts into a few index values,
- comparability of national conditions, which can also be used for benchmarking,
- regular and fast updates,
- creation of a descriptive overview that can serve as a starting point for more in-depth analysis.

The generation of indices, however, also represents a tightrope walk between the reduction in complexity of the labour market into a single metric on the one hand and the aim to ensure the transparency and usability of the information subsumed on the other. There is a dan-

ger of misinterpretation which we aim to counteract through the application of transparent methodology and the documentation of data and methods. The focus on country groups and the separate representation of five aspects of the labour market should increase the amount of information and prevent false interpretation.

## **2. Labour market monitoring with the labour market monitor**

A total of 58 indicators are represented in the labour market monitor and its five dimensions. Content related considerations, as well as the aspects of regular availability and comparability of data determined the selection of indicators. The labour market monitor is mainly based on data from Eurostat (EU-LFS and EU-SILC) and always uses the most recent data – in the 2017 labour market monitor these were primarily data from the years 2015 and 2016. However, not all indicators are as quickly and completely available as others. Where the most recent data for individual countries are missing, data from the previous year are used. If this information is also missing, the country in question is left out of the calculation<sup>1)</sup>.

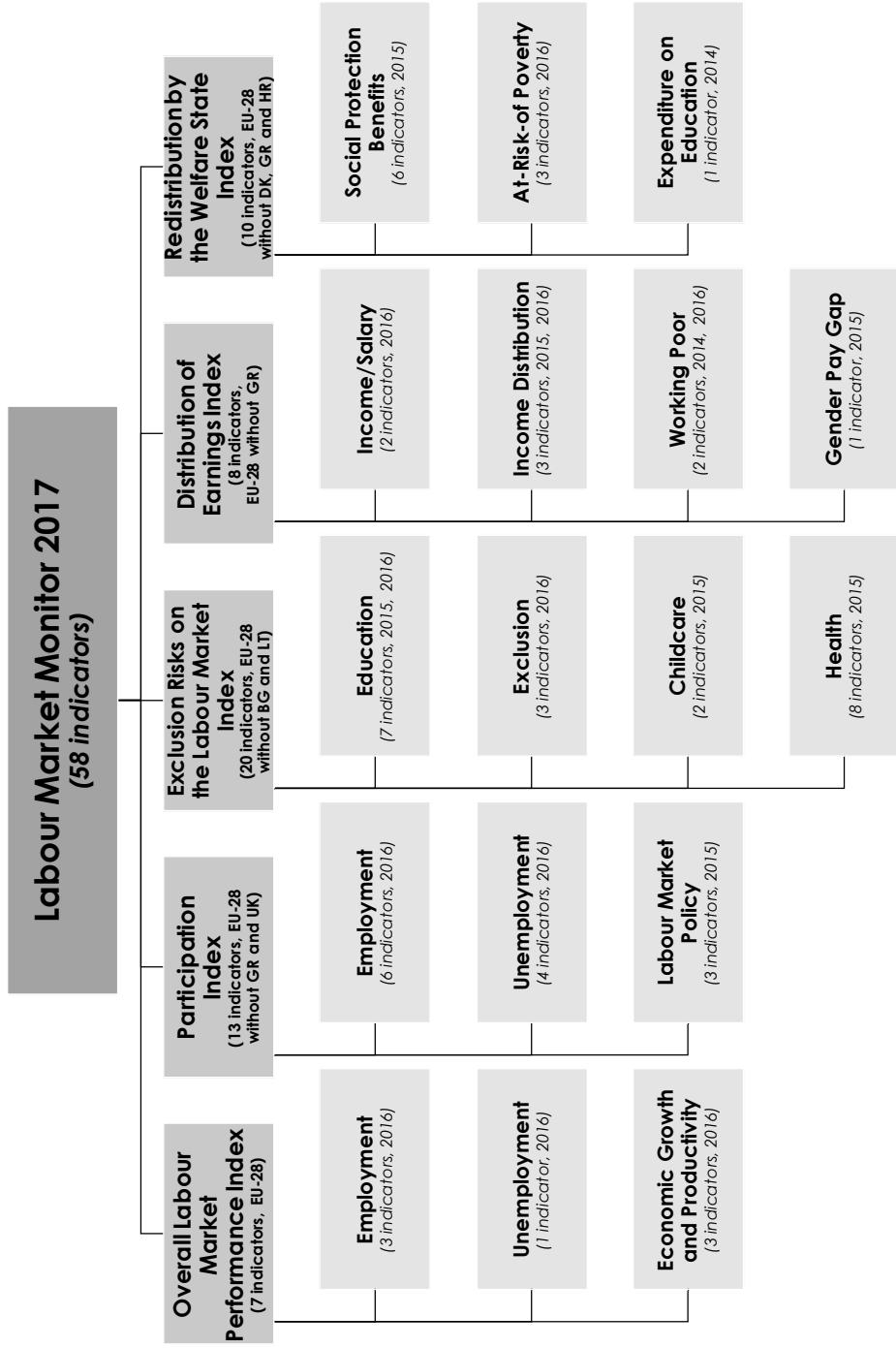
### **2.1 The five dimensions**

The first two dimensions reflect general aspects of the labour market and are measured based on seven respectively 13 indicators. Dimension (1), "overall performance", refers to the labour market in the context of the overall economic situation of a country based on key indicators, such as the employment rate. Dimension (2), "participation", captures the extent to which different groups of people (e.g. young and old, women and men) are integrated into the labour market. The third dimension (3), "exclusion risks on the labour market", should capture the capacity of a country to enable fair access to the labour market; here, an important role is undoubtedly played by the level of education and the availability of care infrastructure, and 20 indicators are used in this dimension. The fourth (4) and fifth (5) dimensions mainly reflect differences in earnings and Welfare State activities within the European Union: dimension (4) shows the "distribution of earnings" based on eight indicators; dimension (5) "redistribution by the Welfare State" uses ten indicators to measure the effectiveness of state interventions and public expenditures for social protection and education.

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<sup>1)</sup> In the Labour Market Monitor 2017 this applied to Great Britain and Greece in dimensions 2 "Participation", to Bulgaria and Lithuania in dimension 3 "Exclusion risks on the labour market index", to Greece in dimension 4 "Distribution of earnings index", as well as to Denmark, Croatia and Greece in dimension 5 "Redistribution by the welfare state".

Figure 1: Structure of the Labour Market Monitor 2017 – dimensions and sub-dimensions



Source: WIFO. – The structure of the Labour Market Monitor remains unchanged compared to the previous year. The only change is the year of observation per indicator.

## 2.2 Index methodology

The calculation of the five dimensions is based on standard methods of index construction (see Haas et al. 2010, p. 15ff). This involves a five-step process. In a first step, the indicators, which are in part measured in different units (e.g. Euros, percentage shares) are normalized. In a second step, the standardized indicators are transformed on a scale of 1 (worst value) to 10 (best value). In a third step, the indicators are weighted (on the basis of their standard deviation), thus making sure that indicators with a higher variation are not represented disproportionately higher or exert a higher influence on the overall index. In a fourth step, the values gained for each index in steps 1 to 3 are added together and once again normalized and transformed. In this way, the different country and dimension indicators of the Labour Market Monitor are condensed into one index figure.

Figure 2: Multi-step calculation process for the five indices



Source: WIFO.

Finally, a sensitivity analysis is applied to test the robustness of our results and compares the performance of the index to alternative configurations (change of weighting of indicators or the composition of indicators per index). This model proves highly robust with respect to the different weighting variations and selection of indicators.

Based on the calculated point values four country groups are formed along the quartile limits ("top" field, "upper middle field", "lower middle" field, and "bottom" field). These country groups are used to carry out a comparison to the previous year<sup>2)</sup>: not the changes in rankings but rather the categorization of the Member States in terms of the four groups of the distribution are evaluated. In forming four equally occupied country groups, however, the distance in point values between neighbouring groups can be quite small. For this reason, an additional alternative group categorisation is carried out: countries are clustered in such a way as to minimize the distance between the countries point values within each group, while at the same time maximize the distance to the neighbouring groups (point difference of at least 0.5 on the ten-part point value scale).

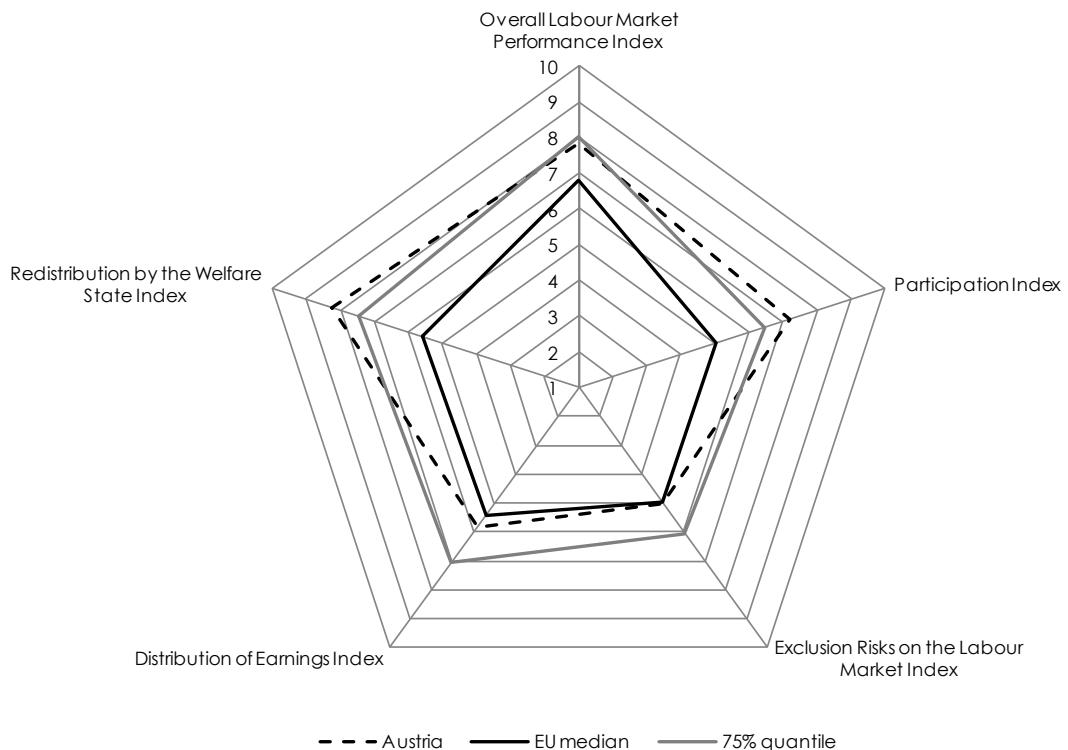
The following points must be taken into consideration when interpreting the indices: despite a comprehensive selection process of figures, an index can never completely capture all national differences and country-specific institutional contexts. Thus, the results are to be understood as an approximation of a labour market country pattern.

<sup>2)</sup> The Labour Market Monitor is calculated twice, once using the most recent data and once using the revised previous year's values.

### 3. Results of the Labour Market Monitor 2017

Smaller EU countries assume the top positions in the five dimensions, and most of these are Nordic states. The bottom field consists of southern European countries and new Member States.

Figure 3: Overview of the results of the five dimensions



Source: Eurostat, WIFO calculations.

The Austrian labour market once again performed better in all five dimensions than the average of the EU Member States. In two out of five dimensions Austria ranked among the top countries within the European Union: in the assessment of the integration capacity of the employment and labour market system (dimension 2, "participation") and in the dimension of social protection and level of transfer (dimension 5, "redistribution by the Welfare State"). Austria is no longer one of the top performers in the evaluation of the overall performance of the labour market (dimension 1). Instead, Austria ranks in the upper middle field with an index point value between the 50% and 75% quartiles. Austria is also situated in the upper middle field in both dimension 3 ("exclusion risks on the labour market" and dimension 4 ("distribution of earnings").

### 3.1 Dimension 1 – Overall performance of the labour market

The first dimension, "overall performance of the labour market", contains seven indicators that represent the labour market performance of a country in an overall economic context.

These indicators reflect the following aspects:

- extent of employment of the working-age population and recent development of the demand for labour (employment rate, employment rate in full-time equivalents and employment growth compared to the previous year);
- current level of unemployment (unemployment rate) and
- economic performance of a country (economic growth and productivity: real GDP per capita – absolute value in Euros and development over time, as well as labour productivity per person employed).

Based on the data for 2016, Luxembourg achieved the best score for overall performance of the labour market, closely followed by Ireland. They in turn are followed by the countries ranked third to seventh, which are Sweden, Denmark, Malta, Germany and the Czech Republic (Abbildung 4). The two top-ranking countries share the same strengths, which are their high real per-capita GDP, their high labour productivity per employee and their relatively high year-on-year employment growth. Luxembourg's weaknesses include its comparatively low employment rate (in terms of full-time equivalents) and its poor year-on-year performance in real GDP per capita, with each of these rankings in the lower middle field. Ireland's weaknesses include its relatively low employment rate, both adjusted and unadjusted for working hours (ranking in the bottom field and lower middle field respectively). Third-placed Sweden, on the other hand, scores highly in this respect and, in common with Luxembourg and Ireland, ranks in the top field in terms of both real GDP per capita and labour productivity per employee. Moreover, with the exception of Germany, Sweden is the only country to be ranked in either the top field or the upper middle field for all seven individual indicators.

These countries, which lead Europe, are closely followed by the upper middle field. The United Kingdom (ranking eighth) heads this group and has a very small points-based differential compared with the next-highest-ranking country (Czech Republic) in the top field (differential of 0.08 points). The other countries ranked in the upper middle field are Lithuania, Austria, the Netherlands, Slovakia, Hungary and Estonia. Although Austria ranks overall in the upper middle field for dimension index 1, it scores in the top field for three out of seven individual indicators (unemployment rate, real per-capita GDP, and labour productivity). Its weaknesses are its comparatively low employment rate in terms of full-time equivalents (62.3%, which ranks 16th overall and scores in the lower middle field), its relatively low real GDP per capita growth over a ten-year period (up 4.6% between 2006 and 2016, which ranks 16th overall and scores in the lower middle field) and its poor employment growth compared with other European countries (1.2%, which ranks 18th overall and scores in the lower middle field). However, its points-based differential (0.17 points) compared with the top field (75% quantile) is smaller than its differential (0.95 points) compared with the median, which marks the boundary with

the lower middle field. Austria's chances of being upgraded one group are therefore greater than its risk of being downgraded.

Finland, Poland, Slovenia, Belgium, France, Latvia and Portugal all rank in the lower middle field. Although these countries on the whole have underperformed the average, individual countries have been successful with respect to selected indicators. Cyprus, Bulgaria, Romania, Spain, Italy, Croatia and Greece are categorized as "bottom field" and are far behind the leaders in terms of the overall performance of their labour markets. All of these countries are southern European or new EU member states. One notable aspect is the wide range of scores within the bottom field, which amounts to 4.67 index points: the performance of last-placed Greece in particular contrasts sharply with that of the other EU member states and is ranked last in terms of four out of seven indicators.

### 3.1.1 Change compared to the previous annual results

Compared with the calculations based on prior-year data, eight countries have switched groups: the Czech Republic, Slovakia, Hungary and Portugal have been upgraded to higher groups, while Estonia, Poland, Latvia and Bulgaria have been downgraded. The individual indicators' raw data for a large number of countries generally improved in 2016 without causing any major changes in country performance rankings. Any deterioration in the raw data centred on two indicators: labour productivity and year-on-year employment growth.

However, changes in rankings are not always caused by improvements or deteriorations in raw data, as can be seen in the case of Bulgaria, which dropped two rankings and was downgraded to the bottom field: its downgrade was solely attributable to the fact that other countries achieved greater improvements. The largest year-on-year change compared with other countries in this year's update was experienced by Estonia, whose ranking dropped from 7<sup>th</sup> to 14<sup>th</sup>, due to a sharp deterioration in employment as well as a rise in its unemployment rate.

## 3.2 Dimension 2 – Participation

The second area index measures different aspects of participation. It captures the extent to which the labour market and employment system is able to integrate different groups of people. The index was calculated for 27 EU Member States (without Great Britain) and comprises a total of 13 indicators that take into account the following aspects:

- employment structure (employment rates of different age groups, employment gender gap, involuntary part-time work, temporary employment);
- structure of unemployment and unemployment of individual groups (unemployment rate of young and old people, long-term unemployment rate and long-term unemployment rate of older persons);

- activity level of active labour market policy(expenditures in percentage of GDP, as well as in percent of GDP per percent unemployed, participation in labour market measures).

Of all the EU member states, Italy was the worst and Denmark was the best at integrating various groups of people into the labour market. Because, however, there is a wide range of scores within the top field (3.55 points), this field consists of a total of three groups. Out in front is Denmark, followed some way behind by Sweden in second place. Sweden, in turn, has been much better at labour market integration than the following group of countries comprising Austria, Lithuania, Finland, Germany and Luxembourg.

Austria ranked in the top field for seven out of the 13 indicators. These seven indicators are the employment rate for people of prime working age (25 to 44 years), the gender employment gap for people of prime working age, involuntary temporary employment, the unemployment rate among young people, the long-term unemployment rate (15 to 64 years) and the two expenditure-related indicators for active labour market policy. Austria also performed relatively well in terms of the unemployment rate among older people (5.0%, ranking eighth); however, the low unemployment rate among older people in Austria is linked to the low employment rate for people aged between 55 and 64 years (49.2%, ranking 17th). In Austria the proportion of older people who are already inactive and no longer participating in the labour market is therefore higher than in other EU member states – a fact which, among women, is mainly attributable to the lower statutory retirement age of 60 years.

The top field is followed – some distance behind – by Hungary, the Netherlands, Estonia, Latvia, the Czech Republic and Belgium in the upper middle field. The lower middle field of European countries comprises Poland, France, Slovenia, Ireland, Bulgaria and Malta. The countries that have performed comparatively poorly in dimension index 2 (bottom field) are all from southern Europe and the new EU member states: Portugal, Romania, Slovakia, Croatia, Cyprus, Spain and Italy.

### 3.2.1 Change compared to the previous annual results

The classification of the EU member states according to the four groups has remained relatively stable over time, with only four countries switching groups: the Czech Republic and Malta have moved up, while France and Romania have moved down. The composition of the top field has remained unchanged. However, the changes in rankings have been minor which, given the favourable and unfavourable starting positions of the four countries concerned, has caused them to switch groups.

### 3.3 Dimension 3 – Exclusion risks on the labour market

Dimension 3 deals more specifically with those factors outside the labour market which directly affect employment and earnings opportunities:

- education,
- health and
- individual care obligations.

These are the main determinants of labour market opportunities. Altogether, the index can be disaggregated into total of 20 indicators on aspects of education participation, exclusion, childcare and health. Sweden offers far better labour market access and a much better chance of remaining employed than other EU countries. It leads the top field in terms of the indicators on education and health. In the other two sub-dimensions – childcare and labour market exclusion<sup>3)</sup> – Denmark ranks at the top end of the distribution. These two Nordic states are the only countries among the 26 EU member states considered to rank in the top field in all four sub-dimensions. Denmark ranks far behind Sweden and ahead of third-placed Finland. The Netherlands, Luxembourg, Ireland and France complete the top field, ranking fourth to seventh respectively.

Given the relatively small points-based differential between the top field and the highest-ranked country in the upper middle field (ranked eighth), the boundary between the groups is fluid. The upper middle field contains scores ranging between the median and the 75% quantile and consists of Cyprus, Belgium, Slovenia, Germany, the United Kingdom and Austria. Austria's weakness is the high proportion of people who work part-time owing to care obligations (8.8%). Austria also has a relatively high incidence of fatal accidents at work (3.23 for every 100,000 workers, ranking 21st in the bottom field) and a comparatively low number of expected healthy life years for women (58.1 years compared with an average of 63.3 for the EU-28) and men (57.9 years compared with an average of 62.2 for the EU-28) at birth (ranking in the lower middle field and the bottom field respectively). Austria's formal childcare offering is also relatively poor, as is the proportion of 25-to-34-year-olds with tertiary education (both lower middle field); this is despite the fact that degrees from vocational colleges (BHS) in Austria are recognised as tertiary qualifications.<sup>4)</sup> By contrast, Austria scores well in terms of its relatively low rate of inactivity as a percentage of the population, its comparatively low proportion of early school-leavers, the relatively high proportion of adults participating in education and training<sup>5)</sup>, and – compared with other EU countries – its low proportion

<sup>3)</sup> The 'labour market exclusion' sub-dimension is composed of three indicators, which on the one hand capture individual care obligations (the proportion of people who are inactive owing to care obligations, as a percentage of the general population, as well as the proportion of people who are working part-time owing to care obligations, as a percentage of total employment), and on the other hand capture the extent of inactivity (proportion of inactive people of a working age).

<sup>4)</sup> Degrees from vocational colleges (BHS) in Austria have been recognised as tertiary qualifications since 2014.

<sup>5)</sup> Proportion of adults participating in education and training in the last four weeks (European Union Labour Force Survey): Austria 14.9% (EU-28: 10.8%).

of the population with no school education beyond the age of 16 (all in the upper middle field). Although, based on its quartile values, Austria is ranked in the upper middle field, its risk of being downgraded is greater than its chances of being upgraded given its large points-based differential (0.6 points) compared with the next-highest-ranking country (United Kingdom, ranked 12th) and its small points-based differential (0.2 points) compared with the country immediately below it (Czech Republic, ranked 14th).

The Czech Republic, Spain, Poland, Estonia, Greece and Latvia rank below the median value but above the 25% quantile of the 26 countries being surveyed, i.e. in the lower middle field for dimension index 3. These countries have performed worse in terms of labour market access and the chances of remaining employed than the countries in the top field and the upper middle field. The bottom field consists of the countries with the greatest need for action in terms of labour market exclusion and includes Malta, Croatia, Slovakia, Portugal, Hungary, Italy and Romania – which are all southern European countries or new EU member states.

### 3.3.1 Change compared to the previous annual results

When the current values of dimension index 3 are compared with the revised prior-year values, eight out of 26 countries switch groups. At the top end of the distribution this is the case with France and Cyprus, although the points-based differential between the two countries and, consequently, between the two groups (France in the top field and Cyprus in the upper middle field) could hardly be smaller (0.05 points). There is also a very small points-based differential (0.23) between two other countries that have swapped places: Austria has improved by one ranking and has been upgraded to the upper middle field, while the Czech Republic has deteriorated by one ranking and has been downgraded to the lower middle field.

The raw data reveal that most countries have made progress in the field of education, whereas the findings are more mixed in the other three sub-dimensions (labour market exclusion, childcare and health).

## 3.4 Dimension 4 – Distribution of earnings

In the fourth dimension, the level and distribution of earnings are examined in greater detail. In total, this index consists of eight indicators, with the following aspects entering the calculation:

- average level of earnings,
- functional and personal distribution of primary income (compensation of employees in percentage of GDP, income distribution quintile),
- taxes on labour as a percentage of total taxation,
- gender-specific wage differential,
- proportion of low wage earners, and
- extent of "working poor".

As in recent years, Belgium once again leads the top field in terms of both the level and distribution of income among the EU member states. It occupies a top position for seven out of eight indicators. Its results, however, are far less impressive with respect to its tax structure: 53.2% of Belgium's total tax revenue comes from taxes on labour<sup>6)</sup>. Within the European Union the values for this indicator range from 33.8% in Malta to 57.6% in Sweden. At the same time, this indicator is the one on which the countries in the top field perform worse on average than those in the bottom field, although this factor has become slightly less pronounced in recent years. Some way behind Belgium in the top field, ranked second to seventh respectively, are Luxembourg, Denmark, Finland, France, Malta and Slovenia.

The upper middle field is led by Sweden and the Netherlands, which have a small points-based differential compared with the top field and are followed some way behind by the United Kingdom, Ireland, Austria and Cyprus. Austria stands out positively in the sub-dimension of income/wages, with high nominal wages per employee in terms of purchasing power standards and high remuneration per employee in terms of purchasing power standards (ranking in the top field in both cases) compared with other European countries; Austria also performs well in terms of income distribution (as measured by the income quintile ratio). However, Austria has the second-highest (after Sweden) proportion of wage- and salary-related taxes (as a percentage of total taxation) and a relatively high gender pay gap of 21.7% as measured by gross hourly wages (ranking Austria 24th in the bottom field).

The lower middle field (Croatia, Italy, Germany, Spain, the Czech Republic, Portugal and Hungary) and the bottom field (Poland, Slovakia, Latvia, Lithuania, Estonia, Bulgaria and Romania) consist – with the exception of Germany – entirely of southern and eastern European countries. Germany performs especially poorly with respect to the taxation of work (taxes on labour as a percentage of total taxation), the gender pay gap and the proportion of low-paid workers (ranking in the bottom field in each case). In addition, Germany has a comparatively high proportion of working poor (lower middle field), which is defined as workers whose equivalised disposable income is below the national at-risk-of-poverty threshold. The raw data reveal that all countries in the bottom field managed to improve their performance in the sub-dimension of income/wages, whereas most countries in the top field saw their year-on-year performance deteriorate as a result of lower nominal wages per employee in terms of purchasing power standards and lower remuneration per employee in terms of purchasing power standards.

The distribution of points generally shows that neither the country with the best results in terms of income distribution (Belgium) nor the country with the greatest room for improvement (Romania) have polarised significantly and thus caused the remaining field to converge more closely. On the whole the countries are distributed relatively evenly along the ten-part scale.

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<sup>6)</sup> Von Arbeitnehmerinnen und Arbeitnehmern und/oder Arbeitgeberinnen und Arbeitgebern zu entrichtende lohn- und gehaltsabhängige Abgaben.

### 3.4.1 Change compared to the previous annual results

In the 'income distribution' dimension there are only minor changes to the composition of the groups based on the current data. Two countries in the middle field have swapped places: Cyprus has moved up one ranking (from 14 to 13) and has been upgraded from the lower middle field to the upper middle field, while Croatia has moved down one ranking (from 13 to 14) and has been downgraded from the upper middle field to the lower middle field. However, the points-based differential between the two countries is tiny (only differing from the third decimal place onwards), so the boundary between the groups is fluid.

## 3.5 Dimension 5 – Redistribution by the Welfare State

The fifth dimension deals with questions of social welfare and levels of transfer in a country. This index encompasses a total of ten indicators:

- extent and structure of social protection benefits (in percentage of GDP)
- expenditures on education (in percentage of GDP) and
- results of public intervention (expressed in terms of at-risk-of-poverty rates).

The greatest social protection and the highest social transfers in the European Union are provided by Finland, Sweden, France, Belgium, Austria and the Netherlands. Finland occupies a broad-based leading position, ranking first or second in all three sub-dimensions. Austria ranked fifth among the 25 EU member states surveyed here. Austria occupies a leading position in four out of ten individual indicators: its social protection benefits as a percentage of GDP for old age, families and children as well as unemployment and in the improvement of the at-risk-of-poverty rate through social transfers.

The upper middle field comprises Germany, the United Kingdom, Luxembourg, Slovenia, Cyprus and Ireland. Germany's strength is its social protection benefits as a percentage of GDP; in these indicators Germany is consistently ranked in the top field (except for its social protection benefits for old age). The lower middle field consists of Hungary, Italy, Portugal, Malta, the Czech Republic and Spain. The final group comprises Poland, Slovakia, Estonia, Latvia, Bulgaria, Lithuania and Romania; these countries constitute the bottom field among EU member states in terms of their levels of social protection benefits and social transfers. These findings apply to all three sub-dimensions in the case of Romania.

### 3.5.1 Change compared to the previous annual results

The classification of the EU member states according to the four groups has remained highly stable over time. In the 'redistribution by the welfare state' dimension there are no changes to the composition of the groups based on the current data.

## 4. Summary

The Labour Market Monitor, which has now been updated for the seventh time, provides a brief overview of a broad range of 58 indicators of relevance to the labour market in the EU member states. The five dimension indices capturing labour market trends comprise dimension 1 “overall performance of the labour market”, dimension 2 “labour market participation”, dimension 3 “exclusion risks on the labour market”, dimension 4 “distribution of earnings” and dimension 5 “redistribution by the welfare state”. Instead of being merged to form a single consolidated index, the five dimensions each remain visible as self-contained indices. This approach also underlines the fact that the consequences of the financial and economic crisis have had a marked impact on the more cyclically sensitive areas of the labour market. These are primarily contained in dimension index 1 (overall performance of the labour market).

On the whole the Austrian labour market has outperformed the average for the EU member states in all five dimensions shown. In the rankings of labour market participation (index 2) and the levels of social protection benefits and social transfers (index 5) Austria remains one of the highest-ranked countries. When compared with other EU member states, Austria scores in the upper middle field in terms of the overall performance of its labour market (index 1) and has a fairly small points-based differential compared with the top field. Austria also ranks in the upper middle field in terms of income distribution (index 4) and the exclusion risks on the labour market (index 3), although in both cases it has a relatively large points-based differential compared with the top field and a comparatively small differential compared with the lower middle field.<sup>7)</sup> The risk of being downgraded one group is therefore greater in these two dimensions than the chances of being upgraded. Austria's weaknesses in terms of income distribution (index 4) are its relatively high levels of taxes on labour (as a percentage of total taxation) compared with other EU countries and its high gender pay gap (ranking in the bottom field in both cases). Austria's weaknesses in terms of the exclusion risks on its labour market (index 3) are the relatively high proportion of people who work part-time and cite care obligations as the reason for their reduced working hours, the high incidence of fatal accidents at work, and the relatively low number of expected healthy life years for men (at birth). Austria also has room for improvement and ranks in the lower middle field in terms of its formal childcare offering for infants below the age of three (i.e. for more than 30 hours per week), the number of expected healthy life years for women and men aged 65 or over and for women from birth, and the proportion of 25-to-34-year-olds and 25-to-65-year-olds with tertiary education. In order to improve in both dimensions – the income-distribution index and the exclusion-risks index – Austria will need to make huge efforts, as demonstrated by a sensitivity

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<sup>7)</sup> Dimension index 4 (income distribution): Austria's points-based differential compared with the 75% quantile (i.e. the top field) amounts to 1.24 points, while the differential compared with the median, which marks the boundary with the lower middle field, is 0.21 points. In dimension index 3 Austria's differential compared with the top field amounts to 1.04 points, while the differential compared with the lower middle field is 0.11 points.

analysis which was based on the assumption that Austria could perform much better in areas that offer significant room for improvement.

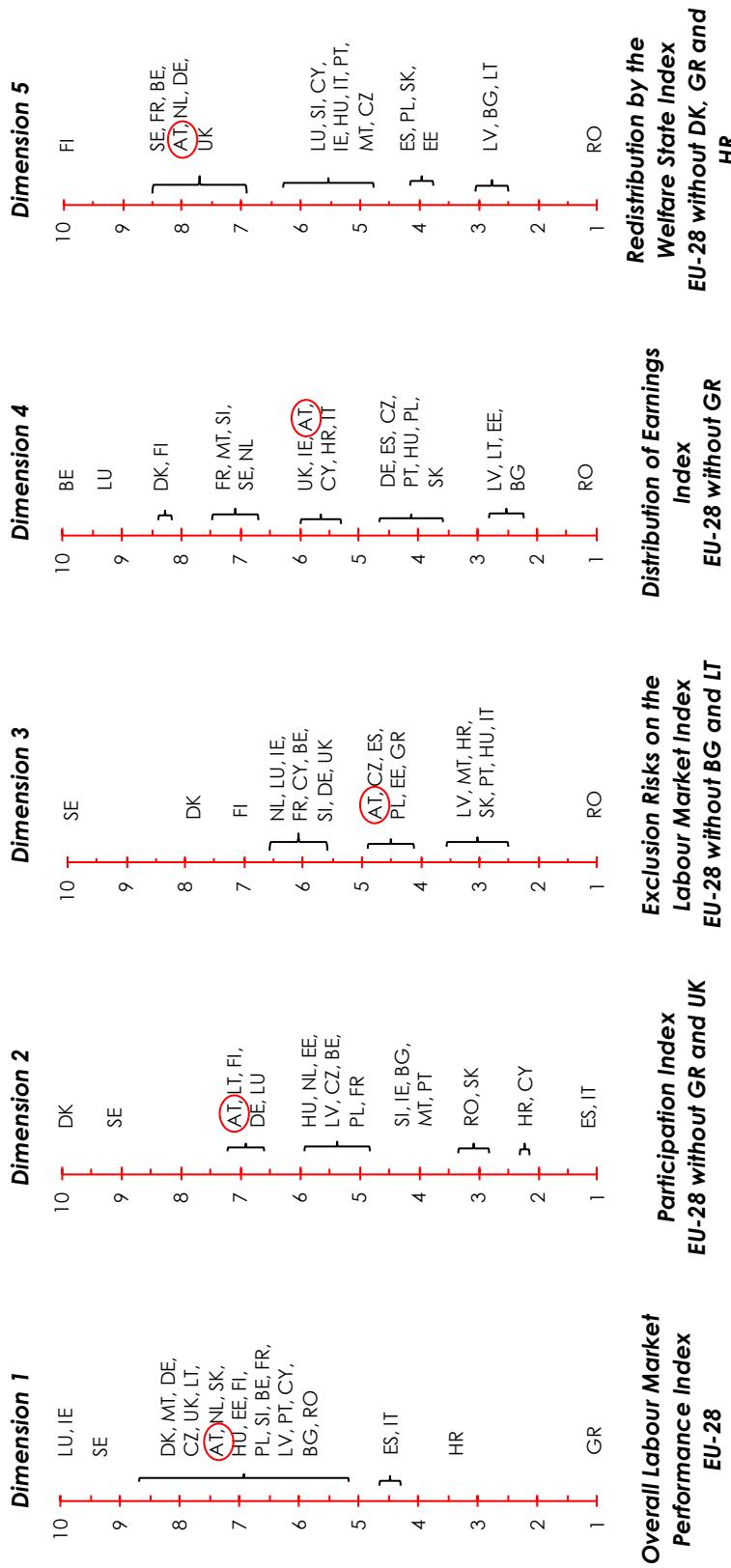
The relevant factors in assessing a country's labour market performance are not just the country's position relative to the other EU member states and its changes over time, but also the absolute level of the index points and its fluctuations over time. This year's update calculates and presents these trends over time for two out of the five dimensions: (1) the performance over time of the cyclically sensitive dimension index 1 ('overall performance of the labour market') between 2007 and 2016, and (2) the changes over time in the sub-dimensions of index 3 ('exclusion risks'), which tracks the performance of indicators of a more structural or institutional nature, for two data points in each sub-dimension (2008 and 2015 or 2016). In dimension index 1 Austria was ranked in the top field every year between 2008 and 2014. In 2015 it was then downgraded to the upper middle field. However, the changes in the levels of index points between 2007 and 2016 reveal a slightly more nuanced picture: although Austria too felt the impact of the financial and economic crisis, these effects were fairly weak and the country recovered relatively swiftly compared with many other EU member states. However, the performance of Austria's labour market deteriorated again slightly in 2012 and 2013 or 2015. The picture looked slightly brighter again in 2016, although Austria has not yet managed to repeat its labour market performance of 2008. In dimension index 3 the exclusion risks on Austria's labour market improved (significantly in some cases) between 2008 and 2015 or 2016 in three out of four sub-dimensions (education, childcare and labour market exclusion). Austria has made little progress in terms of the health indicators – the area in which it has consistently underperformed other EU member states and thus continues to rank in the lower middle field.

## Abbreviations EU-28

### The 28 Member States of the European Union

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

Figure 4: Grouped scaling of the five dimensions (min. 0.5 point difference), index calculation 2017

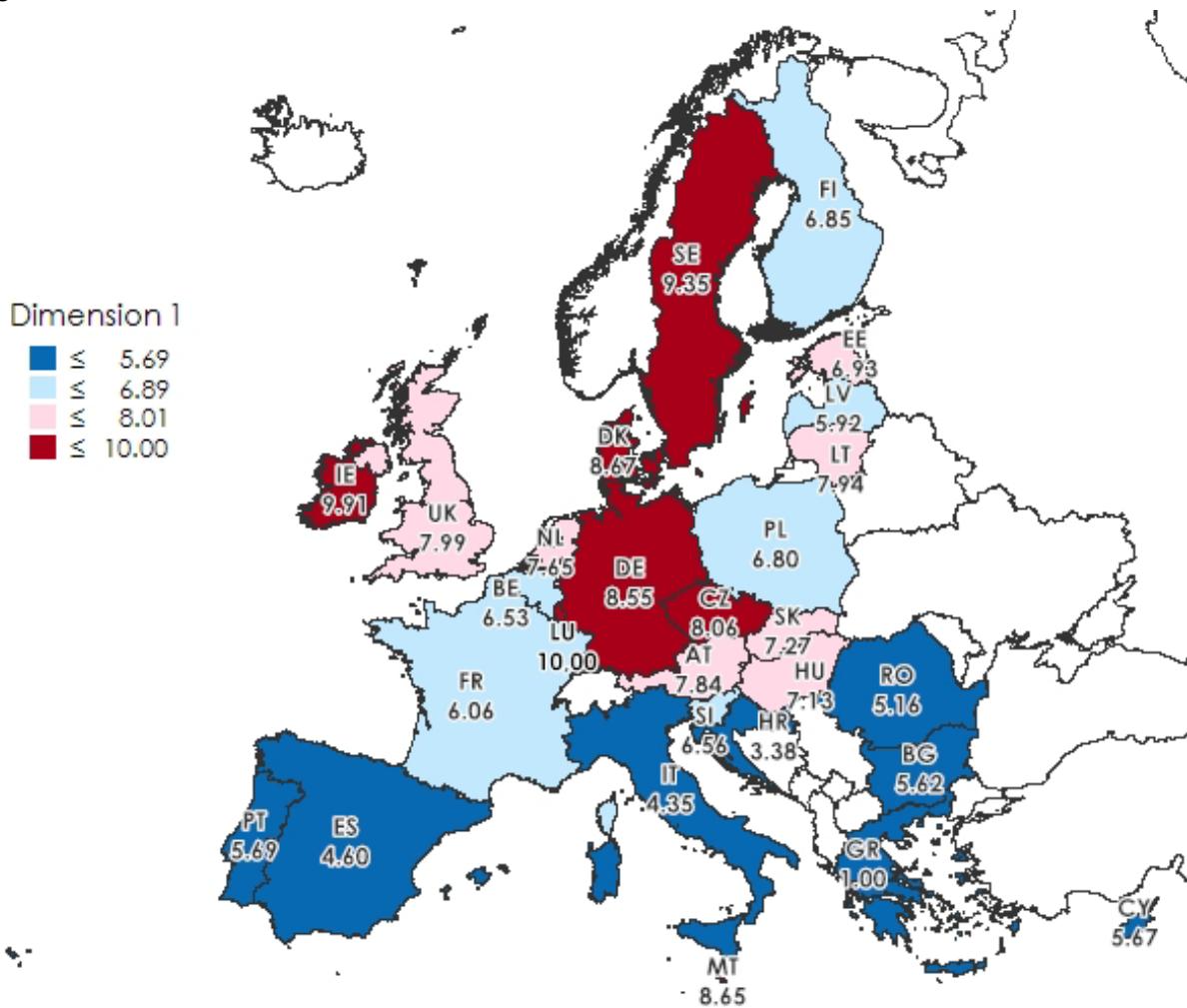


Note: The numbers on the axes represent the point values of the dimensions (for each index, 1 is the minimum and 10 the maximum value). The countries have been categorized based on differences in point values: a new group starts where the distance to the next group is at least 0.5 points. Within the groups the countries are ranked in descending order of points.

Source: Eurostat, WIFO calculations.



Figure 5: Dimension 1 – Overall Labour Market Performance Index, EU-28



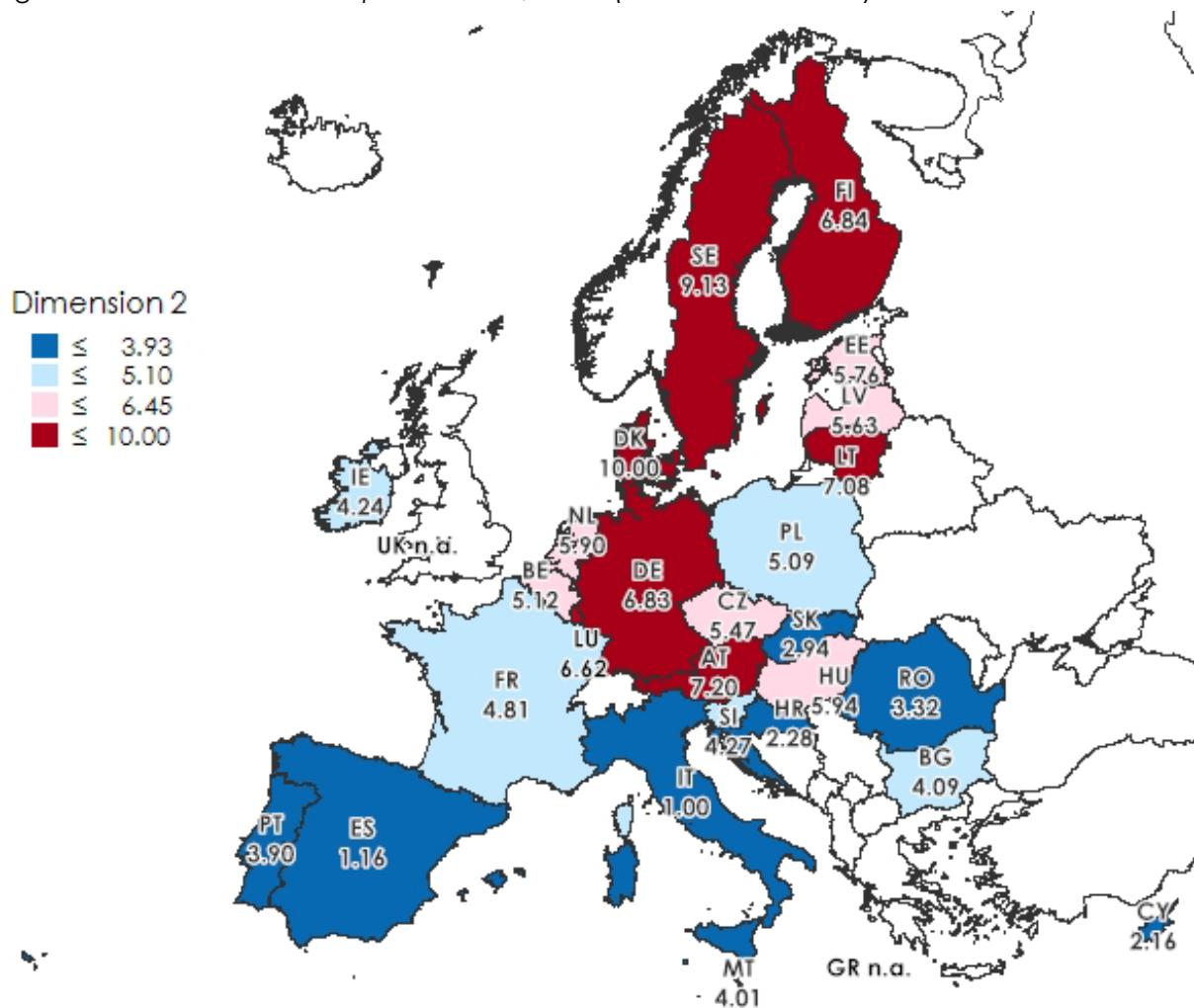
Source: Eurostat, WIFO calculations. The respective value forms the boundary to the next group: 5.69 = 25% quantile, 6.89 = 50% quantile and 8.01 = 75% quantile.

Table 1: Positioning of countries in dimension 1

		Country groups Labour Market Monitor 2017			
		Top field	Upper middle field	Lower middle field	Bottom field
Country groups Labour Market Monitor 2016	Top field	LU, IE, SE, MT, DK, DE	EE		
	Upper middle field	CZ	UK, AT, NL, LT	PL, LV	
	Lower middle field		SK, HU	FI, BE, SI, FR	BG
	Bottom field			PT	RO, CY, ES, IT, HR, GR
Country groups Labour Market Monitor 2017		LU, SE, IE, DK, EE, DE, MT	LU, IE, SE, DK, MT, DE, CZ	UK, LT, AT, NL, SK, HU, EE	FI, PL, SI, BE, FR, LV, PT

Source: Eurostat, WIFO calculations. Country categorization 2016 based on updated values. Countries along the diagonal line shaded in grey have not changed the category. Countries below the diagonal line have moved down the classification and countries above the diagonal line have moved up the classification. The data from the country groups Labour Market Monitor 2017 are based on the year 2016.

Figure 6: Dimension 2 –Participation Index, EU-28 (without GR and UK)



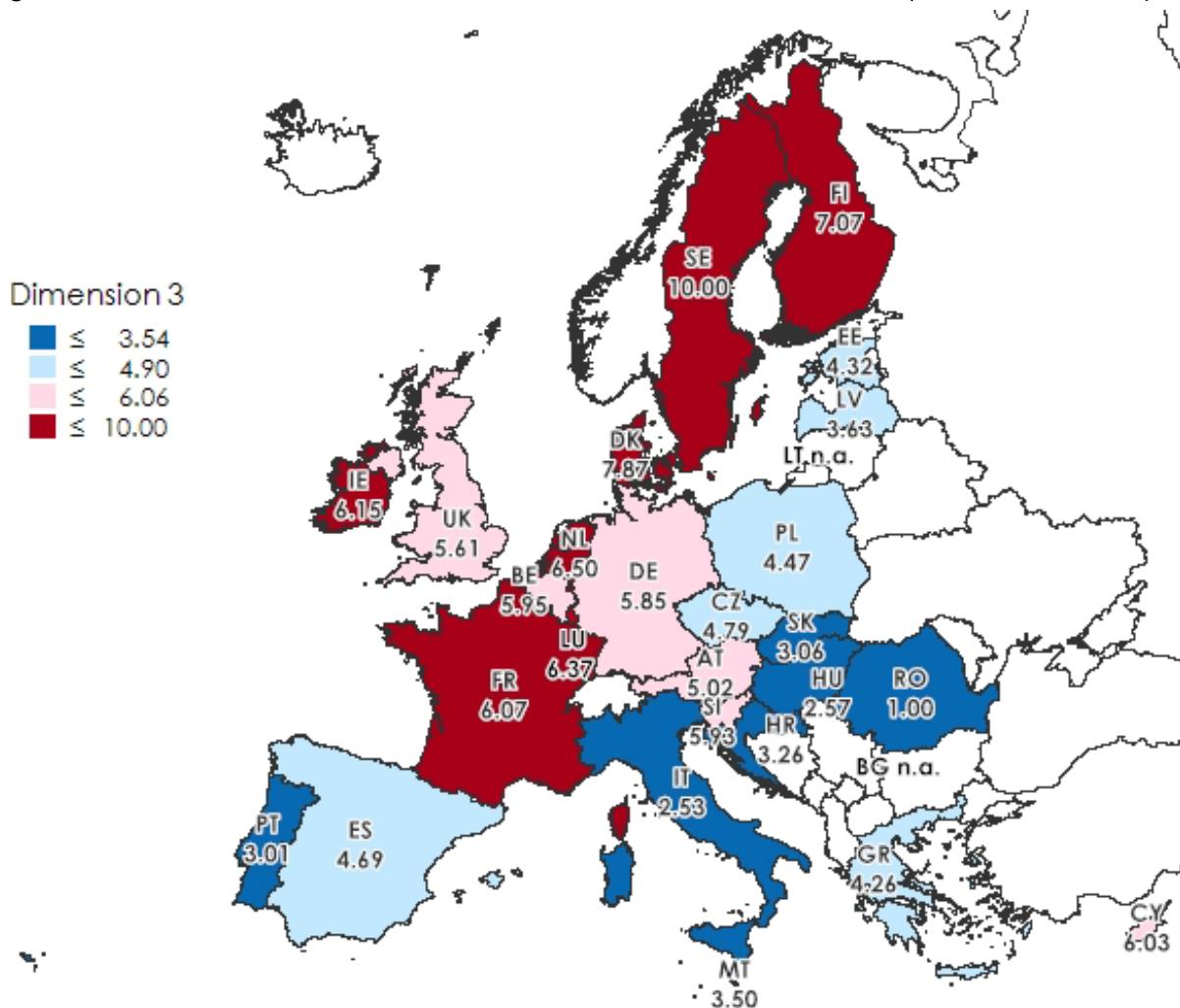
Source: Eurostat, WIFO calculations. The respective value forms the boundary to the next group: 3.93 = 25% quantile, 5.10 = 50% quantile and 6.45 = 75% quantile.

Table 2: Positioning of countries in dimension 2

		Country groups Labour Market Monitor 2017			
		Top field	Upper middle field	Lower middle field	Bottom field
Country groups Labour Market Monitor 2016	Top field	DK, SE, AT, LU, FI, DE, LT			
	Upper middle field		EE, NL, LV, HU, BE		FR
	Lower middle field		CZ	PL, SI, IE, BG	RO
	Bottom field			MT	PT, SK, CY, HR, ES, IT
Country groups Labour Market Monitor 2017		DK, SE, LU, FI, AT, LT, DE	DK, SE, AT, LT, FI, DE, LU	HU, NL, EE, LV, CZ, BE	PL, FR, SI, IE, BG, MT

Source: Eurostat, WIFO calculations. Country categorization 2016 based on updated values. Countries along the diagonal line shaded in grey have not changed the category. Countries below the diagonal line have moved down the classification and countries above the diagonal line have moved up the classification. The data from the Labour Market Monitor 2017 are based on the years 2015 and 2016.

Figure 7: Dimension 3 – Exclusion Risks on the Labour Market Index, EU-28 (without BG and LT)



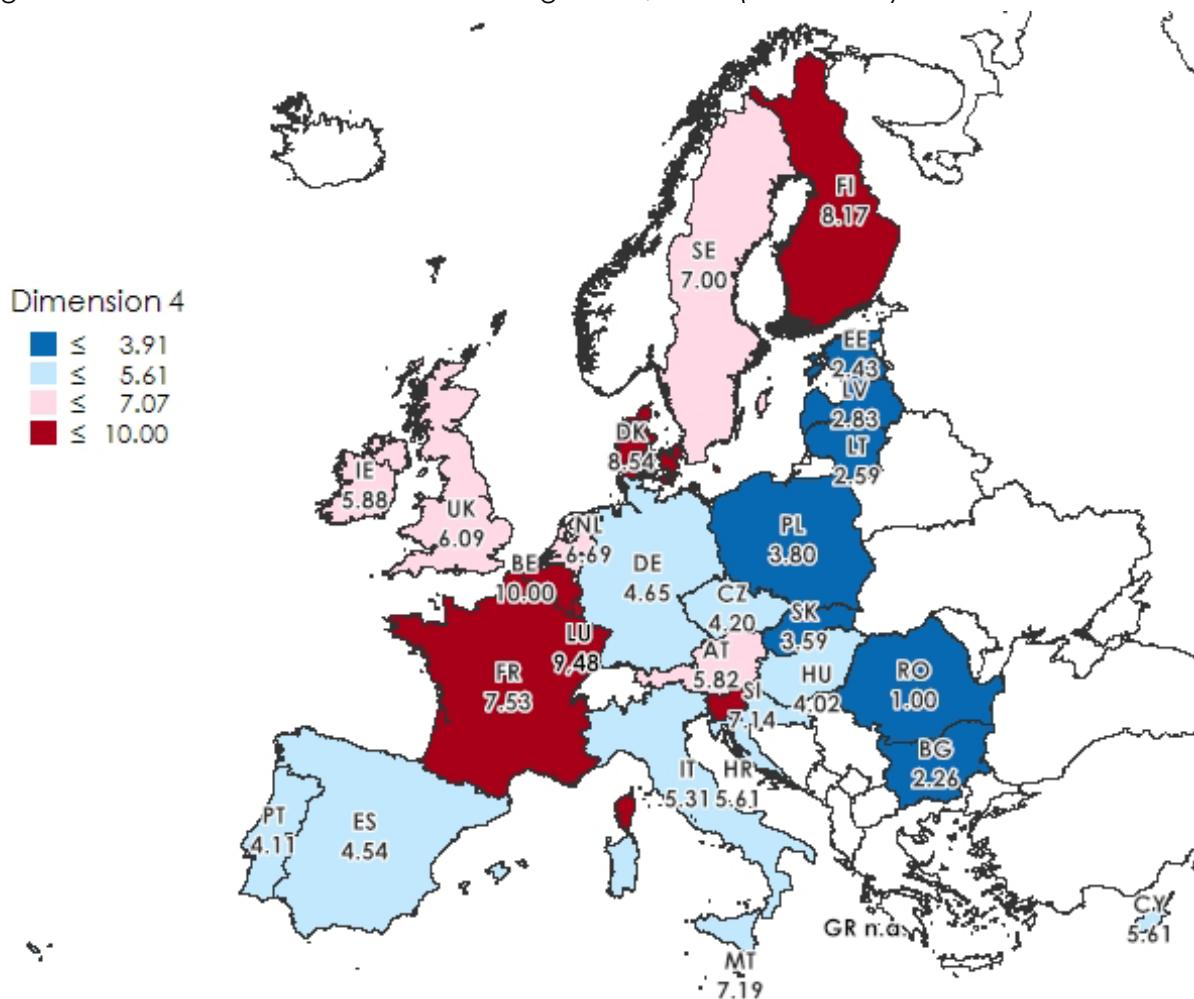
Source: Eurostat, WIFO calculations. The respective value forms the boundary to the next group: 3.54 = 25% quantile, 4.90 = 50% quantile and 6.09 = 75% quantile.

Table 3: Positioning of countries in dimension 3

		Country groups Labour Market Monitor 2017			
		Top field	Upper middle field	Lower middle field	Bottom field
Country groups Labour Market Monitor 2016	Top field	SE, DK, FI, NL, LU, IE	CY		
	Upper middle field	FR	BE, SI, UK	ES, CZ	
	Lower middle field		DE, AT	EE, PL, GR	HR
	Bottom field			LV	MT, SK, PT, HU, IT, RO
Country groups Labour Market Monitor 2017		SE, DK, FI, NL, LU, IE, FR	CY, BE, SI, DE, UK, AT	CZ, ES, PL, EE, GR, LV	MT, HR, SK, PT, HU, IT, RO

Source: Eurostat, WIFO calculations. Country categorization 2016 based on updated values. Countries along the diagonal line shaded in grey have not changed the category. Countries below the diagonal line have moved down the classification and countries above the diagonal line have moved up the classification. The data from the Labour Market Monitor 2017 are based on the years 2015 and 2016.

Figure 8: Dimension 4 – Distribution of Earnings Index, EU-28 (without GR)



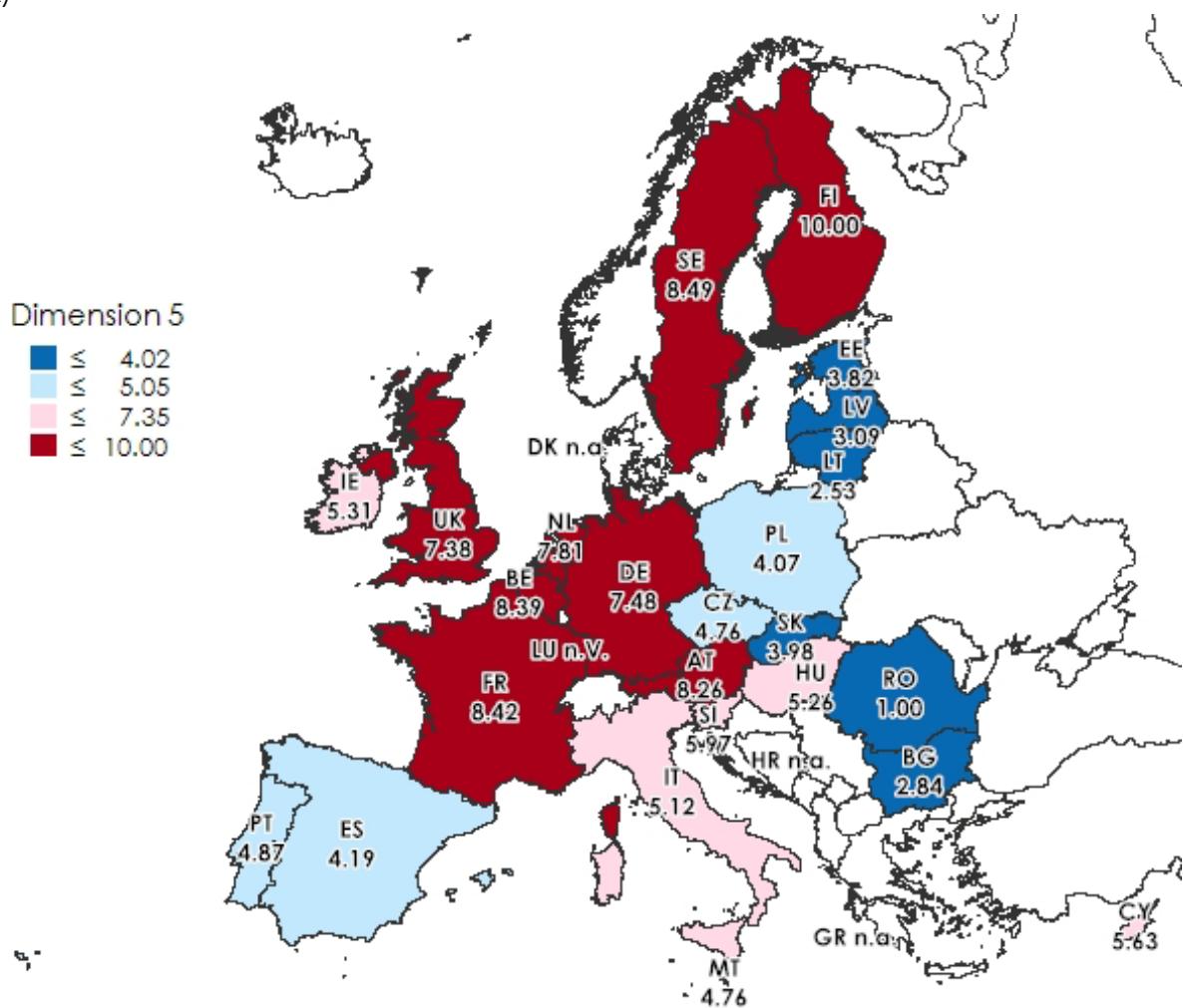
Source: Eurostat, WIFO calculations. The respective value forms the boundary to the next group: 3.91 = 25% quantile, 5.61 = 50% quantile and 7.07 = 75% quantile.

Table 4: Positioning of countries in dimension 4

		Country groups Labour Market Monitor 2017			
		Top field	Upper middle field	Lower middle field	Bottom field
Country groups Labour Market Monitor 2016	Top field	BE, LU, DK, FI, FR, MT, SI			
	Upper middle field		NL, SE, UK, IE, AT		HR
	Lower middle field			CY	IT, DE, ES, PT, CZ, HU
	Bottom field				SK, PL, BG, LV, LT, EE, RO
Country groups Labour Market Monitor 2017		BE, LU, DK, FI, FR, MT, SE	BE, LU, DK, FI, FR, MT, SI	SE, NL, UK, IE, AT, CY	HR, IT, DE, ES, CZ, PT, HU

Source: Eurostat, WIFO calculations. Country categorization 2017 based on updated values. Countries along the diagonal line shaded in grey have not changed the category. Countries below the diagonal line have moved down the classification and countries above the diagonal line have moved up the classification. The data from the country group for Labour Market Monitor 2017 are based on the years 2015 and 2016.

Figure 9: Dimension 5 – Redistribution by the Welfare State Index, EU-28 (without DK, GR and HR)



Source: Eurostat, WIFO calculations. The respective value forms the boundary to the next group: 4.02 = 25% quantile, 5.05 = 50% quantile and 7.35 = 75% quantile.

Table 5: Positioning of countries in dimension 5

		Country groups Labour Market Monitor 2017			
		Top field	Upper middle field	Lower middle field	Bottom field
Country groups Labour Market Monitor 2016	Top field	FI, BE, SE, FR, AT, NL			
	Upper middle field		DE, UK, LU, IE, SI, CY		
	Lower middle field			IT, PT, MT, CZ, HU, ES	
	Bottom field				PL, SK, EE, BG, LT, LV, RO
Country groups Labour Market Monitor 2017		DK, FI, BE, IE, SE, FR, NL	FI, SE, FR, BE, AT, NL	DE, UK, LU, SI, CY, IE	HU, IT, PT, MT, CZ, ES

Source: Eurostat, WIFO calculations. Country categorization 2016 based on updated values. Countries along the diagonal line shaded in grey have not changed the category. Countries below the diagonal line have moved down the classification and countries above the diagonal line have moved up the classification. The data from the country groups of the Labour Market Monitor 2017 are based on the years 2014, 2015 and 2016.

## Literature

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