Price inflation suppresses real minimum wage growth

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AT A GLANCE

In recent months, the call for a minimum wage sufficient to secure a decent existence has been at the centre of public debate both in Germany and more widely across Europe. The European Pillar of Social Rights, proclaimed in November 2017, includes a commitment to ‘adequate minimum wages’. French President Macron has also emphasised the key role of minimum wages for the European Social Model. And in Germany, the coalition agreement between the Christian Democrats (CDU), the Christian Social Union (CSU) and the Social Democrats (SPD) states that the new German government will seek to develop a European-level framework on minimum wages. This WSI Minimum Wage Report aims to contribute to this debate by offering a comprehensive analysis of current minimum wage developments in Europe and beyond. One significant finding is that it confirms the scope for more ambitious increases in minimum wages, in particular in Germany, where the minimum wage is currently at a relatively low level in European comparison.

Minimum wage per hour...

<table>
<thead>
<tr>
<th>Country</th>
<th>Wage (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg</td>
<td>11.55</td>
</tr>
<tr>
<td>France</td>
<td>9.88</td>
</tr>
<tr>
<td>Netherlands</td>
<td>9.68</td>
</tr>
<tr>
<td>Ireland</td>
<td>9.55</td>
</tr>
<tr>
<td>Belgium</td>
<td>9.47</td>
</tr>
<tr>
<td>Germany</td>
<td>8.84</td>
</tr>
</tbody>
</table>

Source: wsi Minimum Wage Database 2018
INTRODUCTION

At the start of 2018, statutory minimum wages were raised in a large number of countries. In EU Member States, the median increase in nominal terms was 4.4%, nearly reaching the 5.0% increase recorded in 2017. Rising consumer price inflation meant that the real increase for 2018 was 2.8%, considerably below the 5.1% real increase for 2017. The fastest pace of change was evident in the new EU Member States in Central and Eastern Europe, where minimum wages in some cases were initially set at very low levels and have begun to move, albeit only gradually, towards the rates prevalent in the more longstanding EU members. Minimum wage recipients in some non-EU Eastern European countries and major economies outside Europe were also able to register growth in real purchasing power.

This report analyses current developments in detail and continues the annual reporting that began in 2009. This basis for this is the WSI-Minimum Wage Data Base, which now has time series for 37 countries. This includes data for 22 of the 28 EU Member States with statutory minimum wages together with seven neighbouring countries (Albania, Macedonia, Moldova, Russia, Serbia, Turkey and Ukraine) and eight non-European developed and industrialising economies (Argentina, Australia, Brazil, Japan, Korea, Canada, New Zealand and USA). In addition to developments in nominal minimum wages, the data base also tracks real trends adjusted for inflation. In order to make cross-country comparisons, values are converted at both current exchange rates and using purchasing power parities and also calculated in terms of the relative values of minimum wages in individual countries in relation to median and average wages.

MINIMUM WAGES AS AT 1 JANUARY 2018

As noted in previous years, the, on occasions very substantial, differences in the level of minimum wages as between countries have persisted and for the most part remain undiminished.

Within the European Union, countries can be assigned to one of three groups based on the level of their minimum wage (Schulten, 2017: 135ff; Fric, 2018). The first covers the highly-developed economies of Western Europe, with minimum wages all above €8 per hour (see Figure 1). The highest is in Luxembourg (€11.55 per hour), followed by France (€9.88), the Netherlands (€9.68), Ireland (€9.55) and Belgium (€9.47). These are followed, after a gap, by Germany (as in 2017, €8.84) and the UK (€8.56). The marked depreciation of the Pound sterling following the Brexit vote in June 2016 led to a drop in the value of the British minimum wage when converted into Euros. Without this depreciation, and based on the 2015 €/£ exchange rate, the statutory minimum wage in the UK would currently be €10.33.

This report does not include those EU Member States, such as Austria, Italy, and the Northern European countries, that do not set a general statutory minimum wage. Mandatory wage floors in these countries are largely set through an extensive system of collective bargaining. The high level of collective bargaining coverage in these countries has meant that trade unions have not felt it necessary to press for a general statutory minimum wage (Schulten et al. 2016).

1 The WSI Minimum Wage Database can be accessed at www.wsi.de/mindestlohndatenbank and is available in English and German.

2 The WSI Minimum Wage Database registers the so-called UK ‘National Living Wage’ (NLW), which sets a general statutory wage floor for all employees and workers aged 25 and above.

3 Austria sets mandatory minimum wages for some individual occupations, especially in household services. See https://www.sozialministerium.at/site/Arbeit_Behinderung/Arbeitsrecht/Entlohnung_und_Entgelt/Mindestlohn.tarife/
The second group comprises countries with minimum wages of €3–€5 per hour. This includes Slovenia (€4.84) and the Southern European EU Member States Spain (€4.46), Malta (€4.31), Portugal (€3.49), and Greece (€2.39). The third group is made up of Eastern European EU Member States, where minimum wages are all below €3 per hour, and in the case of Bulgaria (€1.57) well below this level. Countries neighbouring the EU also have similarly low minimum wage rates and include Turkey (€2.53), Ukraine (€0.74), and Moldova (€0.68). Russia has both a national minimum wage (€0.83 per hour) and regional minima, with considerably higher rates in the metropolises of Moscow (€1.64) and St. Petersburg (€1.49).

Levels of minimum wage also vary widely outside Europe. The highest by far is in Australia, where the Fair Work Commission has set both a national minimum wage of €12.42 (2018) and provisions on wage levels and working conditions in individual industries or occupations (so-called ‘modern awards’). One notable feature of Canada (€7.96) and Japan (€6.69) is that in both countries minimum wages are set exclusively by regional authorities (provinces or prefectures). The national level noted here is the weighted average (by the number of employees) of these rates. By contrast, in the USA minimum wages are set at both Federal and State level, and also by some municipalities (with the latter sometimes applicable only for suppliers in public procurement). The second level of minimum wage setting has grown in significance in recent years, given the stagnation of the Federal rate at $7.25 per hour since 2009 (equivalent to €6.42). The highest regional rates are in Washington State ($11.50/€10.18), Washington D.C. ($12.50/€11.06), and in California and Massachusetts (both at $11.00/€9.03).

As Figure 1 shows, the Federal minimum wage in the USA is only marginally above that of the Republic of Korea (€5.90), where the rate has doubled over the past ten years (WSI Minimum Wage Database). However, other newly-industrialising countries, such as Argentina (€2.53) and Brazil (€1.26), have much lower minimum wages. As with the Eastern European countries neighbouring the EU, this also reflects substantially lower levels of productivity, some of which is attributable to the fact that critical factors of production, such as the capital stock and public investment in education and infrastructure, often lag well behind those in highly-developed industrial economies. From an employee standpoint, the crucial factor is not only the nominal value of the minimum wage but what it will buy.

Simply converting minimum wages into a standard currency using market exchange rates is not sufficient to capture this given the substantial differences in living costs, even within the Eurozone.

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4 For a critical assessment, see Buchanan/Oliver (2016).
5 See WSI Minimum Wage Database.
6 This figure is for national minimum wage and does not consider higher state or city minimum wages.

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The WSI Minimum Wage Database uses the average exchange rate for the previous year. This eliminates some exchange rate volatility by taking a longer reference period. Data are drawn from Eurostat and the national banks of Moldova and Ukraine.
For instance, the Eurostat index for the price level for private households in Ireland (2016: 123.7) is almost double that of Lithuania (62.9). To control for this, the WSI Minimum Wage Report calculates the purchasing power of national minimum wages by expressing them in Purchasing Power Parities (PPPs). In addition to Eurostat, the World Bank also calculates PPPs that allow such a conversion, with the advantage that the latter are available for all countries included in this report. The following sections therefore make use of the World Bank’s PPP conversion factors.

Taking into account differences in purchasing power reduces the differences between minimum wages within the EU but does not remove them entirely (see Figure 2). For example, while minimum wages at market exchange rates in the rich countries of North West Europe are some four times higher than the average for the Baltic states, Romania and Bulgaria, this falls to 2.2 times when expressed in PPPs. And even after adjusting for the price level, the Benelux countries, France and Germany have the highest minimum wages in the EU by some distance. By contrast, Ireland and the UK drop back markedly within this group because of their relatively high living costs.

Several countries also switch position in the second and third groups. For example, while the price level in the Southern EU Member States ranges between just 82.0% and 91.5% of the EU average, this is not sufficient to offset the disadvantage of relatively low minimum wages. Despite the recent increases in minimum wages in Spain and Portugal, the long-term consequences of austerity policies are still discernible (see Section 4, below). These have also affected employees in Greece in particular, where the minimum wage expressed in PPPs is now at a level comparable with that of the Baltic states. Relatively low living costs in Eastern European countries such as Romania (price level 52.3% of the EU average), Poland (53.6%) and Hungary (59.6%) mean that employees in these economies benefit from a higher purchasing power of the minimum wage than would otherwise be the case. After adjusting for differences in purchasing power, these countries approach and in some cases have overtaken Southern EU Member States. By contrast, Bulgaria trails the rest of the EU on both measures.

Comparative minimum wages in countries
neighbouring the EU also rise when converted at purchasing power parities. Outside of Europe, high living costs in Australia, New Zealand and Canada lower the value of minimum wages in these economies when expressed in PPPs, while the relative value of minimum wages in Argentina and Brazil increase due to their lower price levels.

**MINIMUM WAGES AND NATIONAL PAY STRUCTURES**

As a wage floor, minimum wages also are closely connected with countries’ overall wage structure and in turn influence it. Where minimum wages are high, they not only directly benefit minimum wage recipients but, by interacting with the collective bargaining system, can also lead to a rise in agreed wage rates above the statutory minimum – leading to wage compression in the lower half of the wage distribution (see DiNardo et al., 1996 and the contributions in Grimshaw, 2013). These spill-over effects have also been observed in Germany since the introduction of a statutory minimum wage (Mindestlohnkommission, 2016: 49ff). In some branches the statutory minimum wage has led to above-average increases in agreed pay and a squeezing of pay differentials (Bispinck, 2017; Lesch, 2017; Statistisches Bundesamt, 2017). By contrast, in countries where minimum wages are set so low that they have no practical impact on labour markets, no such effect is discernible.

The impact of a minimum wage therefore is highly dependent on its level in relation to the existing national wage structure. The American labour statistician Hyman Kaitz (1970: 43) proposed that the relative level of a minimum wage could be measured in terms of the ratio between the minimum and actual earnings. Kaitz originally adopted the average wage, but the measure used more typically since has been to benchmark the minimum wage against median earnings. The latter has the advantage that, as the midpoint of the wage distribution, it is unaffected by extremely high or low values. Table 1 therefore sets out the Kaitz index using both methods of calculation, using data from the OECD Earnings Database. Although there has been progressive improvement in this source, national information is not wholly comparable due to differences in data collection methods (OECD, 2012).

Despite this limitation, data for 2016, the most recent year for which figures are available, and for the comparison year 2000, indicate considerable differences in the relative level of minimum wages. For the 26 countries for which data is available, the Kaitz index (using median wages) ranges from 34.9% (USA) to 75.8% (Turkey), almost a factor of 2. There are relatively high minimum wages in New Zealand (Kaitz index 60.5%), France (also 60.5%), Slovenia (58.7%), and Portugal (58.3%). Nonetheless, minimum wages in these countries still lie below the OECD low pay threshold of two-thirds of median wages. In many countries, the minimum wage is below 50% of the median, a level normally seen as a poverty wage that is not sufficient to allow for a decent standard of life. This includes Germany (46.7%), currently in 18th place in the ranking. When set against the national wage distribution, the German minimum wage continues to represent a very low pay standard (Pusch, 2018).

Without the support of a robust system of collective bargaining, it is difficult for a statutory minimum wage on its own to contain the spread of low-wage employment. Minimum wages should, therefore, be viewed preferably as a support for collective bargaining and not as a substitute for it. Moreover, for these interactions to take effect, the minimum wage must be sufficiently high. The contribution of minimum wages to limiting growing income polarisation is not only well-established in the academic literature, efforts to put this into practice in policy terms have also led to a renaissance in minimum wages in many countries.

As Table 1 shows, since 2000 the Kaitz index (based on median wages) has risen in 19 countries, in some cases substantially. These include Eastern European countries such as Romania (+31.2 percentage points), and Latvia, Poland and Hungary (each with c. 15 percentage points). The minimum wage in New Zealand (+10.2 percentage points), Korea (+21.6 percentage points) and Japan (+7.5 percentage points) has also shifted significantly closer to the centre of the wage distribution. In contrast, it has fallen back in five countries: the USA (-0.9 percentage points), Belgium (-3.6 percentage points), Australia (-4.4 percentage points), the Netherlands (-7.0 percentage points) and very markedly in Ireland (-22.0 percentage points). Overall, however, the Kaitz index has risen by 6.9 percentage points on average since the turn of the century.

This change is partly attributable to changes in minimum wages (see Section 4) but also to national pay developments, and hence the level of the reference point. In two-thirds of the countries considered here, median wages have lagged the average since 2000. Increases in the minimum wage therefore appear to be less generous when measured against average wages (see the right-hand columns in Table 1). It should also be noted that real-wage growth in large areas of Europe has been extremely moderate since 2000 (Lübker and Schulten 2017).

13 On the interaction between minimum wages and collective bargaining, see Grimshaw et al. (2014) and Garnero et al. (2015).
14 See the overview in Jaumotte/Buitron (2015) and for the USA, Autor et al. (2016).
Table 1

Relative value of minimum wages to average wages of full-time workers, 2000 and 2016 (Kaitz index)
In per cent (2000 and 2016) and percentage points (change over time)

<table>
<thead>
<tr>
<th>Country</th>
<th>Minimum wage as a percentage of median wages of full-time workers</th>
<th>Minimum wage as a percentage of mean wages of full-time workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>45.8</td>
<td>75.8</td>
</tr>
<tr>
<td>New Zealand</td>
<td>50.3</td>
<td>60.5</td>
</tr>
<tr>
<td>France</td>
<td>56.1</td>
<td>60.5</td>
</tr>
<tr>
<td>Slovenia</td>
<td>..</td>
<td>58.7</td>
</tr>
<tr>
<td>Portugal</td>
<td>45.6</td>
<td>58.3</td>
</tr>
<tr>
<td>Romania</td>
<td>25.3</td>
<td>56.5</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>51.6</td>
<td>54.7</td>
</tr>
<tr>
<td>Poland</td>
<td>39.6</td>
<td>54.2</td>
</tr>
<tr>
<td>Australia</td>
<td>58.2</td>
<td>53.8</td>
</tr>
<tr>
<td>Lithuania</td>
<td>49.6</td>
<td>53.6</td>
</tr>
<tr>
<td>Hungary</td>
<td>36.5</td>
<td>51.2</td>
</tr>
<tr>
<td>Latvia</td>
<td>35.5</td>
<td>50.7</td>
</tr>
<tr>
<td>Korea</td>
<td>28.8</td>
<td>50.4</td>
</tr>
<tr>
<td>Belgium</td>
<td>53.1</td>
<td>49.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>40.9</td>
<td>49.0</td>
</tr>
<tr>
<td>Greece</td>
<td>47.1</td>
<td>47.9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>42.0</td>
<td>47.7</td>
</tr>
<tr>
<td>Germany</td>
<td>..</td>
<td>46.7</td>
</tr>
<tr>
<td>Canada</td>
<td>41.4</td>
<td>45.8</td>
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<tr>
<td>Ireland</td>
<td>67.5</td>
<td>45.4</td>
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<tr>
<td>Netherlands</td>
<td>52.3</td>
<td>45.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>34.2</td>
<td>41.3</td>
</tr>
<tr>
<td>Japan</td>
<td>32.2</td>
<td>39.7</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>32.4</td>
<td>39.7</td>
</tr>
<tr>
<td>Spain</td>
<td>36.5</td>
<td>37.3</td>
</tr>
<tr>
<td>USA</td>
<td>35.8</td>
<td>34.9</td>
</tr>
<tr>
<td>Average*</td>
<td>43.3</td>
<td>50.2</td>
</tr>
</tbody>
</table>

* Excluding Germany (no minimum wage in 2000) and Slovenia (no data available for 2000).
Note: No data are available for the following countries: Albania, Argentina, Brazil, Bulgaria, Croatia, Malta, Macedonia, Moldova, Russia, Serbia and Ukraine.
All figures are rounded to the first decimal point. Calculations are based on unrounded values.

Source: OECD Earnings Database.
In all, 26 of the 37 countries included in the WSI Minimum Wage Database raised their minimum wages on 1 January 2018. In seven other countries, increases took effect over the course of 2017. Minimum wage rates remained unchanged in just four countries.

The largest nominal increase took place in Romania (+52.0%), where the minimum wage was increased in two stages, on 1 February 2017 and again on 1 January 2018 (see Figure 3). There were also double-digit increases in eight other Eastern European countries and Turkey, albeit from a low base (see Section 2). In Portugal (+4.1%), Spain (+4.0%) and Ireland (+3.2%), minimum wages were raised after a long phase of stagnation in the wake of the Euro crisis; in Greece, however, they have remained frozen since the cut imposed by the Troika in March 2012 (Schulten, 2015a). In the UK, the National Living Wage was raised by 4.2% on 1 April 2017 and will increase by a further 4.4% on 1 April 2018. By contrast, in most other West European countries, there were only moderate increases with uprating remaining close to the level of inflation. This includes Belgium (+2.0%), the Netherlands (+1.7%), and France (+1.2%). There were no increases in Germany and Luxembourg. Germany is the only country in Europe in which the uprating of the minimum wage takes place only every two years.

Figure 4 aggregates the change in minimum wages in the European Union, based on the median increase in minimum wage rates: that is, half of EU Member States report increases above this level and half below. In contrast to the arithmetic mean, this excludes the impact of extreme changes in individual countries (as with Romania). The figures indicate that the fresh impetus in the uprating of minimum wages noted in previous years has continued into 2018, with a nominal median increase of 4.4%. Rising consumer prices, especially for food and energy, mean that the real rate of increase is only 2.8%, however. Following the prolonged slack period during the years 2009-2013, in which wage increases were often not sufficient to offset price rises, aside from the exceptions noted above, the rate of minimum wage increases is now moving back towards the level that prevailed before the crisis.
Outside Europe, the most notable change has been in the Republic of Korea (+16.4%), where the new government has adopted a policy of raising the minimum wage to 10,000 Won per hour (€7.83) by 2020, an overall increase of 55% from the rate in force on 1 January 2017. In Japan, the government has embarked on an economic reform programme (‘Abenomics’) that includes annual nominal minimum wage increases of 3% (Aoyagi et al., 2016). Unusually, this has been supported by the IMF (2017), which has called for further measures to promote wage growth.

In the USA, by contrast, the minimum wage has lost considerable purchasing power since its most recent increase in 2009. The plan of the Obama administration to enable lower incomes groups to participate in the economic recovery by raising the Federal minimum wage to $10.10 was blocked by the Republican majority in Congress.

Figure 4

Changes in statutory minimum wages in the European Union, 2000 – 2018
In per cent, median change compared with the previous year.

Notes: The chart indicates the median value of national rates of change, as at 1 January compared with the same point in time during the previous year. The real values are based on adjusting for price changes, as measured by national rates of consumer price inflation. The population is all EU Member States with a statutory minimum wage (currently 22 countries).

Source: WSI Minimum Wage Database 2018


At the start of 2018, there were substantial increases in minimum wages in many European countries, continuing the expansive course of recent years, albeit with a reduced pace of growth of real purchasing power in view of the upward movement in consumer price inflation. As such, the growth of minimum wages has constituted a significant element of support for the overall development of wages in Europe. Despite the improved prospects for growth and employment, this has remained persistently moderate and often failed to fully exploit the available scope for distribution (Lübker / Schulten, 2017). Above-average rates of growth in minimum wages were especially prevalent in Eastern Europe. Although starting from a very low level, recent increases have seen the start of a gradual process of catching-up with Western Europe. By contrast, minimum wages have risen only modestly in Western Europe, and in France the increase has only barely exceeded inflation.

Unlike most other EU Member States, the minimum wage in Germany was not adjusted at the start of 2018 in line with the statutory two-year uprating mechanism. German minimum wage recipients will therefore have to accept a slight decline in the real value of their pay until the next opportunity for an adjustment on 1 January 2019. In mid-2018, the German Minimum Wage Commission (Mindestlohnkommission) will issue a recommendation that, in accordance with its statutory duty, will be the outcome of an overall economic and social assessment and in line with the average movement of collectively-agreed pay. Merely tracking the domestic pace of pay settlements, however, would mean that the German minimum wage would continue to trail other Western European economies. This is also the case when the relative level of the German minimum wage is measured using the Kaitz index, with Germany in the lower third of the European ranking. There is a marked gap between Germany and France on this measure, with the French minimum wage higher both relatively and in absolute terms. In September 2017, in a speech dubbed an ‘initiative for Europe’, French President Macron called for the development of ‘common minimum European social standards’ and ‘rules for convergence’ including ‘a minimum wage that takes into account the economic realities of each country, while gradually moving towards convergence’.

In making this proposal, President Macron took up the notion of a European minimum wage that has been under discussion for some time and which, in essence, aims at an appropriate level of minimum wages for Europe as a whole (Schulten, 2015b; Schulten et al., 2015). Discussion on the issue of a European minimum wage has also gained momentum from the adoption of the Pillar of Social Rights that makes express reference ‘to fair wages that provide for a decent standard of living’ and ‘adequate minimum wages’ (Müller / Schulten, 2017). Finally, in Germany, the coalition agreement between the Christian Democrats (CDU), the Christian Social Union (CSU) and the Social Democrats (SPD) states that the new German government will seek to develop a ‘European-level framework on minimum wages and national systems of basic income support’ (CDU et al., 2018: 7).

The European Trade Union Confederation (ETUC) has proposed that statutory minimum wages should, in principle, be ‘Living Wages’, able to offer a decent minimum standard of living and be at least equal to 60% of the national median wage (ETUC, 2017; see also Rieger, 2017). This is an ambitious aim, the realisation of which would require a substantial increase in national minimum wages in most countries in Europe. This applies no less to Germany, where, using OECD data, the minimum wage is less than 47% of the median wage and is some distance from being an adequate Living Wage. Against this background, there are good grounds for considering whether the extremely favourable economic circumstances currently prevailing in Germany might offer a favourable terrain for making a structural shift upwards of the German minimum wage, beyond the constraints of the usual prescribed adjustment.


European Trade Union Confederation (ETUC) (2017): For a common strategy on low and minimum wages, resolution of the ETUC Executive Committee of 15/16 March 2017.


IMF (International Monetary Fund) (2017): Japan: Staff Concluding Statement of the 2017 Article IV Mission, 19 June


