The interaction between minimum wages, income support, and poverty

Research note 10/2015

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Abstract

Minimum wages have emerged as a key policy issue in several countries in Europe (for example, in Germany and Italy) and beyond (for example, in the US). Furthermore, at EU level, discussions on a common European benchmark have gained momentum since European Commission President J.-C. Juncker came out in favour of an EU minimum wage as an essential component of the European Social Model. This Research Note attempts to throw light on the interaction between minimum wages, income support, and poverty. It focuses on two closely connected aspects of this issue. On the one hand, the latest EU-SILC data is used to examine the relationship between low wages and poverty, looking at the individual characteristics and household circumstances of those workers earning less than 50% of average hourly wages. On the other hand, the European tax-benefit model EUROMOD is deployed to simulate the effects on poverty of raising national minimum wages to that threshold (i.e. 50% of average hourly wages), taking into account interactions with social assistance and other tax-benefit policies, and assuming no negative impact on employment or behavioural effects. The main finding is that raising minimum wages to that level would have at best modest effects in terms of poverty reduction, though better coordination of minimum wages with other tax-benefit policies, and in particular with in-work benefits, could improve overall anti-poverty performance.

Introduction

Minimum wage policies have been brought to the top of the political agenda in a number of EU Member States. In Germany, a national minimum wage of €8.50 per hour has been gradually phased in since January 2015, and will be fully in place in 2017. In Italy, the recent 'Jobs Act' has put in place a framework for the future introduction of a national minimum wage for those workers (including the 'dependent self-employed') not already covered by a collective bargaining agreement. That leaves Austria, Cyprus and the Nordic countries (Denmark, Finland and Sweden) as the only EU members without a national minimum wage[1]. In the other 23 EU Member States with a *national* minimum wage, its current level (January 2016) varied widely, from €215 per month in Bulgaria to €1,923 per month in Luxembourg[2].

Renewed interest in minimum wages is also evident at EU level, where discussions on the feasibility and desirability of setting a common threshold applicable throughout the EU gained momentum when European Commission President J.-C. Juncker came out in favour of an EU minimum wage (for example, set at 60% of national median wages) as an essential component, along with a minimum guaranteed income, of the European Social Model[3].

The relationship between low wages and the risk of poverty has gained in salience as it has become increasingly clear that, in the years before the economic and financial crisis, rising employment levels failed to engineer a decline in relative poverty rates (Cantillon, 2011; Gábos et al., 2015). As recent work has established, in-work poverty and the "erosion of minimum income protection" for the working-age population (and, especially, for families with children) was in most countries associated not with cuts in benefit levels (nor with rising taxation levels), but rather with "sinking gross low wages compared to median household incomes" (Cantillon et al., 2015).

The notion that raising the minimum wage would cause the risk of poverty to fall has intuitive appeal. Nevertheless, economic theory suggests that the effectiveness of minimum wages as an anti-poverty tool is in fact questionable (Boeri & van Ours, 2013). On the one hand, many of those at risk of poverty are either not employed (i.e. are retired, inactive, or unemployed), work part-time (i.e. would not gain as much from a rise in the hourly minimum wage), or are self-employed or in the informal sector (i.e. beyond the scope of minimum wage legislation). On the other hand, a number of minimum wage earners live in households with income above the at-risk-of-poverty threshold, in many cases because they are *secondary earners* (e.g. women caring for children, or grown-up children living with their parents)[4]. Furthermore, raising the

[1] In most of these countries, industry-level minimum wages are typically in place, resulting from collective bargaining and extended to all workers in the relevant industries. No minimum wage applies for workers not covered by an industry-level agreement.

[2] For more information on minimum wages in the EU and candidate countries, see Eurostat "Minimum wage statistics".

[3] These developments are mirrored across the Atlantic, in the United States, where President Obama called on Congress to raise the federal minimum wage to $10.10 per hour (from its current level of $7.25). Even though the presidential proposal was not endorsed by Congress, the minimum wage for federal contract workers was raised to that level in January 2015. Meanwhile, several states have legislated minimum wage increases well above the level indicated by the President, with California and New York now both committed to moving towards a minimum hourly wage of $15. (In California, the $15 minimum hourly wage will apply to the entire state, with all large businesses phased in by 2022, and all those with fewer than 26 employees by 2023. New York City will get to $15 by the end 2018, and the city's suburbs by the end of 2021, while in upstate areas the hourly minimum wage will be raised to $12.50 by the end of 2020.)

[4] "Assortative mating", or the tendency of some individuals to select a spouse from within their own group (defined by occupational, educational, ethnic or other characteristics), will have the opposite effect, leading to minimum wage earners being clustered in low-income households. For more analysis, see OECD (2011), where it is pointed out that assortative mating is on the increase in the United Kingdom, Poland, Sweden, and other EU Member States. We thank Maria Vaalavuo for pointing this out.

minimum wage may cause *adverse effects on employment*, in which case some workers will suffer from a loss of earnings as they move from low-wage employment to no employment at all.

Given that the employment and poverty effects of minimum wages as predicted by theory are ambiguous (and contingent on other factors), the relevant questions can only be resolved empirically. As it happens, evidence (mainly, though not exclusively, from North America) abounds: "The employment effect of the minimum wage is one of the most studied topics in all of economics" (Schmitt, 2014). In large part, this can be traced to the seminal work by Card & Krueger (1994, 1995), which inspired a vast and often contradictory body of research. The key finding of the 'New Economics of the Minimum Wage' was that earlier assumptions, based mostly on theory, needed to be revised: "The weight of the evidence suggests that it is very unlikely that the minimum wage has a large, negative employment effect" (Card & Krueger, 1995). In dissent, some later studies found strong adverse employment effects (Neumark & Wascher, 2008). Nevertheless, a more recent crop of empirical work (Dube et al. 2010) appears to confirm that moderate increases of the minimum wages have little or no effect on employment.

Strikingly, a 'meta-analysis' of 64 studies published between 1972 and 2007, yielding over 1,000 estimates, specifically measuring the impact of the minimum wage on teenage employment in the US, found that the most precise estimates were heavily clustered at or near zero employment effects. Keeping in mind that teenagers are the one category of workers most likely to be 'priced out' by a hike in the minimum wage, the authors concluded: "Two scenarios are consistent with this empirical research record. First, minimum wages may simply have no effect on employment. […] Second, minimum-wage effects might exist, but they may be too difficult to detect and/or are very small" (Doucouliagos & Stanley, 2009). Similar conclusions were reached by a more recent meta-analysis of 201 estimates from 27 studies published since 2000 (Wolfson & Belman 2014).

The poverty effects of changes in the minimum wage are somewhat less researched, though most economists would argue that minimum wages (on their own) are a blunt instrument for reducing poverty. Nevertheless, a comprehensive recent study (Dube, 2013), using microlevel data from the US, has actually suggested that, under certain conditions (growing labour demand, no or small disemployment effects), minimum wage rises can be effective in reducing poverty. Specifically, the poverty rate elasticity of the minimum wage estimated in the study ranged from -0.12 to -0.37, with the best estimate being -0.24, implying that raising the minimum wage by 10% will reduce the number of people living in poverty by 2.4%. The same study also reviewed the existing literature, and concluded it was 'broadly consistent' with the above range of estimates.

This Research Note attempts to throw light on the interaction between minimum wages, income support, and poverty. The focus is on two closely connected aspects of this issue. In Part I, the relationship between low wages and poverty is examined on the basis of the latest EU-SILC (2013) data, looking at the individual characteristics and household circumstances of those workers earning less than 50% of average (mean) hourly wages. In Part II, the European tax-benefit model EUROMOD is used to simulate the effects on poverty of raising national minimum wages to that threshold (i.e. 50% of average hourly wages), taking into account interactions with social assistance and other tax-benefit policies, assuming no adverse effects on employment or behavioural impact.

Part I: The household circumstances of low earners in the EU

Methodology

Low wages are defined here, in line with Özdemir and Ward (2015), as hourly wages below 50% of average (mean) hourly wages. The focus is on employees for obvious reasons (i.e. the self-employed are not covered by minimum wage legislation). The analysis is based on data from the latest available wave of EU-SILC at the time of writing (survey carried out in 2013, information on incomes earned in 2012).

Since information on current monthly earnings for employees (PY200G) is only available in the case of 10 countries in EU-SILC, this variable is not suitable to study differences over all Member States of the EU. EU-SILC, however, records yearly employee cash and non-cash income (PY010G) over the income reference year. To study low wages among individuals with different working hours, hourly wage rates were calculated using the information on yearly employee income, the number of months the respondent was in employment (PL070, PL072) and the hours they typically work in their main job (PL060). One limitation of the data is that information on hours of work relates to the current situation, whereas there is no information on hours of work in earlier periods of the year[5]. Thus the calculation of hourly wage rates had to be restricted to employees who have been working full-time over the whole year or have been working part-time over the whole year. Employees who have changed job during the reference year have also been excluded, since in this case hours of work at the previous job are not known[6]. The assumption here is that individuals who have been working through the entire year at the same job, have been working the same hours as currently, reported in variable PL060.

As noted above, low wages are defined as gross hourly wages below 50% of the average (mean), both to be in line with the parallel study referred to above and to increase the number of people covered (in most countries, very few people earn the minimum wage or below).

It is important to keep in mind that, because of data limitations, the definition of lowearners used in the study is restricted to those in stable employment (either full-time or part-time), so that those whose employment has fluctuated over the year are not included. This is of course a serious limitation in the study since workers with unstable employment are also likely to be affected by low wages and high poverty risk. Nevertheless, the share of employees in stable employment in the 18-64 age group is rather high in all countries, ranging from 77% in Estonia to 95% in Romania (see Annex Table A1 for further details).

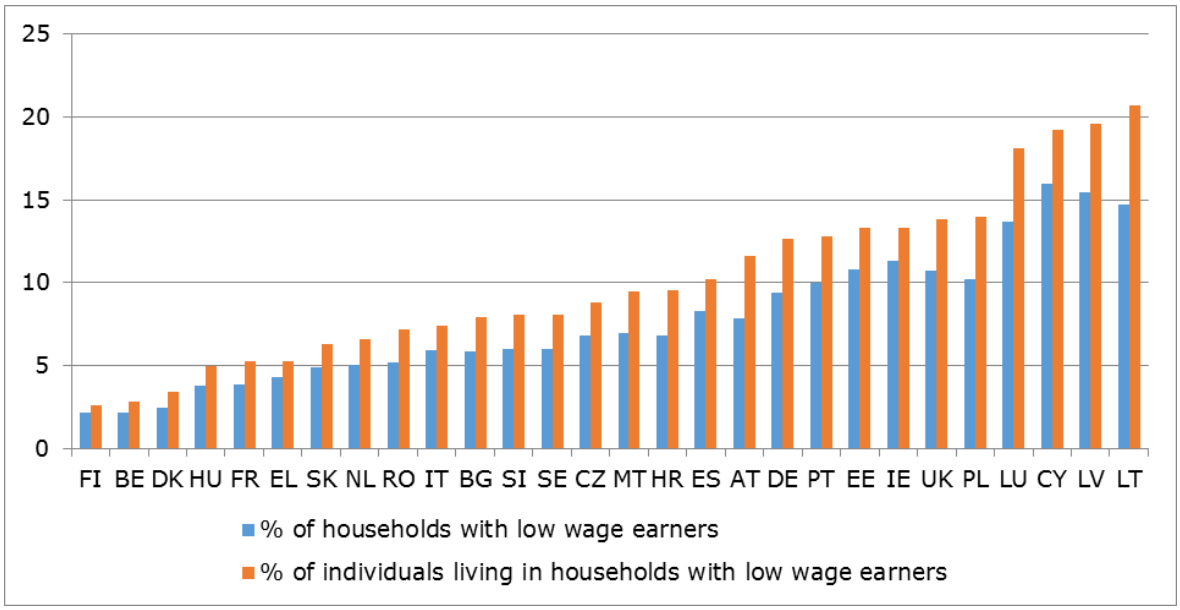
The analysis focuses on household incomes, so that the relationship between low wages and poverty risk is affected by labour market status and the incomes of all household members as well as the number of dependants in the household. As poverty is best defined at the household level, the sample used will include all those who live in households with a low-wage household member. The at-risk-of-poverty threshold is defined as 60% of median equivalised household income in the country concerned. Two indicators relating to this are used: the at-risk-of-poverty rate (showing the percentage of those with income below the threshold), and the at-risk-of-poverty gap (showing the income shortfall of those below the poverty threshold, relative to that threshold, in percentage terms).

[5] This approach is similar to that taken by other studies in the literature. For instance, Maître et al. (2012) focus on those working full-year full-time when studying low pay.

[6] This was omitted from the definition in the case of countries where there was no information in this variable (PL160), for example, Bulgaria, Sweden, and Finland; and also in the case of countries where it was only asked from the selected respondents (and not all household members above 16 years of age), such as Denmark, the Netherlands, and Slovenia.

Figure 1 shows the proportion of the population living in the households of low earners. The proportion ranges from 2.6% in Finland to 20.6% in Lithuania[7].

Figure 1 Population share of low earners in the EU (%)



Source: own calculation using EU-SILC 2013, UDB August 2015

The proportion of households with low-wage employees ranges from 2% to 16%. In Lithuania, Latvia, Luxembourg, and Cyprus, that proportion is between 14% and 16%. In contrast, it is below 3% in Belgium, Finland, and Denmark.

Household circumstances of low earners

As shown by Özdemir and Ward (2015), low earners are over-represented among the young, women, those working part-time, and those with temporary contracts. According to the conclusions of that study, based on data from the European Labour Force Survey, low pay is not necessarily associated with low education or low-skilled occupations, though low-wage workers are disproportionately employed in sectors like basic services, retailing, hotels and restaurants, and social work. In most Member States, migrants, defined as those born outside their country of residence, are more likely to have low pay than those born in the country.

In this section the focus is on households of those in low-wage employment. Households of low-wage employees are described from the point of view of the employment situation of household members and the number of dependants, as these factors are the main determinants of the risk of poverty. First, households will be described with respect to the concentration of low pay in them before other indicators of the labour market situation of household members are examined, such as the identity of the low earner in the household and work intensity of the household. The other issue that is relevant for the risk of poverty is the number of dependants in the households of those with low pay.

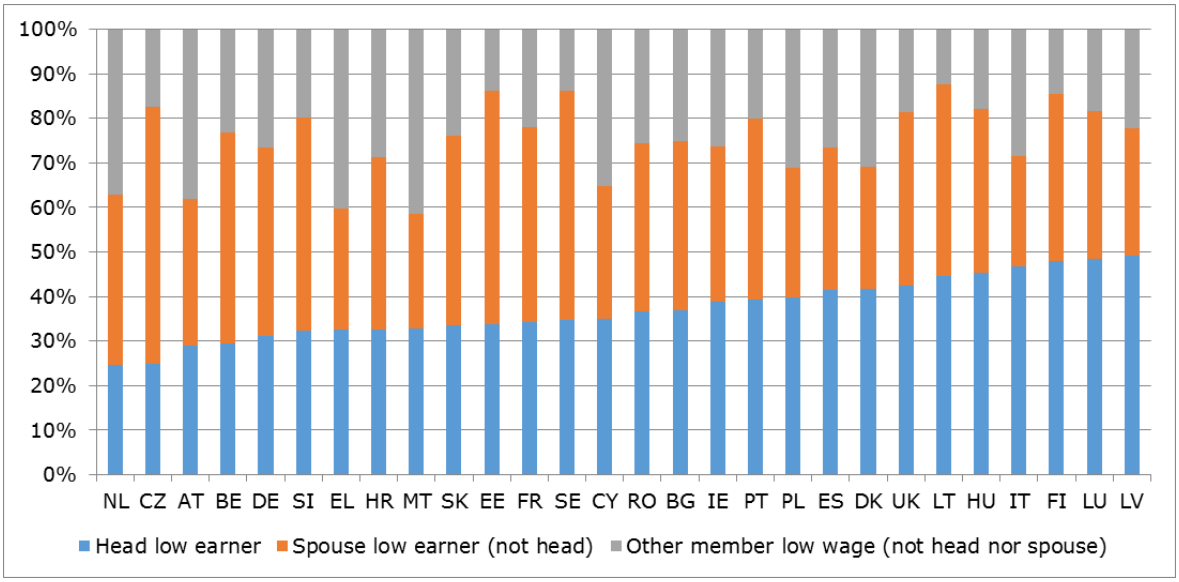
There is little evidence of a concentration of low-paid workers in households, the proportion of households with several low-wage employees being around 1% in households where the head is of working age (between 18 and 64). The largest proportions are found in countries with a higher share of households with low-wage

[7] The absolute sample size of those living in households of low earners is shown by Table A2 in the Annex. Sample sizes depend of course on overall sample size in the country and the percentage of individuals with low wages. The lowest sample size is found in Belgium (N=413), while the highest in Poland (N=5093).

employees: Luxembourg (2.8% of households with at least two low-wage members), Latvia (2.6%), Cyprus (1.9%), and Lithuania (1.7%).

From the perspective of the income situation in the household, it is important to know which members are earning a low wage. If the household head is a low-wage earner this might have a more serious effect on household income than if a young adult living with parents is. Households with low-wage earners are divided in three groups: (i) those where the household head is a low earner[8], (ii) those where the household head is not a low earner but the spouse is, and (iii) those where the low earner is neither the household head nor their spouse, but another member of the household[9].

Figure 2 Composition of households with low earners (% of individuals)



Source: own calculation using EU-SILC 2013, UDB August 2015

To capture the labour market status of all household members, the concept of household work intensity is used. This is shown in Annex Table A5. We measure work intensity as the ratio of the number of months spent in employment during the year by household members of working age (i.e. those aged 16-64) - adjusted for part-time working (i.e. weighted by the number of hours worked per week relative to 35) - to the number of months they would work if they were all employed full time (defined as working 35 hours a week or more) throughout the year[10]. Households where every member of working age is employed full time throughout the year are given a work intensity of 1, while those where no one of working age is employed have a work intensity of 0 (jobless households). In the population of households with low earners, the proportion of those

[8] This group is not limited to households where only the head is a low earner, but includes also those households where the head and other members of the household have low earnings.

[9] This 3-group variable is a simplified version of a 5-group variable, in which the first group is composed of single-adult households, where the only adult is a low-wage earner. Among households with more adults we differentiate according to whether the low earner is the household head or not. Each group is divided in two subgroups: in the former, we distinguish according to whether only the head is low earner or other members also are; in the latter, according to whether the spouse is low earner, or other household members are. Figure 2 shows the distribution of the 3-group variable, in which three groups (single adult on low wage; only head on low wage; head as well as another member on low wage) are conflated into one (household head on low wage). The full distribution of all individuals living in households with low earners by the position of the low earner(s) in the household using the 5-group variable is shown in Annex Table A4.

[10] Note that our work intensity definition is different from the one used by Eurostat. In EU-SILC, the work intensity of a household is the total number of months all working-age household members have *actually* worked during the income reference year divided by the total number of months the same household members could *theoretically* have worked over the same period. Our indicator adjusts work intensity by whether household members worked full-time or part-time. For more detail, see Ward & Özdemir (2016).

living in households with low work intensity (i.e. below 0.5) ranges from 2% in Denmark to 38% in Greece. Other countries with relatively low figures are Sweden, Slovenia, and Finland (3-7%), while other countries with relatively high figures are Ireland and the Netherlands (30-34%). The reason for low work intensity can of course be different in these cases: in the case of Greece, it is related to a high number of unemployed and inactive persons in low-wage households, while in the Netherlands it is more related to a relatively high number of part-time workers.

Other than the labour market situation of household members, the number of dependants also affects the risk of falling into poverty. The demographic composition of households with low earners is shown in Annex Table A6. The proportion of those living in households with children is the smallest in Greece (36%) and the Czech Republic (40%), while the largest is in Sweden, where 67% of those in households with low-wage earners live in households with children. The proportion of those living in households with children is also relatively large in Luxembourg, Romania, Slovenia, and Portugal. Low-wage households with children can be further divided into three groups: lone-person households with children; households with two or more adults and one or two children; and households with two or more adults and three or more children. The proportion of lone parents is small in all countries, though it reaches almost 5% in the UK. The proportion of those living in households with three or more children is largest in Denmark (19%), Luxembourg (15%), and Sweden (15%); and smallest in Greece, Portugal, and Slovakia (2-3%). The third group, households with at least two adults and one or two children, is the most widespread, the proportion varying between 31% in Finland and 57% in Portugal.

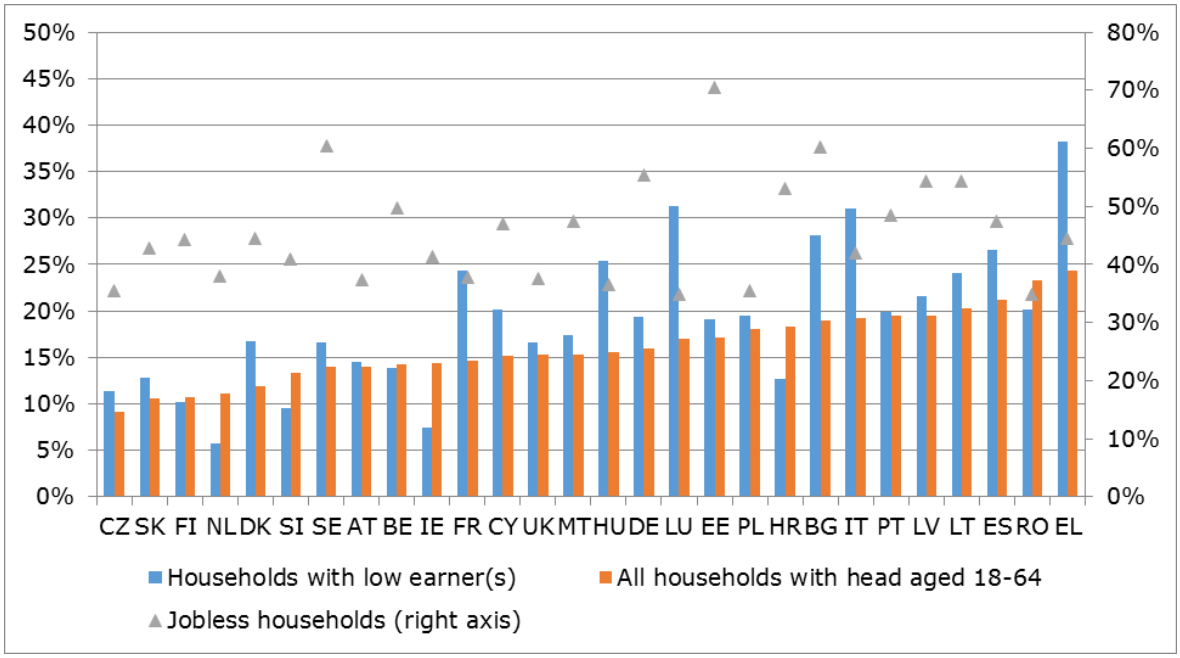
The risk of poverty in households with low earners

Our main concern here is to compare the extent and depth of the risk of poverty among households with low-wage workers with those prevailing in the working-age population as a whole. We also examine the factors associated with a risk of poverty among low earners, as well as the role of social transfers in alleviating this risk.

Extent and depth of monetary poverty in households of low earners

The at-risk-of-poverty rate among those living in households with low earners was highest in Greece in 2012 at 38% (see Figure 3).

Figure 3 At-risk-of-poverty rate, 2012

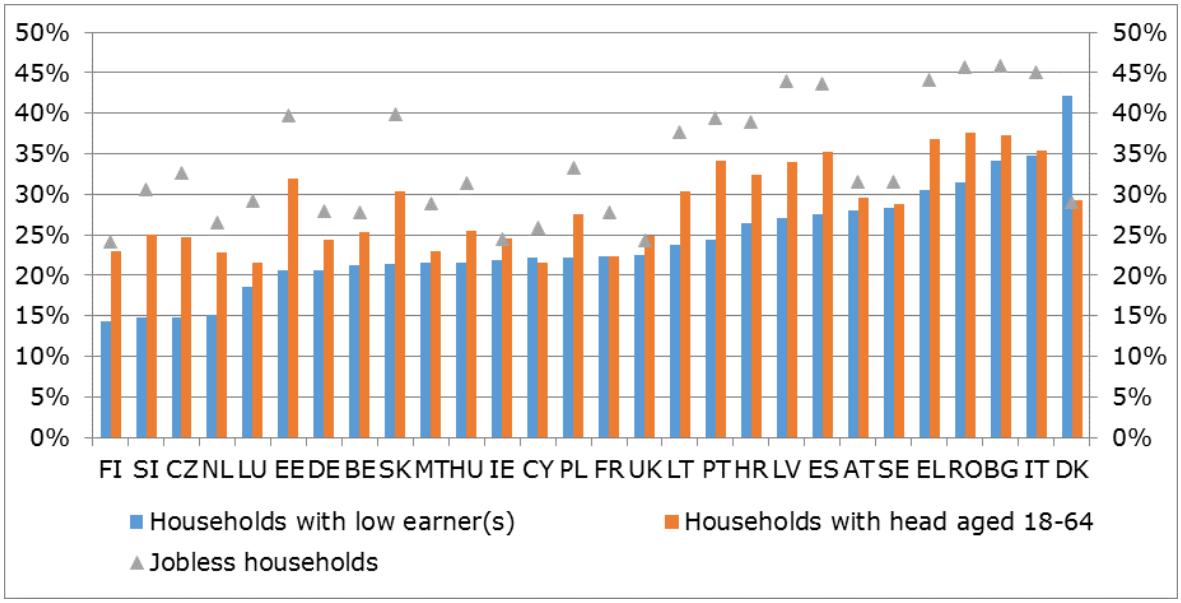


Source: own calculation using EU-SILC 2013, UDB August 2015

The at-risk-of-poverty rate was also above 30% in Luxembourg and Italy, while the rate was only 6% in the Netherlands and below 10% in Ireland and Slovenia. In most EU Member States, households with low earners have a higher at-risk-of-poverty rate than the average for all households with working-age heads. The few exceptions are mostly countries where the at-risk-of-poverty rate among those living in households with a low earner was relatively small: the Netherlands, Ireland, Slovenia, and Finland, (though also Croatia, Belgium, and Romania). The biggest difference in rates can be found in Greece, Luxembourg, Italy, Hungary, and France, where the at-risk-of-poverty rate is at least 10 points higher in the case of individuals living in households with low-wage members. Even though households with a low-wage earner face a higher-than-average poverty risk, that risk is much higher still for jobless households.

The at-risk-of-poverty gap is widest among those living in households with low earners in Denmark, where those at risk of poverty had on average income of 42% below the threshold; while in Italy, Bulgaria, Romania, and Greece, the rate was also above 30% (see Figure 4). In Finland, Slovenia, the Czech Republic, and the Netherlands, on the other hand, the average income of those at risk of poverty was only 14-15% lower than the threshold.

Figure 4 At-risk-of-poverty gap, 2012



Source: own calculation using EU-SILC 2013, UDB August 2015

With the exception of Denmark, the poverty gap is higher among jobless households than among households with low-wage earners. Moreover, the at-risk-of-poverty gap was lower for households with low earners than for all working-age households in all countries except Denmark and Cyprus. This may look surprising at first sight. It should be recalled, however, that low-wage earners here include only those employed throughout the year. As a result, households of low-wage earners below the poverty threshold may well have higher average incomes than other households below the same threshold.

Poverty risk in subgroups

In this section, we analyse the relationship between the risk of poverty of households with low earners and household composition. The expectation is that the risk will be higher than average for households where the head has a low wage, where household work intensity is low, and where the number of dependants is relatively high.

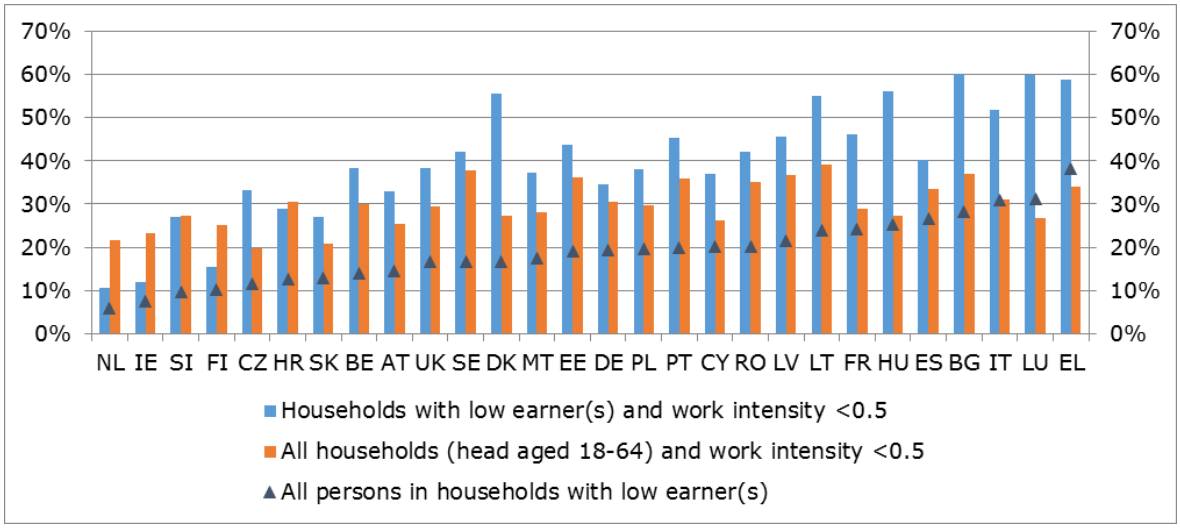
As a rule, the at-risk-of-poverty rate is higher when the low-wage earner is the household head than when he or she is another household member (see Annex Table A9). This is the case in all countries. The differential (relative to the average of all those living in households with a low-wage household member) was largest in Denmark,

Germany, and Bulgaria (around 20 points in 2012), while it was also quite large in another 10 countries (over 10 percentage points). In Latvia and the Czech Republic, on the other hand, the differential was smallest (below 3 percentage points). Having a low earner as household head thus tends to increase the at-risk-of-poverty rate as compared with cases where the spouse or some other member is a low earner.

The at-risk-of-poverty rate is also associated with low work intensity at household level. The definition of low-wage earners adopted in this study means that low earners in the household work during the whole year (although not necessarily in full-time jobs). Other household members, on the other hand, can have spells of inactivity or unemployment, and thus might be employed for only a few months during the year. Household work intensity thus varies among households with low earners. As Figure 5 shows, among households with low-wage earners, the poverty risk is higher than average among households with a work intensity lower than 0.5. The difference is especially large in Bulgaria, Denmark, Lithuania, and Hungary, where the at-risk-of-poverty rate among households with work intensity below 0.5 exceeds by over 30 percentage points the average for those in all households with low-wage earners (see Annex Table A10).

It is also evident that having a low-wage earner in the household represents an additional poverty risk factor even among households with low work intensity. Figure 5 shows that the at-risk-of poverty rate is higher in the case of households with a work intensity below 0.5 where there is a low-wage household member. Having a low-wage earner increases the risk of poverty especially in Luxembourg, Hungary, and Denmark, but also in several other countries. A few exceptions do exist: in the Netherlands, Ireland, Slovenia, Finland, and Croatia, the at-risk-of-poverty rate is actually lower among households with low work intensity where there is a low earner.

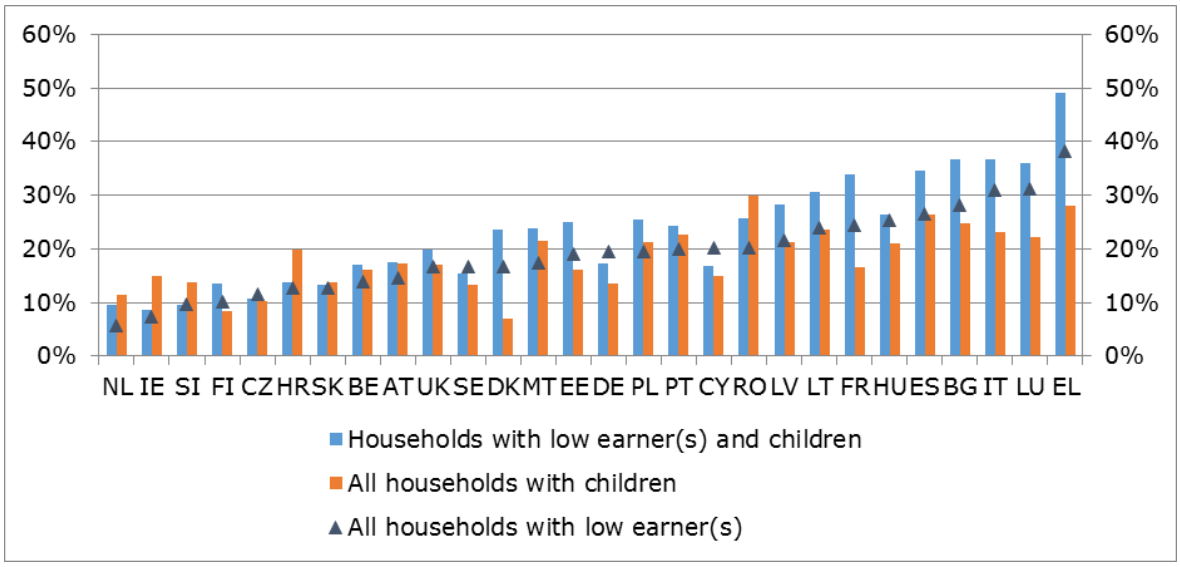
Figure 5 At-risk-of-poverty rate in households with work intensity below 0.5



Source: own calculation using EU-SILC 2013, UDB August 2015

As indicated in Figure 6, having children is also associated with a higher-than-average poverty risk among those living in households with low-wage earners. The biggest difference is in Greece and France, where the at-risk-of-poverty rate of those living in households with children exceeds the average for households with low-wage earners by some 10 percentage points. The only exceptions are a few countries with a relatively low at-risk-of-poverty rate for households with children, such as Cyprus, Germany, Sweden, and the Czech Republic. In these countries the risk of poverty is lower in the case of low-wage households with children.

Figure 6 At-risk-of-poverty rate in households with children



Source: own calculation using EU-SILC 2013, UDB August 2015

It is also clear that having a low-wage household member increases the poverty risk among households with children in the majority of EU Member States. In Greece, France, and Denmark, families with low earner(s) and children face at-risk-of-poverty rates that are more than 15 points higher than they are for all families with children. On the other hand, there are certain countries (especially Ireland, Croatia, Romania, and Slovenia) where the opposite is true: there the risk of poverty is actually *lower* for households with low earner(s) and children than it is for all households with children.

The role of social transfers in reducing poverty risk

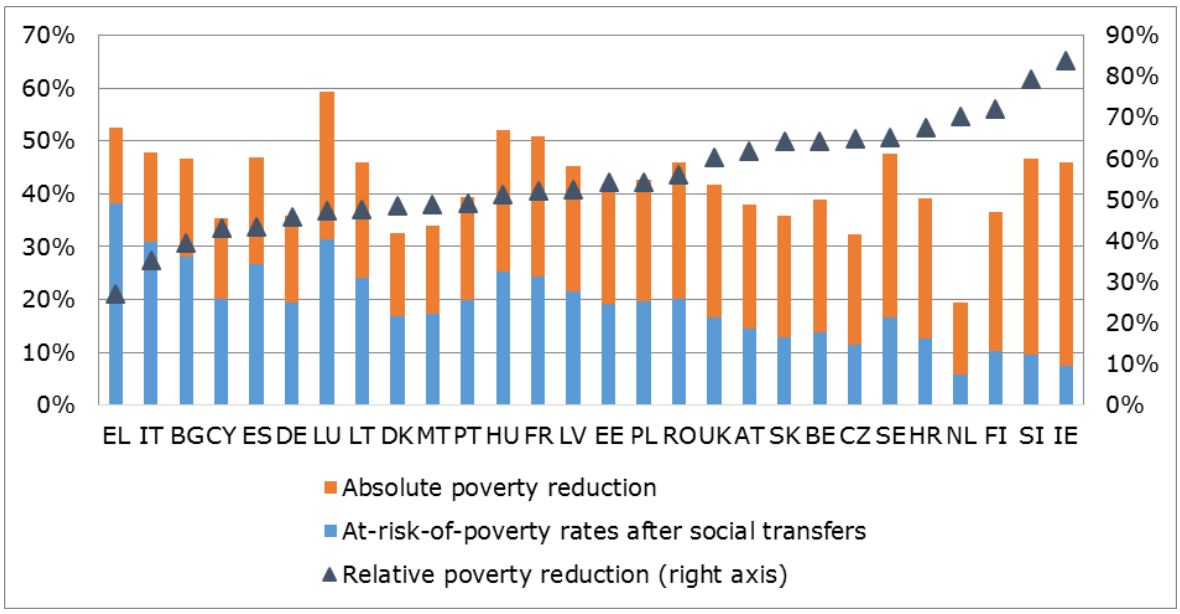
The income structure of households with low-wage earners differs greatly among EU Member States (see Annex Table A12). The two extreme cases are the Netherlands (where 92% of all incomes are either labour or capital earnings, with only 8% coming from social transfers) and Slovenia (where the respective shares of market incomes and social transfers are 73% and 27%). Relatively low shares of social transfer income are also found in Germany, Malta, and Finland (12-13%), and high shares in Ireland, Sweden, and France (22-23%). In the case of Greece and some other countries (Poland, Slovakia, Romania, Cyprus, Latvia, and Bulgaria), old-age pensions are the most important social transfer in households with low-wage earners. The share of family benefits in total income is the highest in Slovenia (14%), Sweden (11%), and Luxembourg (9%), while the share of unemployment benefits is highest in Spain (9%) and Ireland (8%). Sickness and disability benefits make up the highest share of total income in Slovenia (8%) and Sweden (7%). Social assistance and housing allowances are only a small part of the total income of households with low earners, the highest share of these being found in the UK and France (3%).

Social benefits play an important role in moderating the risk of poverty of those living in households with low earners. Figure 7 shows that social transfers reduce the at-risk-of-poverty rate (relative to a "no social transfers" counterfactual) by over 30 percentage points in Ireland, Slovenia, and Sweden. The smallest reduction is seen in the Netherlands, Denmark, Cyprus, and Greece, where the rate is lowered by 14-16 points. The effect of social transfers can also be assessed relative to the pre-transfer at-risk-of-poverty rate. This indicator varies from 27% in Greece to 84% in Ireland (see also Annex Table A7).

The effect of social transfers on the depth of the risk of poverty can be measured by comparing the poverty gap before and after social transfers. The gap before social transfers is naturally larger than after transfers in all countries. The biggest difference is in France, where the inclusion of social transfers reduces the gap by 26 percentage points. The poverty gap after social transfers is lowered by 20-25 percentage points in

the UK, Cyprus, Hungary, Germany, and Ireland. The reduction is smallest in Latvia, Austria, Romania, and Denmark (see Annex Table A8).

Figure 7 Impact of social transfers on at-risk-of-poverty rate in households with low earners, 2012



Source: own calculation using EU-SILC 2013, UDB August 2015

Note: absolute poverty reduction is the difference between the pre-transfer and post-transfer at-risk-of-poverty rate. Relative poverty reduction equals absolute poverty reduction divided by pre-transfer at-risk-of-poverty rate.

Part II: Simulating the poverty effects of an EU minimum wage

Methodology

The aim here is to simulate the poverty effects of raising national (hourly) minimum wages to 50% of national average (hourly) wages, taking account of interactions of low earnings with social assistance, other benefits, and taxes using the European tax-benefit model EUROMOD[11]. We assume no employment or behavioural effects.

As in Part I, the analysis is confined to employees who have been working either full-time or part-time over the whole year. Average hourly earnings are calculated as gross monthly earnings divided by usual working hours per month (i.e. usual working hours per week multiplied by 52/12).

In three Member States (Bulgaria, France, and Italy), where information on whether employees had worked full-time or part-time is missing, all employees with an employment record of 12 months over the year are covered. In the UK, where information on months of employment is missing, all employees are covered.

The simulated EU minimum wage is equal to 50% of national average hourly wages, but is set on a monthly basis (multiplying minimum hourly wages by usual working hours per week by 52/12). Where national legislation dictates that monthly wages are paid 13/14 times a year, this is assumed also to be the case with the new minimum.

In those Member States where a youth sub-minimum wage is currently in force, it is assumed that the EU minimum wage applies to all workers, irrespective of age.

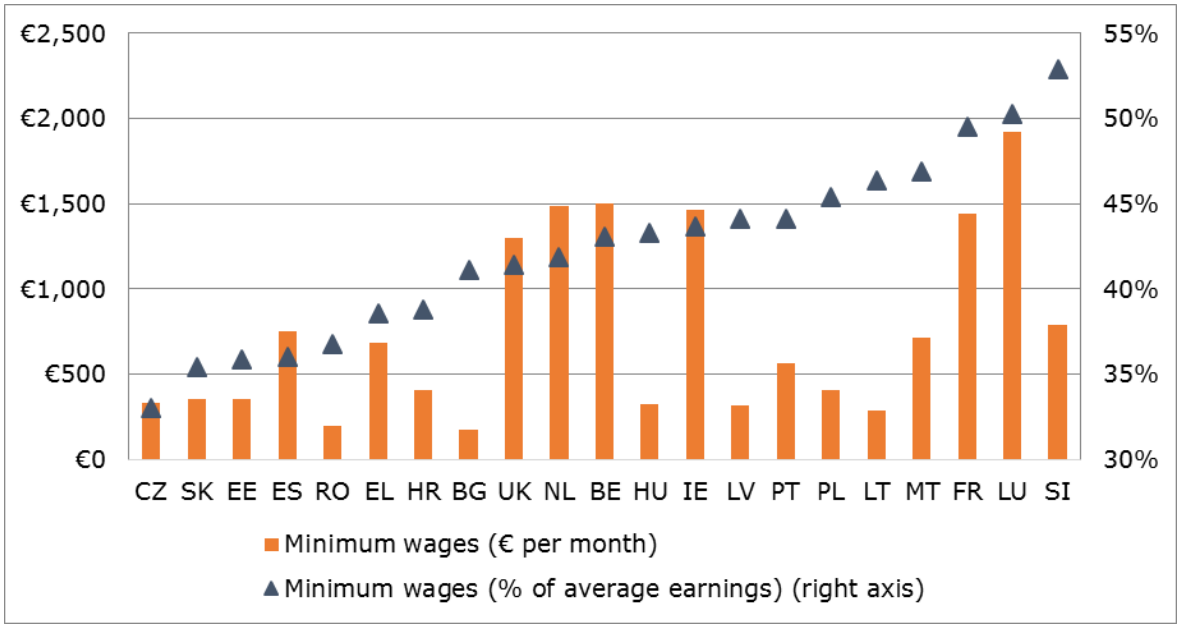
[11] Specifically, we use version G2.75+, running on EU-SILC 2012 data, uprated to 2014 incomes and tax-benefit policies.

Minimum wages in the EU

As pointed out earlier, in 2014 most Member States had a national minimum wage, the exceptions being Germany, Austria, Italy, Cyprus, Denmark, Finland, and Sweden. (In the meantime, the introduction of a minimum wage has been phased-in gradually in Germany, and has been legislated in Italy.)

Obviously, the level of the minimum wage varied considerably, from €174 a month in Bulgaria to €1,921 in Luxembourg. In terms of the ratio of the minimum to average wages, the variation was also significant, though less wide – from 33% in the Czech Republic to 53% in Slovenia. This is shown in Figure 8.

Figure 8 Minimum wages in the EU, 2014



Source: Eurostat (OECD for average earnings in Belgium, France, Greece, the Netherlands, and Romania).

Simulating an EU minimum wage

A hypothetical EU minimum wage at 50% of national average wages is simulated. The latter are estimated from the EU-SILC data, restricting the sample to those employees who had been working either full-time or part-time throughout the previous year, except in the case of Bulgaria, France, Italy, and the UK (see above).

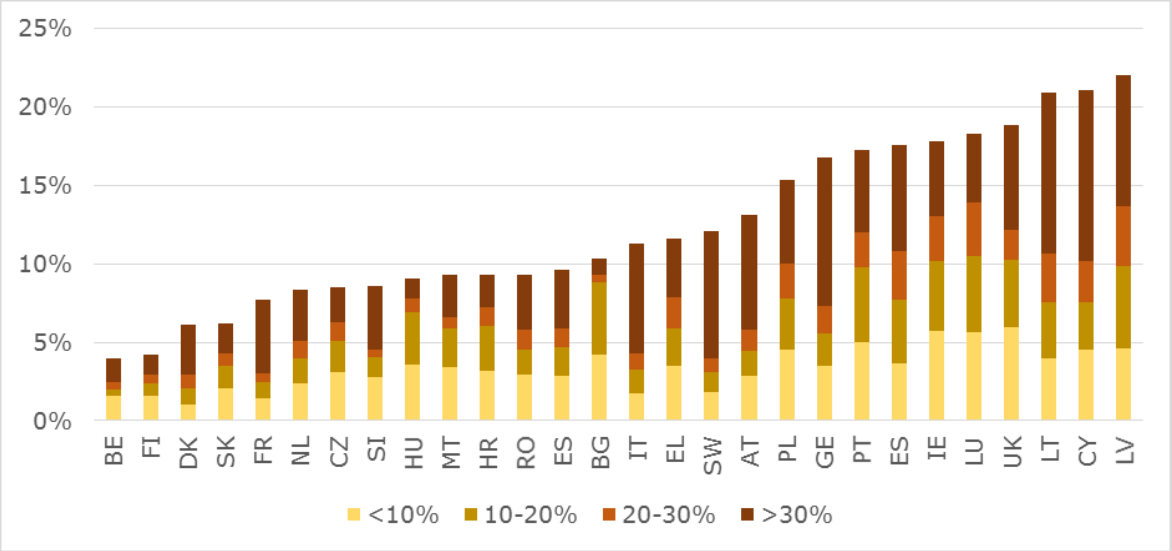
Comparing the threshold of 50% of national average wages with actual minimum wage levels in 2014, the required increase would be relatively large in a number of countries, reaching 50% in the Czech Republic and 51% in Estonia. Note that in two Member States (France and Hungary), where actual minimum wages were above the threshold of 50% of national average wages as estimated from the data[12], the actual minimum wage level is assumed when simulating a hypothetical EU minimum wage. This is shown in Annex Table A13.

The proportion of workers (narrowly defined) affected by the increase in earnings following the introduction of a minimum wage at 50% of national average wages is shown in Figure 9. On the whole, the proportion of workers affected would range from around 4% to 5% in Belgium and Finland to around 21% to 22% in Cyprus, Lithuania, and Latvia. The level of the resulting adjustment also varies. In Belgium, Bulgaria, and

[12] Note that this is slightly different from Figure 8, where the countries in which minimum wages were above 50% of national average wages were Luxembourg and Slovenia. The discrepancy is due to the fact that, as explained earlier, our analysis here is restricted to employees working continuously throughout the year (except in the UK).

Hungary[13], for over 40% of workers affected by the hypothetical introduction of a minimum wage at this level, the rise in wages would be below 10%. Conversely, in France, Denmark, Austria, Cyprus, and Lithuania, between 64% and 78% of workers currently below the new minimum wage threshold would receive a pay rise of over 20%, with the proportion reaching 71% in Italy and 75% in Sweden. The distribution of workers by level of the required increase is shown in Annex Table A14.

Figure 9 Distribution of workers affected by a minimum hourly wage at 50% of national average hourly wage, by level of implicit pay rise



Source: EUROMOD 2014 model on SILC 2012 input data.

Notes: Average hourly wages are calculated as gross monthly wages divided by usual working hours per month. Our analysis is limited to workers employed either full-time or part-time over the whole year. Because of missing information, all employees working 12 months over the year (irrespective of whether full-time or part-time) are covered in Bulgaria, France, and Italy, while all employees (irrespective of whether full-time or part-time, and of whether full-year or part-year) are covered in the UK. In France and Luxembourg EUROMOD ran on SILC 2010 data.

The above figures need to be interpreted with caution. Notwithstanding differences in definitions, years of reference, and sources, the finding that in Sweden more than 8% of all employees working permanently over the previous 12 months were paid less than 38.5% of average wages[14] differs from the estimates from the Structure of Earnings Survey that no more than 2.5% of workers in firms with at least 10 employees in that country were paid less than 67% of national median gross hourly earnings in 2010. It should be noted, however, that this excludes large sections of the economy – those working in agriculture and the public sector as well as those in firms with fewer than 10 employees, many of whom are likely to be low paid.

Poverty effects of an EU minimum wage

The effectiveness of the minimum wage as an anti-poverty tool depends on a variety of factors over and above its level. To start with, if the minimum wage is set in hourly terms, the number of hours a worker is employed is clearly important. On the other hand, compliance also matters: if the minimum wage is not enforceable (as in informal labour markets, or segments thereof), raising it may well fail to improve the incomes of low-paid workers. Finally, if increases to the minimum wage 'price' some workers out of

[13] Note that, although in Hungary the minimum wage is formally above 50% of national average wages, the data show that a number of low-wage workers actually work long hours. In their case, dividing monthly pay by hours worked (as explained in the Methodology section) results in an hourly wage that is below the statutory minimum.

[14] A wage increase from 38.5% to 50% of average earnings amounts to a relative increase of 30%. In Annex Table A14, introducing a minimum wage at 50% of average hourly earnings would result in hourly wage increases of 30% or more for 8.1% of workers in our sample in Sweden.

the labour market, then to them a higher minimum wage will mean lower not higher incomes.

While the above considerations concern the effectiveness of minimum wages in raising the earnings of low-paid workers, poverty effects will also depend on their household circumstances – in other words, on:

(i) The position of minimum-wage earners in the household, i.e. whether they are primary earners (i.e. heads of household) or secondary earners (e.g. spouses or working-age children living in the parental home).

(ii) The contribution to household income by other household members.

Furthermore, the poverty effect of *changes* to the minimum wage will also depend on interactions with the tax and benefit system; specifically, on the extent to which improvements in market incomes (in this case, labour earnings) resulting from higher minimum wages may be partly offset by:

(iii) Increases in income taxes and social contributions.

(iv) Reductions in social assistance and other cash benefits.

Such interactions can be decisive. For example, it has been estimated that "in Ireland […], without any accompanying measures such as raising means-tested benefits in line with the minimum wage, less than a tenth of a minimum wage increase would end up in the pockets of single-parent minimum wage earners [while in] Luxembourg, a minimum-wage increase could actually make a single parent worse off, as benefit reductions and higher social contributions can outweigh the wage increase" (OECD, 2015a). Elsewhere, the culprit is the 'tax wedge' between labour costs and workers' take-home pay, which exceeds 45% of the gross minimum wage in countries where social contributions are high, as in Germany, Poland, and Slovenia, or where income tax schedules are flat, as in Hungary and Latvia (OECD, 2015b).

In Part I, it was established that between a quarter and a half of all those living in households where at least one member earned below 50% of average earnings lived in households where that member was not the head (see Figure 2 and Annex Table A4). Moreover, even though in some countries (Greece, Luxembourg, Italy, Hungary, and France) the poverty rate of households with low earners was 10 or more points above the average for all households with a head aged below 65, in most other Member States the difference was small. What is more, in as many as 7 countries (Ireland, the Netherlands, Slovenia, Finland, Croatia, Belgium, and Romania) households with low earners actually reported *below*-average poverty rates (see Figure 3).

Here, in Part II, the picture is completed by simulating the poverty effects of raising the minimum wage to 50% of average hourly earnings (or, introducing one at that level, where none exists). We do so taking into account the household circumstances of minimum-wage earners, as well as interactions with taxes and benefits. Also, we assume no employment effects or behavioural responses. Finally, to focus on genuine improvements in low incomes, we fix the poverty line at the baseline[15].

A useful point of departure is to establish the extent to which low earnings actually overlap with income poverty. As seen in Table A15, this is rather limited: across the EU, among all persons living in households with low earners only 17.7% were poor; and among all persons in our reference group (households of employees who worked for 12 months full-time or 12 months part-time during the previous year), only 2.3% lived in poor households with low earners. So the scope for reducing in-work poverty *via* an increase in the minimum wage may not be great.

[15] In fact, if the hike in minimum wages is entirely absorbed by employers taking lower profits, assuming no shifting of higher labour costs onto consumers in the form of higher prices, and no job losses, then the first effect of the policy change will necessarily be to raise real disposal incomes at aggregate level, and quite probably the income of the median person too, in which case the increase in the minimum wage will also raise the poverty threshold.

Having said that, our results show that the poverty effects of higher minimum wages may not be entirely negligible either. As shown in Table A16, in-work poverty would decline by 2.2 percentage points in Austria, and by 1.6 to 1.9 points in another four countries (Cyprus, Malta, Estonia, and Luxembourg). In most Member States, poverty reduction would be between 0.6 and 1.3 percentage points (around 1.0 point in France, Germany, and Spain). At the other extreme, at-risk-of-poverty rates would fall by 0.2 to 0.4 of a percentage point in four countries (Croatia, Romania, Latvia, and Finland), and would remain unchanged in another four (Slovenia, Slovakia, Bulgaria, and Poland).

With the exception of Cyprus, where raising the minimum wage to 50% of average hourly earnings would reduce poverty rates for women by 1.0 percentage point more than it would for men, gender effects were rather small. At one end of the scale, female poverty rates in Sweden would fall by 0.3 of a percentage point more than male ones. At the other end, female poverty rates in Denmark would fall by 0.4 of a percentage point *less* than male ones.

In terms of age, the reduction in poverty following an increase in the minimum wage would least benefit the elderly (see Table A.17). Only in Cyprus, where a large number of pensioners lived with their working children, would the rise in the minimum wage significantly reduce the at-risk-of-poverty rate among older people (by 3.2 percentage points). Elsewhere, poverty in old age would fall by less than half percentage point.

Conversely, in most Member States (16 out of 28), child poverty would decline by at least one percentage point following an increase in the minimum wage. In Austria, the size of child poverty reduction would be 3.4 percentage points. In Luxembourg and Malta, it would be 2.6 points. Child poverty would also fall appreciably in Estonia (by 2 percentage points), in France (1.8), and in Portugal and Sweden (both 1.5 points).

Young people (aged 18-29) would appear to be the greatest beneficiaries of a rise in the minimum wage in terms of a reduction in at-risk-of-poverty rates. In 19 Member States, the size of poverty reduction for that age group would be at least 1.2 percentage points. In Germany and Sweden, it would be 2.5 points; in Greece, 2.7; and in Denmark, 3.1. In Austria, youth poverty would fall by as much as 3.8 percentage points[16].

Inequality effects of an EU minimum wage

Finally, another effect of an EU-wide minimum hourly wage set at 50% of average hourly earnings, assuming no adverse employment effects, would be to reduce income inequality in most Member States. As seen in Table A18, the reduction in inequality as measured by the Gini index would be largest in Portugal (0.9 percentage points), followed by Austria and Cyprus (0.7 pp.), Sweden, Hungary, and Estonia (0.6 pp.), then France, Spain, Malta, Lithuania, and Luxembourg (0.5 pp.). Although in another 13 countries the reduction would be small (0.1 to 0.4 percentage points), only in Poland, Bulgaria, Slovenia, and Slovakia would the Gini index remain unchanged.

While the Gini index is known to be most sensitive to changes around the middle of the income distribution, by definition the opposite is the case with the income quintile share ratio (S80/S20), which measures the total income received by the top quintile relative to that received by the bottom quintile. Our results show that raising minimum hourly wages to 50% of average hourly earnings would reduce the S80/S20 ratio in 24 out of 28 Member States. This may be interpreted as evidence that, at the very least, the increase in minimum wages would benefit poorer households more than it would richer ones. The effect would be greatest in three South European countries: in Spain, the ratio would fall by 0.24; in Portugal and Greece, by 0.18 and 0.16 respectively[17].

[16] In Annex Tables A16 and A17 only *differences* in poverty rates are presented (i.e. before and after raising the minimum wage to 50% of average hourly earnings).

[17] Note, however, that in Italy the S80/S20 ratio would decline by a mere 0.02.

Concluding remarks

This Research Note set out to answer two distinct but closely related questions:

(i) What is the relationship between low wages and poverty?

(ii) Would an EU-wide minimum wage at 50% of national average hourly wages be effective in reducing poverty?

Clearly, poverty analysis requires shifting the focus to the *household* circumstances of low-wage workers, which provides the rationale for analysing EU-SILC data. The analysis here complements Özdemir & Ward (2015), who examined the *individual* characteristics of low-wage workers using LFS data.

Working with EU-SILC data to identify workers on low hourly wages has important drawbacks, such as possible measurement errors affecting both earnings and working hours, and discrepancies between the reference periods of the variables involved (the survey year for usual working hours, the previous year for labour earnings and full-time/part-time employment status). To minimise errors in estimates, the analysis was restricted to a subset of households with employees who had worked throughout the income year.

With these caveats in mind, the findings can be summarised as follows.

With respect to the first question, there is little evidence of a concentration of low pay in households in EU Member States. The proportion of households with two or more low-wage employees turns out to be below 3% in all Member States. Put differently, among all persons living in working-age households with at least one low earner, the proportion of those living in households with *two or more* low earners is below 20% in all Member States, and is usually below 10% (in 16 out of 28 Member States).

Furthermore, most low earners are not 'primary earners': among all individuals living in low-wage households, the majority (51%-75%) are in households where the low earner is either the spouse or another person, but not the household head.

Households with a low earner typically face higher at-risk-of-poverty rates than other working-age households (in 21 out 28 Member States). The rate among those living in households with low-wage earners is highest in Greece, Luxembourg, and Italy (over 30%), and is lowest in the Netherlands, Ireland, and Slovenia (below 10%).

The risk of poverty is higher still where the person earning a low wage is the household head, most especially in Denmark, Germany, and Bulgaria. The risk of poverty among households with low earners is also increased by low work intensity, the effect being most pronounced in Bulgaria, Lithuania, and Hungary. The number of dependants, children especially, is also associated with a higher risk, this being particularly the case in Greece and France.

A tentative attempt was made to answer the second question using EUROMOD to estimate the effects on the risk of poverty of introducing a minimum wage in all countries at 50% of national average wages, taking into account interactions with tax-benefit policies, and assuming no effects on employment. Setting a minimum wage at this level is estimated to affect under 5% of employees in Belgium and Finland but over 20% in Latvia and Lithuania. In some Member States, a large proportion of those affected (over 60% in Italy and Sweden) would appear to receive significant pay rises (in excess of 30%), a finding which may in part be attributed to measurement error.

The anti-poverty effect of raising the minimum wage (as measured relative to a fixed poverty threshold) would be small but not trivial. The at-risk-of-poverty rate would fall by at least 1.0 percentage point in 13 out of 28 Member States. The size of poverty reduction would be largest among working households with children and young adults.

Our findings suggest that, given the household circumstances of low-wage workers, and the current rules of tax and benefit systems, raising minimum wages to 50% of national average hourly wages is likely to have positive but modest effects in terms of reducing the number of people at risk of poverty.

Our analysis is limited to households of employees who worked for 12 months full-time or 12 months part-time during the previous year. This inevitably excludes several employees working intermittently[18] (i.e. less than 12 months over the previous year), or those switching from part-time to full-time work or vice versa. While the latter category might benefit from the increase in minimum wages simulated here, the former would probably benefit less.

More generally, minimum wage increases would do little directly to improve the living standards of the self-employed, including "the so-called 'bogus self-employed' who do similar work to regular employees but whose contracts are not protected by the same safeguards and regulations" (OECD, 2015b). Nor would minimum wage increases raise the earnings of informal workers, except possibly in the context of the 'lighthouse effect'[19].

Nevertheless, setting the minimum wage at 50% of national average hourly wages EU-wide can also be supported on grounds other than poverty reduction. In particular, a higher minimum wage will by definition reduce *earnings* inequality at individual level (while, as shown earlier, in most countries it would also reduce *income* inequality at household level). Also, setting a wage floor may address considerations of fairness and counterbalance the monopsony power of some employers. Moreover, the minimum wage may act as a 'beneficial constraint', increasing the value of the job for both workers and employers, limiting costly turnover, providing incentives for training, and altogether raising productivity.

Finally, while the minimum wage may be a blunt instrument for poverty reduction *on its own*, better coordination with other tax-benefit policies may significantly increase its overall effect. For instance, a broader targeting of means-tested assistance and a lower tax wedge will make work pay more even when pay is low, enhancing the extent to which minimum wage increases can improve take-home pay. In-work benefits[20] have often proved effective in this respect. Conversely, the case for minimum wages becomes stronger in the presence of in-work benefits, as the former prevent the latter from being captured by employers rather than by their intended beneficiaries.

[18] Note that employees working intermittently *were* included if they lived in a household with a member who worked for 12 months full-time or 12 months part-time during the previous year.

[19] A 'lighthouse effect' is said to be observed when employers and workers in the informal sector (where minimum wages are *not* legally enforced) set pay by reference to the level of the minimum wage in the formal sector. When this is the case, wages in the informal sector will move in line with minimum wages in the formal sector. In contrast, under the standard model, workers displaced from the formal sector after the introduction or increase of a minimum wage will seek employment in the informal sector, causing wages there to *fall*. For a recent analysis, see Boeri et al. (2011).

[20] The Earned Income Tax Credit in the US and the Working Tax Credit in the UK are the best known such schemes. For a formal analysis of in-work benefits in an optimal tax design setting, see Brewer et al. (2010). For a comprehensive review of schemes in a variety of countries, see Immervoll & Pearson (2009).

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Annex

Table A1 Percentage of full-year employees among all employees

	full-year employees (either full-time or part-time)		employees with spells of self-employment or employment change during the year	employees with spells of inactivity during the year	
	low-wage	non-low wage			
BE	2.8	81.6	7.1	8.5	100.0
BG	6.7	82.3	0.6	10.3	100.0
CZ	8.3	81.1	3.4	7.2	100.0
DK	3.5	84.4	1.6	10.5	100.0
DE	12.3	74.0	7.9	6.0	100.0
EE	12.4	64.3	11.3	12.0	100.0
IE	15.3	66.6	6.1	12.0	100.0
EL	8.8	76.0	5.3	9.9	100.0
ES	12.6	71.2	5.0	11.3	100.0
FR	5.1	79.3	7.6	8.0	100.0
HR	9.7	79.1	2.3	9.0	100.0
IT	9.3	77.9	6.6	6.1	100.0
CY	18.1	66.6	3.9	11.5	100.0
LV	20.1	64.4	5.8	9.7	100.0
LT	19.0	69.1	1.7	10.3	100.0
LU	16.9	68.8	7.0	7.3	100.0
HU	4.7	77.0	7.2	11.1	100.0
MT	8.1	77.8	8.5	5.6	100.0
NL	6.8	83.1	2.0	8.1	100.0
AT	9.2	71.4	6.9	12.6	100.0
PL	13.9	70.3	7.6	8.2	100.0
PT	12.6	76.8	4.9	5.8	100.0
RO	7.1	88.8	2.8	1.3	100.0
SI	7.3	83.1	4.5	5.2	100.0
SK	4.9	85.0	4.2	5.8	100.0
FI	3.1	75.6	3.3	18.0	100.0
SE	7.5	80.3	4.1	8.1	100.0
UK	13.6	71.9	9.9	4.6	100.0

Source: EU-SILC 2013, UDB August 2015.

Table A2 Number of low earners in the sample

	number of low earners	number of all workers	%	no. of individuals in households with low earners	number of individuals	%
BE	143	4238	3.4	413	14623	2.8
BG	293	3876	7.5	982	12425	7.9
CZ	561	6064	9.3	1688	19105	8.8
DK	171	4185	4.1	477	13910	3.4
DE	1334	9242	14.4	3381	26709	12.7
EE	709	4406	16.1	1999	15053	13.3
IE	574	3065	18.7	1683	12663	13.3
EL	317	3025	10.5	955	18030	5.3
ES	1146	7589	15.1	3271	32162	10.2
FR	461	7524	6.1	1378	26353	5.2
HR	373	3411	10.9	1328	13897	9.6
IT	1154	10841	10.6	3290	44622	7.4
CY	839	3931	21.3	2546	13277	19.2
LV	1044	4367	23.9	2865	14624	19.6
LT	804	3731	21.6	2427	11754	20.6
LU	651	3288	19.8	1805	9994	18.1
HU	408	6957	5.9	1258	25441	4.9
MT	341	3570	9.5	1135	11965	9.5
NL	589	7849	7.5	1630	24629	6.6
AT	476	3867	12.3	1538	13250	11.6
PL	1482	8975	16.5	5093	36438	14.0
PT	665	4715	14.1	2093	16410	12.8
RO	392	5297	7.4	1271	17672	7.2
SI	692	8605	8.0	2191	27265	8.0
SK	284	5231	5.4	969	15456	6.3
FI	299	7661	3.9	733	27910	2.6
SE	438	5155	8.5	1230	15218	8.1
UK	1114	7012	15.9	3217	23251	13.8

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A3 Concentration of low earners in households

	households (%)				individuals (%)			
	no low earners	one low earner	more than one low earners	total	no low earners	one low earner	more than one low earners	total
BE	97.2	2.7	0.1	100.0	96.7	3.2	0.1	100.0
BG	92.4	6.8	0.8	100.0	91.0	7.7	1.3	100.0
CZ	91.2	8.3	0.5	100.0	89.8	9.6	0.6	100.0
DK	96.8	3.2	0.0	100.0	95.9	4.1	0.1	100.0
DE	87.2	11.7	1.1	100.0	84.3	14.1	1.6	100.0
EE	87.1	12.0	0.9	100.0	85.4	13.4	1.2	100.0
IE	86.3	12.4	1.3	100.0	85.3	13.1	1.6	100.0
EL	94.5	5.1	0.4	100.0	94.0	5.6	0.4	100.0
ES	89.7	9.4	0.9	100.0	88.5	10.3	1.2	100.0
FR	94.8	5.0	0.1	100.0	93.8	6.1	0.2	100.0
HR	91.2	7.9	0.9	100.0	89.4	9.2	1.4	100.0
IT	92.0	7.6	0.4	100.0	91.3	8.2	0.5	100.0
CY	80.9	17.2	1.9	100.0	78.9	18.7	2.4	100.0
LV	80.4	17.1	2.6	100.0	77.9	18.6	3.5	100.0
LT	80.6	17.6	1.7	100.0	76.1	21.6	2.3	100.0
LU	83.3	14.0	2.8	100.0	79.8	16.2	4.1	100.0
HU	95.2	4.3	0.5	100.0	94.4	5.0	0.6	100.0
MT	91.3	8.0	0.7	100.0	89.4	9.6	1.0	100.0
NL	93.5	6.2	0.4	100.0	92.1	7.3	0.6	100.0
AT	89.8	9.2	1.0	100.0	86.4	11.8	1.8	100.0
PL	87.5	11.0	1.5	100.0	84.6	13.2	2.2	100.0
PT	86.9	12.2	1.0	100.0	85.1	13.6	1.4	100.0
RO	93.4	5.6	1.1	100.0	91.9	6.6	1.5	100.0
SI	92.2	7.4	0.4	100.0	90.8	8.7	0.5	100.0
SK	93.9	5.6	0.5	100.0	93.1	6.3	0.6	100.0
FI	97.0	3.0	0.0	100.0	96.8	3.2	0.0	100.0
SE	91.9	7.8	0.3	100.0	90.2	9.4	0.4	100.0
UK	86.2	12.6	1.2	100.0	83.9	14.7	1.4	100.0

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A4 Distribution of individuals living in households with low earners (%) by the position of the low earner(s) in the household

	single adult on low wage	households with two or more adults				total
		spouse (not head) on low wage	other member (not head) on low wage	only head on low wage	head and other member on low wage	
BE	5.9	47.2	23.3	19.9	3.7	100.0
BG	3.4	38.0	25.0	22.7	11.0	100.0
CZ	3.1	57.9	17.3	18.0	3.7	100.0
DK	8.9	27.4	30.9	32.5	0.3	100.0
DE	8.8	42.4	26.5	17.8	4.6	100.0
EE	7.0	52.4	13.8	21.3	5.5	100.0
IE	4.9	34.7	26.4	26.7	7.3	100.0
EL	4.7	27.0	40.4	24.8	3.1	100.0
ES	4.9	31.9	26.6	30.3	6.4	100.0
FR	6.8	43.6	22.0	25.9	1.7	100.0
HR	0.9	38.6	28.7	23.4	8.3	100.0
IT	8.6	24.8	28.5	32.8	5.3	100.0
CY	2.7	29.8	35.1	25.2	7.2	100.0
LV	6.3	28.7	22.2	29.4	13.4	100.0
LT	5.5	43.2	12.3	31.4	7.6	100.0
LU	7.2	33.2	18.4	25.2	16.0	100.0
HU	3.0	36.9	17.8	36.6	5.7	100.0
MT	4.5	25.7	41.5	24.9	3.3	100.0
NL	8.0	38.1	37.2	16.0	0.8	100.0
AT	6.1	32.8	38.2	19.9	3.1	100.0
PL	1.6	29.2	31.0	29.6	8.6	100.0
PT	3.1	40.6	20.0	30.4	5.9	100.0
RO	1.2	37.8	25.7	20.5	14.9	100.0
SI	3.9	48.0	19.7	24.2	4.1	100.0
SK	2.1	42.6	23.9	24.9	6.5	100.0
FI	12.6	37.3	14.6	34.8	0.6	100.0
SE	9.7	51.4	13.9	21.5	3.5	100.0
UK	7.9	39.0	18.6	28.3	6.3	100.0

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A5 Distribution of individuals living in households with low earners (%) by work intensity

	work intensity					
	0.01-0.49	0.5	0.51-0.80	0.81-0.99	1.0	
BE	16.8	7.4	27.3	15.2	33.3	100.0
BG	21.5	13.7	26.1	6.6	32.1	100.0
CZ	7.3	9.4	33.5	6.0	43.7	100.0
DK	1.8	17.5	15.3	16.0	49.5	100.0
DE	13.1	9.6	36.1	19.7	21.5	100.0
EE	9.0	15.2	27.8	10.2	37.7	100.0
IE	33.9	11.1	27.1	9.5	18.4	100.0
EL	38.1	16.9	22.6	5.8	16.5	100.0
ES	23.5	15.6	28.1	10.4	22.5	100.0
FR	17.1	10.3	24.1	12.8	35.7	100.0
HR	14.8	22.2	28.9	6.1	28.1	100.0
IT	24.0	15.8	25.1	12.2	22.8	100.0
CY	15.8	10.4	27.6	8.5	37.8	100.0
LV	9.0	17.2	31.1	6.1	36.7	100.0
LT	11.0	12.5	23.8	5.1	47.6	100.0
LU	10.0	11.6	33.9	14.8	29.7	100.0
HU	21.2	11.6	28.9	9.2	29.1	100.0
MT	21.6	13.9	35.4	13.4	15.7	100.0
NL	30.0	6.6	35.9	19.8	7.7	100.0
AT	9.8	11.1	33.0	25.1	20.9	100.0
PL	13.5	15.3	30.2	8.6	32.5	100.0
PT	14.3	13.1	29.9	5.4	37.2	100.0
RO	10.8	16.8	37.9	5.6	28.9	100.0
SI	6.3	15.1	23.8	7.4	47.3	100.0
SK	8.0	15.1	39.7	10.6	26.6	100.0
FI	6.8	15.6	19.7	15.8	42.2	100.0
SE	3.6	7.4	15.8	22.0	51.2	100.0
UK	16.5	8.8	30.0	16.4	28.4	100.0

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A6 Distribution of individuals living in households with low earners (%) by household type

	households with working-age head				households with elderly head	total
	one or more adult, no children	single adult with children	two or more adults, one or two children	two or more adults, three or more children		
BE	43.1	1.7	44.6	9.5	1.1	100.0
BG	45.5	1.4	41.0	11.1	1.1	100.0
CZ	58.4	0.8	35.6	3.8	1.4	100.0
DK	46.0	0.0	33.5	18.6	1.8	100.0
DE	54.9	2.3	36.6	5.4	0.8	100.0
EE	51.0	1.0	38.3	4.1	5.6	100.0
IE	39.5	3.4	48.0	7.8	1.2	100.0
EL	60.9	0.3	33.6	1.9	3.3	100.0
ES	49.9	1.9	42.1	5.0	1.1	100.0
FR	44.3	2.2	43.1	9.2	1.2	100.0
HR	39.3	0.5	49.5	8.1	2.7	100.0
IT	51.4	1.8	38.0	6.9	2.0	100.0
CY	49.6	0.5	43.5	5.0	1.5	100.0
LV	49.7	2.7	38.7	6.8	2.1	100.0
LT	40.9	2.7	45.9	9.1	1.4	100.0
LU	34.4	2.4	47.5	14.8	0.9	100.0
HU	47.5	1.0	41.7	9.3	0.5	100.0
MT	39.7	2.8	52.8	3.5	1.2	100.0
NL	55.1	1.7	35.9	6.7	0.5	100.0
AT	39.3	1.7	50.0	7.7	1.3	100.0
PL	42.3	0.5	47.2	8.7	1.4	100.0
PT	38.0	1.1	57.3	2.8	0.9	100.0
RO	36.3	0.3	56.2	7.2	0.0	100.0
SI	36.9	0.9	52.2	9.4	0.6	100.0
SK	51.4	0.7	43.3	3.1	1.5	100.0
FI	52.8	3.7	30.6	11.7	1.2	100.0
SE	31.5	2.3	50.5	14.5	1.2	100.0
UK	42.1	4.8	39.8	9.7	3.7	100.0

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A7 At risk-of-poverty rate before and after social transfers (%)

	individuals living in households with low earner(s)			individuals living in all households with head of working age		
	after social transfers	before social transfers	number of observations	after social transfers	before social transfers	number of observations
BE	13.9	38.8	413	14.2	29.3	12347
BG	28.1	46.5	982	18.9	31.9	10758
CZ	11.4	32.4	1688	9.1	22.3	16341
DK	16.8	32.5	477	11.9	23.3	11401
DE	19.4	35.8	3381	16.0	24.9	21428
EE	19.1	41.7	1999	17.2	27.7	12919
IE	7.4	46.0	1683	14.4	33.3	11313
EL	38.3	52.5	955	24.4	36.9	15473
ES	26.6	46.9	3271	21.3	36.9	28077
FR	24.3	50.9	1378	14.6	32.9	21871
HR	12.7	39.2	1328	18.3	30.9	12156
IT	31.0	47.7	3290	19.3	33.6	37058
CY	20.1	35.4	2546	15.2	27.1	11891
LV	21.6	45.3	2865	19.6	32.0	12681
LT	24.0	46.0	2427	20.2	33.7	10002
LU	31.3	59.3	1805	17.0	36.6	8836
HU	25.4	52.0	1258	15.6	37.7	22402
MT	17.3	33.9	1135	15.3	30.3	10554
NL	5.8	19.3	1630	11.1	24.3	20607
AT	14.5	38.0	1538	14.0	33.2	11165
PL	19.5	42.8	5093	18.0	33.7	32690
PT	19.9	39.3	2093	19.5	31.5	13916
RO	20.1	46.0	1271	23.3	36.8	15752
SI	9.6	46.6	2191	13.4	32.7	23665
SK	12.8	35.8	969	10.6	24.4	13769
FI	10.2	36.6	733	10.7	27.4	22741
SE	16.6	47.6	1230	14.0	26.6	12356
UK	16.6	41.6	3217	15.3	29.3	19220

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A8 At risk-of-poverty gap before and after social transfers (%)

	individuals living in households with low earners		individuals living in all households with head of working age	
	after social transfers	before social transfers	after social transfers	before social transfers
BE	21.3	38.8	25.3	53.5
BG	34.1	42.7	37.2	45.1
CZ	14.8	30.9	24.7	35.2
DK	42.2	43.8	29.3	46.0
DE	20.7	41.0	24.4	44.6
EE	20.6	35.9	32.0	45.7
IE	21.9	42.0	24.6	49.1
EL	30.5	39.4	36.8	45.2
ES	27.5	40.3	35.3	50.9
FR	22.4	48.8	22.3	46.5
HR	26.4	33.8	32.4	42.7
IT	34.8	44.5	35.4	45.1
CY	22.2	43.5	21.6	38.1
LV	27.0	33.0	33.9	45.2
LT	23.7	39.1	30.4	48.1
LU	18.6	34.8	21.6	43.9
HU	21.6	42.1	25.5	45.7
MT	21.6	41.3	23.0	50.0
NL	15.1	32.8	22.8	49.2
AT	28.0	33.4	29.5	47.6
PL	22.2	33.1	27.6	43.1
PT	24.4	34.5	34.1	41.2
RO	31.5	36.0	37.7	44.5
SI	14.8	34.6	25.0	43.5
SK	21.4	33.7	30.4	40.9
FI	14.3	25.7	23.0	45.9
SE	28.3	41.0	28.8	44.4
UK	22.5	44.0	24.9	46.1

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A9 At-risk-of-poverty rate of households with low earners (%) by the position of the low earner in the household

	at-risk-of-poverty rate (%)				number of observations			
	head on low wage	spouse (not head) on low wage	other member (not head) on low wage	total	head on low wage	spouse (not head) on low wage	other member (not head) on low wage	total
BE	17.7	16.6	3.4	13.9	122	195	96	413
BG	47.1	17.8	16.6	28.3	361	370	244	976
CZ	13.9	8.2	18.8	11.4	419	977	292	1688
DK	41.3	0.5	0.0	17.4	192	126	142	460
DE	40.3	11.9	7.2	19.5	1044	1422	889	3355
EE	25.9	13.3	19.4	18.4	655	1018	268	1941
IE	10.8	6.5	3.6	7.4	655	585	443	1683
EL	53.4	31.0	29.9	37.8	309	256	383	948
ES	34.5	20.6	22.1	26.8	1341	1029	858	3228
FR	36.0	17.9	18.8	24.3	467	593	299	1360
HR	23.0	8.2	7.1	12.7	434	513	382	1328
IT	44.8	23.1	15.2	31.0	1529	814	938	3281
CY	34.3	21.0	5.2	20.1	892	759	895	2546
LV	23.5	16.5	24.0	21.6	1368	800	620	2787
LT	30.5	18.4	22.0	24.2	1059	1029	292	2379
LU	40.0	25.2	19.1	31.3	874	597	326	1798
HU	35.8	19.2	11.9	25.4	570	464	225	1258
MT	34.3	10.1	8.5	17.3	372	292	472	1135
NL	14.4	4.2	1.9	5.9	395	605	597	1598
AT	29.9	7.9	8.0	14.3	445	503	585	1533
PL	29.8	17.5	10.8	20.3	1906	1399	1486	4791
PT	24.7	16.1	17.9	19.9	814	839	414	2067
RO	23.9	15.6	21.6	20.1	465	480	326	1271
SI	14.8	6.1	9.6	9.6	701	1042	428	2171
SK	23.8	8.7	4.7	12.8	324	413	232	969
FI	17.0	5.6	0.0	10.3	350	272	107	728
SE	30.5	7.4	13.6	16.3	419	622	168	1209
UK	19.9	15.3	11.7	16.6	1359	1249	596	3204

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A10 At-risk-of-poverty rate of households with low earners (%) by work intensity

	at risk-of-poverty rate (%)				number of observations			
	0-0.49	0.5-0.99	1	total	0-0.49	0.5-0.99	1	total
BE	38.3	7.2	4.6	13.9	100	175	137	413
BG	60.3	11.1	10.4	28.2	344	320	313	977
CZ	33.1	8.8	5.7	11.5	281	664	735	1681
DK	55.6	2.1	11.4	17.0	91	147	233	471
DE	34.5	13.2	19.9	19.4	764	1885	727	3377
EE	43.7	9.7	13.8	19.5	470	736	731	1938
IE	12.0	4.1	2.9	7.4	754	613	308	1675
EL	58.9	13.4	12.0	38.2	524	271	158	953
ES	40.2	18.8	16.3	26.6	1277	1256	734	3266
FR	46.2	19.0	13.1	24.3	378	507	492	1377
HR	28.8	3.3	3.2	12.7	491	464	373	1328
IT	51.7	17.2	17.3	31.0	1306	1218	742	3266
CY	36.9	9.3	18.8	20.1	664	917	960	2541
LV	45.7	14.8	11.9	21.8	742	1051	1040	2833
LT	55.1	23.6	9.3	24.2	563	696	1143	2403
LU	60.0	29.3	13.5	31.3	391	872	535	1798
HU	56.2	10.9	9.6	25.4	413	479	367	1258
MT	37.3	6.0	6.6	17.2	403	553	178	1134
NL	10.5	3.5	0.0	5.8	592	908	125	1625
AT	33.0	8.9	11.5	14.5	322	894	322	1537
PL	38.1	14.3	9.4	19.6	1462	1972	1650	5084
PT	45.3	11.4	9.6	20.0	571	737	775	2083
RO	42.1	17.2	3.7	20.1	351	553	367	1271
SI	27.0	6.3	3.9	9.6	469	685	1037	2191
SK	26.9	8.0	9.7	12.8	223	485	257	965
FI	15.4	9.4	8.1	10.2	164	260	309	733
SE	42.1	10.5	15.9	16.7	135	461	626	1222
UK	38.3	12.2	5.7	16.9	789	1447	888	3124

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A11 At-risk-of-poverty rate of households with low earners (%) by number of children

	at risk-of-poverty rate (%)			number of observations in dataset		
	without children	with children	total	without children	with children	total
BE	10.0	17.1	13.9	178	230	413
BG	18.5	36.7	28.1	446	525	982
CZ	12.1	10.8	11.4	987	678	1688
DK	9.8	23.5	16.8	220	249	477
DE	21.1	17.3	19.4	1854	1499	3380
EE	15.7	25.0	19.1	1019	868	1998
IE	6.0	8.5	7.4	665	997	1683
EL	33.3	49.0	38.3	582	342	955
ES	19.1	34.6	26.6	1632	1602	3270
FR	13.3	33.8	24.3	610	752	1378
HR	12.0	13.8	12.7	521	771	1328
IT	26.7	36.7	31.0	1682	1535	3281
CY	23.7	16.8	20.1	1262	1247	2546
LV	15.9	28.3	21.6	1424	1380	2865
LT	15.3	30.7	24.0	993	1400	2427
LU	22.3	36.1	31.3	614	1168	1798
HU	24.7	26.3	25.4	598	654	1258
MT	7.9	23.8	17.3	451	671	1135
NL	2.5	9.4	5.8	893	723	1625
AT	10.5	17.4	14.5	605	914	1538
PL	12.1	25.4	19.5	2152	2872	5093
PT	13.3	24.3	19.9	794	1281	2093
RO	10.5	25.6	20.1	461	810	1271
SI	9.8	9.6	9.6	809	1369	2191
SK	12.7	13.3	12.8	498	457	969
FI	7.5	13.6	10.2	387	337	733
SE	18.9	15.5	16.6	388	828	1230
UK	13.2	19.9	16.6	1354	1741	3213

Note: Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A12 Share of social benefits in total income of households with low earners

	old-age pensions	family benefits	unemployment benefits	housing benefits	social assistance	other benefits	total social benefits
BE	3%	6%	4%	0%	0%	3%	15%
BG	10%	2%	2%	0%	0%	3%	18%
CZ	7%	1%	0%	0%	0%	6%	15%
DK	1%	2%	5%	0%	0%	5%	14%
DE	3%	5%	2%	1%	0%	1%	12%
EE	10%	3%	0%	0%	0%	5%	19%
IE	3%	8%	8%	0%	0%	3%	23%
EL	14%	1%	1%	0%	0%	1%	16%
ES	8%	0%	9%	0%	1%	3%	21%
FR	9%	4%	5%	2%	1%	1%	22%
HR	8%	5%	1%	0%	0%	6%	20%
IT	8%	2%	5%	0%	0%	2%	17%
CY	10%	2%	4%	0%	0%	3%	19%
LV	11%	2%	1%	0%	0%	4%	18%
LT	6%	5%	1%	0%	1%	6%	19%
LU	5%	9%	2%	1%	1%	2%	21%
HU	9%	7%	1%	0%	0%	3%	19%
MT	5%	3%	0%	0%	2%	2%	12%
NL	2%	1%	1%	1%	1%	2%	8%
AT	4%	6%	2%	0%	0%	2%	14%
PL	12%	2%	1%	0%	0%	3%	17%
PT	9%	2%	3%	0%	0%	2%	16%
RO	11%	4%	0%	0%	0%	3%	18%
SI	3%	14%	1%	0%	1%	8%	27%
SK	11%	3%	0%	0%	0%	5%	20%
FI	3%	4%	3%	1%	0%	3%	13%
SE	2%	11%	2%	0%	0%	7%	23%
UK	6%	5%	1%	1%	1%	2%	16%

Note: Other benefits include sickness, disability, and education-related benefits. Low earners are defined as those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EU-SILC 2013, UDB August 2015.

Table A13 National minimum wages vs 50% of average earnings, 2014

	average hourly earnings (€)	average monthly earnings (€)	50% of average monthly earnings (€)	national monthly minimum wage (€)	required increase (%)
BE	19.54	3,480	1,740	1,502	16%
BG	2.37	417	208	174	20%
CZ	5.37	987	494	329	50%
DK	26.22	4,524	2,262	.	.
DE	17.56	3,506	1,753	.	.
EE	5.92	1,070	535	355	51%
IE	22.27	3,854	1,927	1,462	32%
EL	8.46	1,457	729	684	7%
ES	10.79	1,925	963	753	28%
FR	15.31	2,511	1,256	1,445	-13%
HR	5.06	908	454	406	12%
IT	13.70	2,255	1,128	.	.
CY	11.55	2,032	1,016	.	.
LV	4.94	897	448	320	40%
LT	4.07	716	358	290	24%
LU	26.87	4,918	2,459	1,921	28%
HU	3.17	562	281	328	-14%
MT	9.60	1,744	872	718	21%
NL	22.21	3,964	1,982	1,490	33%
AT	19.00	3,546	1,773	.	.
PL	4.77	858	429	404	6%
PT	7.42	1,333	666	566	18%
RO	2.30	414	207	198	5%
SI	9.57	1,688	844	789	7%
SK	4.85	869	435	352	23%
FI	20.80	3,620	1,810	.	.
SE	25.12	3,596	1,798	.	.
UK	17.71	2,766	1,383	1,303	6%

Note: The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EUROMOD version G2.75+, running on EU-SILC 2012 data, uprated to 2014 (except for France and Luxembourg: EU-SILC 2010 data, uprated to 2014). Figures on current monthly minimum wages (in 2014) from Eurostat.

Table A14 Distribution of workers affected by the increase in minimum wages to 50% of average hourly earnings, by level of increase (%)

	total affected	increase in earnings to 50% of average earnings				not affected
		<10%	10.01-20%	20.01-30%	>30%	
BE	4.0	1.6	0.4	0.5	1.6	96.0
BG	10.4	4.2	4.6	0.4	1.1	89.6
CZ	8.5	3.1	2.0	1.2	2.2	91.5
DK	6.1	1.0	1.0	0.9	3.1	93.9
DE	16.7	3.5	2.1	1.7	9.4	83.3
EE	17.6	3.6	4.1	3.1	6.8	82.4
IE	17.8	5.7	4.5	2.8	4.8	82.2
EL	11.6	3.5	2.3	2.0	3.8	88.4
ES	9.6	2.9	1.8	1.1	3.8	90.4
FR	7.7	1.5	1.0	0.6	4.7	92.3
HR	9.3	3.2	2.8	1.2	2.1	90.7
IT	11.3	1.8	1.5	1.0	7.0	88.7
CY	21.0	4.5	3.0	2.6	10.9	79.0
LV	22.0	4.6	5.2	3.8	8.3	78.0
LT	20.9	4.0	3.6	3.1	10.3	79.1
LU	18.3	5.7	4.8	3.4	4.4	81.7
HU	9.0	3.6	3.3	0.9	1.2	91.0
MT	9.3	3.4	2.5	0.7	2.7	90.7
NL	8.3	2.4	1.6	1.1	3.3	91.7
AT	13.1	2.8	1.6	1.3	7.3	86.9
PL	15.3	4.6	3.3	2.2	5.3	84.7
PT	17.3	5.0	4.8	2.2	5.3	82.7
RO	9.3	2.9	1.6	1.2	3.6	90.7
SI	8.6	2.8	1.2	0.5	4.1	91.4
SK	6.2	2.0	1.4	0.8	1.9	93.8
FI	4.2	1.6	0.8	0.6	1.3	95.8
SE	12.1	1.8	1.2	0.9	8.1	87.9
UK	18.8	6.0	4.3	1.9	6.6	81.2

Note: The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EUROMOD version G2.75+, running on EU-SILC 2012 data, uprated to 2014 (except for France and Luxembourg: EU-SILC 2010 data, uprated to 2014). Figures on current monthly minimum wages (in 2014) from Eurostat.

Table A15 Poverty risk in households of low earners, 2014

	total earners (1)	low earners (2)	of which: in poor households (3)	poverty rate of low earners (4) = (3) / (2)	low earners in poor households as % of all earners (4) = (3) / (1)
BE	3,353,261	134,026	17,970	13.4%	0.5%
BG	2,362,137	244,588	63,961	26.2%	2.7%
CZ	3,331,428	282,085	29,516	10.5%	0.9%
DK	1,749,226	106,300	25,224	23.7%	1.4%
DE	30,271,881	5,068,452	793,234	15.7%	2.6%
EE	427,162	75,190	17,895	23.8%	4.2%
IE	1,164,123	207,729	17,405	8.4%	1.5%
EL	2,084,532	242,333	72,889	30.1%	3.5%
ES	12,258,632	1,177,421	309,078	26.3%	2.5%
FR	19,911,322	1,535,080	234,136	15.3%	1.2%
HR	1,063,434	98,966	12,125	12.3%	1.1%
IT	15,503,093	1,749,434	488,952	27.9%	3.2%
CY	284,162	59,795	10,793	18.0%	3.8%
LV	628,621	138,371	27,466	19.8%	4.4%
LT	928,391	194,150	37,148	19.1%	4.0%
LU	184,141	33,673	6,327	18.8%	3.4%
HU	2,775,484	250,535	45,132	18.0%	1.6%
MT	129,372	12,027	2,446	20.3%	1.9%
NL	5,544,901	462,701	60,572	13.1%	1.1%
AT	2,596,626	341,187	63,808	18.7%	2.5%
PL	10,166,671	1,558,698	280,035	18.0%	2.8%
PT	3,303,603	571,146	80,247	14.1%	2.4%
RO	6,214,151	580,179	99,679	17.2%	1.6%
SI	647,095	55,639	7,210	13.0%	1.1%
SK	1,807,568	111,931	21,873	19.5%	1.2%
FI	1,514,848	63,844	6,723	10.5%	0.4%
SE	3,232,371	390,717	64,719	16.6%	2.0%
UK	22,093,617	4,156,506	633,675	15.2%	2.9%
EU-28	155,531,853	19,902,703	3,530,237	17.7%	2.3%

Note: Low earners are those earning less than 50% of average hourly wages. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year. The poverty threshold is at 60% of national household disposable equivalised income. The poverty rate is the share of population (or population group) below that threshold. Source: EUROMOD version G2.75+, running on EU-SILC 2012 data, uprated to 2014 (except for France and Luxembourg: EU-SILC 2010 data, uprated to 2014). Figures on current monthly minimum wages (in 2014) from Eurostat.

Table A16 Effects of a minimum wage at 50% of average hourly wages on at-risk-of-poverty rates by gender, 2014

	change in at-risk-of-poverty rates		
	total	men	women
BE	-0.8	-0.8	-0.8
BG	0.0	0.0	0.0
CZ	-1.2	-1.1	-1.3
DK	-0.6	-0.8	-0.4
DE	-1.0	-0.9	-1.1
EE	-1.8	-1.6	-1.9
IE	-0.6	-0.6	-0.7
EL	-1.1	-1.0	-1.1
ES	-0.9	-0.8	-1.0
FR	-1.1	-1.0	-1.1
HR	-0.4	-0.4	-0.5
IT	-0.8	-0.7	-0.8
CY	-1.9	-1.4	-2.4
LV	-0.3	-0.4	-0.3
LT	-1.0	-1.0	-1.0
LU	-1.6	-1.6	-1.6
HU	-1.2	-1.2	-1.1
MT	-1.8	-2.0	-1.7
NL	-0.7	-0.9	-0.6
AT	-2.2	-2.2	-2.2
PL	0.0	0.0	0.0
PT	-1.3	-1.3	-1.2
RO	-0.4	-0.4	-0.4
SI	0.0	0.0	0.0
SK	0.0	0.0	0.0
FI	-0.2	-0.2	-0.3
SE	-1.2	-1.1	-1.4
UK	-0.6	-0.6	-0.5

Note: The change in poverty rates is the percentage point difference before and after the introduction of a minimum wage at 50% of average hourly earnings. The poverty rate is the share of population (or population group) below that threshold. The poverty threshold is at 60% of national household disposable equivalised income. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year. Source: EUROMOD version G2.75+, running on EU-SILC 2012 data, uprated to 2014 (except for France and Luxembourg: EU-SILC 2010 data, uprated to 2014). Figures on current monthly minimum wages (in 2014) from Eurostat.

Table A17 Effects of a minimum wage at 50% of average hourly wages on at-risk-of-poverty rates by age, 2014

	change in at-risk-of-poverty rates				
	aged <18	aged 18-29	aged 30-44	aged 45-64	aged 65+
BE	-1.0	-1.9	-0.8	-0.4	0.0
BG	0.0	0.0	0.0	0.0	0.0
CZ	-1.4	-1.7	-1.1	-1.4	-0.3
DK	-0.2	-3.1	-0.1	-0.4	0.0
DE	-0.8	-2.5	-0.9	-0.9	-0.3
EE	-2.0	-2.0	-1.6	-2.5	-0.4
IE	-0.5	-2.0	-0.2	-0.6	0.0
EL	-1.2	-2.7	-1.0	-1.0	0.0
ES	-1.0	-1.2	-1.0	-1.0	-0.1
FR	-1.8	-1.7	-1.2	-0.6	-0.1
HR	-0.5	-0.7	-0.4	-0.5	-0.1
IT	-1.0	-1.3	-1.0	-0.7	0.0
CY	-1.0	-2.3	-2.3	-1.3	-3.2
LV	-0.7	-0.5	-1.3	-0.3	0.0
LT	-1.3	-1.2	-1.1	-1.1	-0.3
LU	-2.6	-2.1	-1.8	-1.2	-0.3
HU	-1.4	-1.8	-1.2	-1.2	-0.1
MT	-2.6	-2.3	-2.0	-1.6	-0.5
NL	-1.2	-1.7	-0.5	-0.4	0.0
AT	-3.4	-3.8	-2.8	-1.3	-0.2
PL	0.0	0.0	0.0	0.0	0.0
PT	-1.5	-2.3	-1.1	-1.5	-0.1
RO	-0.5	-0.5	-0.4	-0.4	-0.2
SI	0.0	0.0	0.0	0.0	0.0
SK	0.0	0.0	0.0	0.0	0.0
FI	-0.2	-0.4	-0.2	-0.3	-0.1
SE	-1.5	-2.5	-1.4	-0.7	-0.4
UK	-0.6	-0.9	-0.7	-0.6	-0.1

Note: The change in poverty rates is the percentage point difference before and after the introduction of a minimum wage at 50% of average hourly earnings. The poverty rate is the share of population (or population group) below that threshold. The poverty threshold is at 60% of national household disposable equivalised income. The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year. Source: EUROMOD version G2.75+, running on EU-SILC 2012 data, uprated to 2014 (except for France and Luxembourg: EU-SILC 2010 data, uprated to 2014). Figures on current monthly minimum wages (in 2014) from Eurostat.

Table A18 Effects of a minimum wage at 50% of average hourly wages on inequality, 2014

	change in inequality	
	Gini coefficient	income quintile share ratio (S80/S20)
BE	-0.2	-0.04
BG	0.0	0.00
CZ	-0.4	-0.08
DK	-0.3	-0.09
DE	-0.4	-0.06
EE	-0.6	-0.14
IE	-0.2	-0.03
EL	-0.4	-0.16
ES	-0.5	-0.24
FR	-0.5	-0.06
HR	-0.1	-0.02
IT	-0.1	-0.02
CY	-0.7	-0.14
LV	-0.2	-0.07
LT	-0.5	-0.09
LU	-0.5	-0.07
HU	-0.6	-0.12
MT	-0.5	-0.10
NL	-0.2	-0.04
AT	-0.7	-0.12
PL	0.0	0.00
PT	-0.9	-0.18
RO	-0.2	-0.05
SI	0.0	0.00
SK	0.0	0.00
FI	-0.1	-0.02
SE	-0.6	-0.07
UK	-0.3	-0.06

Note: The change in inequality is the difference in the index concerned before and after the introduction of a minimum wage at 50% of average hourly earnings. The Gini coefficient ranges from 0 to 100, where 0 represents perfect equality in a given country and 100 represents the maximum level of inequality. The income quintile share ratio (S80/S20) is the ratio of the total income received by the 20% of the country's population with the highest disposable income (top quintile) to that received by the 20% of the country's population with the lowest disposable income (bottom quintile). The reference group is households of employees who worked for 12 months full-time or 12 months part-time during the previous year.
Source: EUROMOD version G2.75+, running on EU-SILC 2012 data, uprated to 2014 (except for France and Luxembourg: EU-SILC 2010 data, uprated to 2014). Figures on current monthly minimum wages (in 2014) from Eurostat.