Towards a better marriage between job growth and poverty reduction

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Executive Summary

Disproving fears of a future characterized by ‘jobless growth’, the decade prior to the crisis of 2008 was marked by strong net employment gains, even though many countries failed to achieve the employment targets set within the context of the Lisbon Agenda. Still, just prior to the crisis, employment rates had reached historically high levels. Unemployment in many EU Member States was at or below levels observers only a decade earlier deemed impossible to achieve. Yet it also became clear that employment growth in and out of itself did not produce the expected outcomes in terms of poverty reduction and other aspects of social inclusion. Marked increases in employment rates had gone accompanied with rising or stagnant relative poverty rates for the working aged population. Income inequality had mostly increased.

The crisis period has been marked by equally if not more dramatic declines in employment in a number of countries. Yet ambitions to put more Europeans to work remain unabashed. First among the headlines targets formulated in the current Europe 2020 strategy is the objective of reaching an employment rate of 75 percent by 2020. Some countries have set even more ambitious national targets within this framework. Thus the idea that employment growth and poverty reduction need to go together remains at the core of the current Europe 2020 Agenda, but there seems to be an implicit recognition now that higher levels of employment may not automatically bring better social inclusion outcomes. The Europe 2020 Agenda also contains clear poverty and social inclusion targets. The European Commission (2010) recently stated that social protection is an additional cornerstone of an effective policy to combat poverty and social exclusion in Europe, complementing the effects of growth and employment. The European Commission (2013) has also launched a ‘Social Investment Package’ emphasizing human capital investment.

This paper asks how a better marriage between employment participation and poverty reduction could be achieved. The paper starts with a sketch of current debates. The paper continues with a review and interpretation of past trends; why is it that employment growth has not brought lower poverty in the past? We then devote a sizable section to the issue of in-work poverty, as this is essential for optimal policy design. A second major part of this paper looks at what policy can do to achieve a better marriage between employment growth and poverty reduction. We discuss indirect policy options, which can help to tackle demand and supply barriers to higher work intensity, particularly among the poor. The major focus, however, is on policies for direct income support of workers. Here we discuss both incremental and innovative policy options. A final section contains
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some clear suggestions on directions policy could take so as to foster a stronger complementarity between employment and social inclusion\textsuperscript{1}.

\textsuperscript{1} In addition to the authors listed this paper builds on earlier work with Brian Nolan, Gerlinde Verbist, Josefine Vanhille, Frank Vandenbergroucke, Pieter Vandenbergroucke and Natascha Van Mechelen. Our thanks also to Tereza Vyprachticka for comments on an earlier version. We thank Ingrid Van Zele for the careful copy-editing.
1. **Perceptions and ideas on work and poverty**

Widely varying assumptions are entertained about the relative merits of alternative courses of action for policy if it comes to reducing inequality and poverty. This is perhaps none the more true when it comes to the link between work and poverty. An important section of opinion basically holds that more people in work equals less people in poverty and, by implication, that an elaborate welfare state with large-scale redistributive efforts is not a prerequisite for a low level of poverty.

The idea that, ultimately, the best and most sustainable anti-poverty strategy is a work-based strategy has long been advocated. There is common sense appeal to the notion that “the best protection against poverty is a job”. People who are not in work tend to occupy the lower strata of the income distribution. If more jobs become available and low-income people take up these jobs, improve their income position, the result is a selective rise of incomes at the lower end and thus a reduction in income inequality and the share of the population in poverty relative to the median. The important proviso of course is that work pays more on average than remaining inactive.

An alternative view holds that we are effectively confronted with a trade-off between employment (that is, *non-government* employment) and income equality. The idea here is that high levels of non-subsidized employment can in present day economic circumstances only be achieved at the cost of a large low-paid (service) sector and increased, though perhaps temporary, ‘poverty in work’. Deindustrialisation, economic globalisation and technological progress play a central role in arguments that the industrialized economies are increasingly faced with a choice between more structural labour market exclusion or more low paid employment, unless government is willing to provide adequately paid employment. Iversen and Wren (1998) called this the “trilemma of the service economy”. The contrast is sometimes made with the golden years of welfare capitalism when manufacturing industry provided stable, well-paid employment even for those with little or no formal education. As Esping-Andersen et al. (2002) put it: ‘We no longer live in a world in which low-skilled workers can support the entire family. The basic requisite for a good life is increasingly strong cognitive skills and professional qualifications...Employment remains as always the sine qua non for good life chances, but the requirements for access to quality jobs are rising and are likely to continue to do so. In similar vein, Bonoli (2007: 496) states: ‘Postindustrial labour markets are characterized by higher wage inequality with the result that for those at the bottom end of the wage distribution, access to employment is not a guarantee of a poverty-free existence.’
Such statements are in line with an important stream in the academic and popular literature on the devastating effects of economic globalization and skill-biased technological change on the labour market position of less qualified workers in rich countries. Research by labour economists shows that this picture of a uniform shift away from low skilled work needs to be nuanced (Autor, 2003). The impact of technological change, real as it is, has not simply entailed a demand shift away from lower skilled labour and towards higher educated workers. Studies have shown that there is growth in employment in both the highest-skilled (professional and managerial) and lowest-skilled occupations (personal services) with declining employment in the middle of the distribution (manufacturing and routine office jobs). Goos, Manning and Salomons (2009) document this trend towards ‘job polarization’ throughout Europe, albeit with varying intensity. This research does, however, provide legitimate concern about a possible rise of low-paid work (Lucifora and Salverda, 2009).
2. Efforts to boost employment in the EU

The period before the current crisis saw a strong rise in employment levels in the EU. These did not come by accident (Van Rie and Marx, 2012). In most EU countries a marked policy shift had taken place towards boosting labour market participation levels and reducing benefit dependency among those at working age.

Some countries pursued macro-economic policies to foster job growth, like the Netherlands, where a policy of sustained wage moderation was central to boosting labour participation levels, and with considerable success it must be added. In other countries, changes in macro-economic conditions (low interest rates following the EMU and Euro membership) had major impacts on employment performance, as in Spain, where unemployed dropped spectacularly prior to the crisis.

At the same time an increased policy emphasis on micro-level activation has become evident in many European countries, certainly at the level of rhetoric, and gauging by some indicators also in terms of actual policy (Barbier and Ludwig-Mayerhofer, 2004; Kenworthy, 2008; Immervoll, 2012; Marchal and Van Mechelen, 2013). Within the broad set of activation strategies deployed, an important number specifically target the long-term unemployed, including social assistance recipients. The general purpose is to get these people into a job, in the private market or in the subsidized sector. Most of these are relatively low-paid/minimum wage level jobs. In the case of Belgium, for example, the main activation measure for social assistance recipients is a public employment scheme offering temporary minimum wage level employment. Employment subsidies and employers’ social security contribution reductions also generally aim to stimulate the creation and take-up relatively low-paid jobs.

From a poverty perspective, it matters who is targeted for activation into such low paid jobs and under what conditions this is done. If activation measures stimulate single persons to move from long-term benefit dependency into minimum wage jobs this will impact positively on poverty if minimum wages (and net incomes at minimum wage) exceed poverty thresholds and when benefits for the long-term unemployed (be it social insurance or social assistance) are below poverty thresholds. Similarly, if such measures stimulate potential second earners into low-paid jobs there may also be a positive effect on (in-work) poverty, provided they are living in a household with a disposable income not far below the poverty threshold. There may be an indirect effect, however, in that poverty thresholds may be pushed up if these jobs are mainly taken up by people in households with disposable incomes already in the middle and upper ranges of the distribution. This could then
cause median equivalent income and hence the relative poverty thresholds to rise, other factors held constant.

If, however, single parents are the target of activation efforts, without there being affordable/available child-care there is a potential problem in that they may be forced to take part-time jobs. This may imply that they remain stuck in financial poverty. Even a full-time minimum wage job may not suffice if the minimum wage is not sufficiently high relative to the poverty threshold, or if taxes and social security contributions cause net disposable income to drop below the poverty line. Similarly, unemployed sole breadwinners with a dependent spouse and children (and possibly others) to support may not be lifted from poverty if they are forced to take up a low paid job unless there are supportive measures like child benefits or in-work benefits. Hence, the potential impact in each country will depend on compositional factors (the household composition of the non-active population) and contextual factors (minimum wage levels, the presence of child care benefits and child care facilities, the presence of in-work benefits, or earnings disregards).
3. **Past and projected impact of employment growth on poverty**

3.1 **Pre-crisis employment and poverty trends 1995-2008**

The idea that, ultimately, the best and most sustainable anti-poverty strategy is an employment-based strategy has long been advocated. The basic argument has common-sense appeal. People who are not in work tend to occupy the lower strata of the income distribution. If more jobs become available and low-income people take up these jobs, improve their income position, the result is a selective rise of incomes at the lower end and thus a reduction in income inequality and the share of the population in poverty relative to the median.

Figure 1 shows employment rates and relative poverty rates as averages for the EU countries 1995-2010. Between 1995 and 2008 the employment rate increased on average by about 7 percentage points in the EU15. For all EU Member States we only have data from 2000 and onwards. In this larger group of countries the increase in employment was particularly pronounced in the mid-2000s. Yet as the figures clearly show, this increase in employment is not followed by a corresponding decrease in income inequality or in the relative income poverty rate. At the very minimum it can be said that very significant net employment gains did not yield lower household inequality levels and that in more than one instance employment growth went in fact accompanied with rising inequality and relative income poverty, for example in the case of Germany. This general picture does mask an enormous amount of cross-country variation, as is documented in Figure 2. Indeed, poverty trends are the result of many interrelated factors, including demographic shifts, household formation patterns, wage and employment shifts, changes in tax and benefit policies etc. In that sense it should not come as a surprise that no one on one relationship between employment growth and poverty reduction is to be expected.

[Figure 1 Poverty and employment trends in the EU, 1995-2011]

[Figure 2. Employment and poverty trends in individual member states, 1995-2011]

In its report Growing Unequal, the OECD (2008) performed a comprehensive analysis of the role of earnings and employment trends in income inequality trends at the household level. Amid a considerable degree of variation across countries the general patterns was for increases in male earnings inequality, while wage gap between men and women narrowed. The growth of non-
standard employment did however contribute to a widening in the dispersion of personal earnings. This increase in earnings inequality was partially offset by higher employment rates and the continued proliferation of dual earnership.

### 3.2 Crisis developments

Has the relationship between employment and poverty changed during the crisis period? For the EU-27 as a whole, the crisis disproportionately affected male dominated sectors like industry and construction. Analysing the consequences for household work intensity, Ward & Ozdemir (2012a) argue that the crisis disproportionately affected male breadwinner and one and a half earners families. Lesche (2012) show that temporary workers, who often lack social protection, were also disproportionately affected by the crisis.

[Figure 3. Poverty and in-work poverty (IWP) by work intensity at the individual and household level: EU-27, 2005-2011]

Figure 3 shows the poverty risks associated with different types of work intensity at the individual and household level for EU-27 between 2005 and 2011. Eurostat classifies individuals as ‘working’ according to their most frequent activity status in the previous year. The work intensity of a households is the ratio of the total amount that all working-age household members have worked during the income reference period\(^2\) and the total amount the same household members theoretically could have worked in the same period.

From figure 3 we see that in-work poverty rates are lower than the overall poverty rates, but it matters how much is worked. Part-timers, for example, have an increased poverty risk and their position tends to deteriorate over time. This is especially problematic since we know that the that part-time employment increased during the crisis, also for men (see Ward & Ozdemir, 2012b). Not working a full year is also associated with increased poverty rates, in fact, for these workers figures are close to the overall poverty rate. The most problematic group, however, are workers with a low work intensity at the household level. For the EU-27 they had a poverty risk of about thirty percent in 2005, which has been rising to almost thirty-six percent in 2011. The overall poverty risk of jobless households even rose from 48.8 to 54.2 percent. Before the crisis, new labour market entrants, like women and young people, decreased the share of people living in work poor households across Europe. This resulted for some countries in decreasing or at least stagnating poverty trends (Corluy &

\(^2\) Income reference period", past whole year in most countries except IE and UK.
Vandenbroucke, 2013). During the crisis, on the other hand, the share of work poor households increased, mainly due to male breadwinner job losses (Ward & Ozdemir, 2012a).

Looking at the relationship between employment and poverty from a cross-country perspective in figure 4, we see that between 2005 and 2008 the overall relationship did not change much. Between 2008 and 2011, the relationship between employment and poverty at the country level has become remarkably stronger. With the exception of Malta and Germany, between 2008 and 2011 most countries show a stable or decreasing employment pattern. This went hand in hand with a poverty decrease in the UK, a poverty increase in Estonia, Spain, Italy, France, Ireland, Latvia and Slovakia. On the other hand, in Germany, poverty did not change much during the crisis period. The cross-country relationship between the employment rate and the poverty rate now appears stronger than it has ever been. This is not to imply that the underlying causal relationship has been strengthened. But there is a starker contrast now between countries that have been very severely affected by the crisis, and that now face the double challenge of comparatively low employment rates and high poverty rates, and countries that have weathered the crisis relatively well, sustaining comparatively high employment and low relative poverty rates.

[Figure 4. Country positioning on employment and poverty dimensions in 2005, 2008 and 2011 ]

3.3 Projections of the Europe 2020 employment target and its impact on poverty

Marx et al. (2013) have used a simulation model that builds on regression based estimates of employment probabilities and wages to estimate the impact on relative income poverty of moving towards the Europe 2020 target of 75 per cent of the working aged population in work.

[Figure 5. Poverty rates before and after increase of employment to 75 percent using shift-share and RB approach (fixed and floating poverty line), active age population]

Figure 5 shows their results. A crucial factor here is whether a fixed or floating poverty line is used. When the poverty threshold is held constant, the poverty reducing impact of moving to a 75 per cent employment rate is a very strong one in most member states. However, income poverty as it is measured in the EU and in most studies builds on a relative notion of poverty. Thus the poverty threshold needs to be sensitive to changes in the level and distribution of income as employment changes. The projected impact of employment growth to 75 per cent is very weak in most countries. This is much in line with past observed trends. Note that even in the fixed line scenario, the increases in employment never result in proportional drops in poverty. The main reason is that people with the highest employment probabilities tend not to live in poverty in the first place. Employment growth
tends to improve the income position of some individuals, especially those that actually get jobs, but it also causes the relative position of others to deteriorate. Much depends on where in the overall income distribution the newly created jobs end up, and that is not always predominantly in the bottom half of the distribution. To test for the sensitivity of the outcomes, two alternative specifications were introduced in the projection models. First, the projected newly created jobs were diverted to work poor households first. Second, the wage estimation was changed by imputing a low pay wage. The second alternative does not change results to a large extent, while the first alternative causes relative poverty to decrease more strongly. Thus a main challenge for policy is to make sure that job creation, if and when it occurs, also comes to the benefit of the poor.

3.4 Reasons for past and projected trends: why does employment growth not result in lower poverty?

There are three principal reasons why past job growth has not produced poverty declines: a) because past job growth did not sufficiently benefit poor people and b) because getting a job does not always raise income enough to escape poverty c) because of median equivalent income shifts associated with job growth and the policies that stimulate job growth.

First, most at risk of poverty are persons living in so-called “workless households”, i.e. households where no adult at working age has an attachment to the labour market (OECD, 2009; De Graaf-Zijl and Nolan, 2011). People at working age living in such workless households face the highest poverty rates by far and they also tend to experience the most severe financial hardship, including their dependent children if any. More generally, poverty at working age is more strongly associated to work intensity at the household level than to individual labour market status and this for the obvious reason that a non-employed person may well live in a household where others have earnings, as we will further demonstrate below. A household where no one has earned income, or very little of it, is almost always reliant on transfer income.

Household joblessness tends to be higher than the distribution of individual non-employment risks would lead one to expect. The concentration of non-employment within the same households may be due to many factors (Gregg, Scutella and Wadsworth, 2010). A correlation between the employment statuses of household members may reflect a tendency for individuals who share common characteristics to live together. Since persons with fewer educational qualifications typically experience higher unemployment and non-employment rates, households whose members all have a low level of educational attainment are likely to be over-represented among workless households. Household members are usually looking for work in the same local labour market and a depressed
labour market will have a common impact on them. The disincentive effects of tax and benefit systems can also play a role. It is often the case that if one person gets a benefit, another person is punished if he or she accepts a job. To get out of this dependency trap, all members of the household must find a job simultaneously, which may be particularly hard if both partners have low educational attainment. This problem may be more severe in countries with extensive means-testing of welfare benefits based on family income.

In this light, it is perhaps not altogether surprising that employment growth has not produced commensurate drops in workless household rates. Job growth has in many countries resulted in more double or multi-earner households, but only to a more limited extent in fewer no earner households (Corluy and Vandenbroucke, 2013). This ‘Matthew effect’ in the benefits to job growth may have had the added effect of pushing up median income, and hence relative poverty thresholds, widening the distance between the stagnant bottom and the rising median.

A second reason why employment growth does not necessarily result in less poverty is that a job may not pay enough to escape poverty. This is what is commonly referred to as ‘in-work poverty’. What poor jobless persons often require is not just a job, but a job that pays significantly more than their benefit. In the case of non-employed poor persons living in a household with already one earner the additional income required to escape financial poverty may be quite limited. Indeed, a small part-time job may suffice (Maitre, Nolan and Whelan, 2012). For sole breadwinners the required income gain is often quite substantial. From an anti-poverty perspective, the issue is not just “making work pay” (i.e. tempting people to move out of dependency), but to make work pay sufficiently to make sure that a move from dependency to work also implies a move from poverty to an adequate living standard. The living standard of poor households with weak or no labour market attachment is often so far below the poverty threshold (especially in the case of single parents and child rich households) that it is quite possible that a job that pays significantly above the minimum wage will not suffice to lift them from poverty (Immervoll, 2007; Marx et al., 2013).

A third reason why past employment growth did not translate into lower relative poverty rates is because of the poverty line dynamics associated with employment growth and, more indirectly, the policies, particularly at the macro level, which stimulate job growth. The difference can be seen when poverty trends are considered using an anchored-in-time poverty line. With this approach the poverty threshold does not increase in line with median living standards, it only adjusts for increases in prices. Clearly, against a fixed poverty line, countries experienced much sharper drops in poverty prior to the crisis than was the case within a relative poverty framework. Note, however, that even against a fixed threshold, employment gains never resulted in proportional drops in poverty. As we already indicated, the main reason why the poverty reducing impact of employment growth is
limited is because the first beneficiaries from employment growth tend to be people who do not live in poverty in the first place. Everything depends on where in the overall income distribution the newly created jobs end up, and in the past that has not always predominantly been in the bottom half of the distribution. If employment growth results in rising median living standards, but not in rising living standards in the lower segments of the distribution the effect may well be rise in relative income poverty. This is in effect what we observe in a number of countries. The poorest did not manage to take full advantage of growing demand for labour where and when this happened, and their plight was further exacerbated by the fact that passive protection levels, as provided through social insurance and social assistance, eroded relative to wages and living standards.
4. Understanding the link between work and poverty at the individual and household level

4.1 Has in-work poverty increased in Europe?

Recent comparative studies confirm in-work poverty to be a pan-European problem (Andreß and Lohmann, 2008; Crettaz, 2011; OECD, 2009; Fraser et al., 2011; Maitre, Nolan and Whelan, 2012; Marx and Nolan, 2013). Workers in countries like Germany, France, Sweden or Spain are as likely to be confronted with household financial poverty as those in Britain or Ireland. According to the SILC based EU Social Inclusion Indicators, the extent of in-work poverty in 2010 ranges from a low of 4-5 percent to upwards of 17 percent (Table 1).

[Table 1: Percentage of Those in Work at Risk of Poverty, EU 2000-2010]

It is not the case, however, that in-work poverty rates are higher in countries with more elevated employment levels (Table 1). It is also not the case that in-work poverty increased most strongly in countries where employment increased most strongly. In fact, despite across the board increases in employment in the pre-crisis decade, in-work poverty remained stable in most countries. That may have something to do with the way in-work poverty is conventionally measured. The “working poor” as conventionally defined in the statistics as those individuals who have been mainly working during the reference year (either in employment or self-employment) and whose household equivalised disposable income is below 60% of the median in the country in question. Combining two levels of analysis – the individual’s labour market status and the household’s income (adjusted for household size) – inherently complicates interpretation, since the labour market status of other persons in the household, rather than that of the individual being considered, may be crucial, as may the number of dependent children if any. This definition/measure makes it difficult to identify the different factors potentially underlying the phenomenon and thus the locus(es) of policy failure, which could include: low (household) work intensity; inadequate out-of-work benefits; inadequate earnings; inadequate earnings supplements; the number of dependent people (children) relative to income...

As we already suggested, it is relevant to ask whether high employment countries have more households at full work intensity unable to make ends meet. A number of studies have looked at poverty and poverty trends through the lens of work intensity at the household level (de Graaf-Zijl and Nolan, 2013; Corluy and Vandebroucke, 2013). These studies show that zero and very low work intensity households face much higher poverty risks than households with very high levels of work...
intensity, i.e. households in which all adults at working age put in significant work effort. The difference is in fact quite significant, with workless households facing poverty risks of around 40 per cent and upwards in most EU member states (Figure 6). For households with at least some work intensity that risk is much lower, from around 5 to 15 per cent. At the same time it is the case that because relatively high work intensity households make up such a large part of the working age population that poverty at working age is to a very considerable extent concentrated among high work intensity households. As Figure 7 shows that in many EU countries, persons living in relatively high work intensity household actually make up the majority. A significant share in each country are at full work intensity, i.e. every work-able adult in that household works full time.

[Figure 6. At risk of poverty rate by work intensity in the working-age population, 20-59]

[Figure 7. The distribution of household work intensity in the working-age population (20-59) living in relative income poverty]

4.2 Is low-paid work the main driver of poverty among workers?

It is particularly important to dedicate extra attention here to the link between low-paid work and in-work poverty. First, there is concern that low-paid work is rising due to the combined impact of structural labour market change (a demand shift away from less skilled work due to globalisation and skill biased technological change) and activation efforts (many of which seek to activate the long-term unemployed into relatively low-paid jobs). A second reason is that low-paid work and in-work poverty are tightly linked, if not equated, in the public and policy debate. A third reason is that many policy efforts aimed at reducing in-work poverty are targeted at low-paid workers, in the assumption that there is a strong relationship between low-paid work and in-work poverty.

There are good reasons to assume that low-paid work is on the increase. Service sector employment has become the main source of jobs growth in recent decades, now accounting for more than three-quarters of all jobs in several OECD countries. Low paid employment is more widespread in the services industries, with hotels, restaurants and retail the sectors where low-paid work is most frequent, even in countries like Denmark where the overall incidence of low paid work is low (Lucifora and Salverda, 2008).

Although a clear demarcation is often assumed to exist between the Anglo-Saxon countries and the Continental European ones – with substantially more low pay in the former – the evidence does not support this. Nor is it the case that low-paid work has necessarily increased most in the less regulated, more service-intensive economies: it has remained relatively steady (at a high level in the
(US), and though increasing in the UK this was proportionally by not much more than for example in the Netherlands (Lucifora and Salverda, 2008).

There is as yet also no systematic research available linking low pay trends with the intensity of activation efforts, in part because actual activation intensity is so difficult to quantify. In the case of the Netherlands, where activation efforts have been significant, there is evidence of an increase in low-paid work, but the link with activation has not been demonstrated (Salverda et al., 2008). In the German case too, drastic labour market and social security reform has coincided with a rise in low-paid work (Bosch and Weinkopf, 2008; Kenworthy, 2011).

While we lack empirical analysis linking activation efforts and low pay trends, an important body of research has linked pay dispersion trends with employment and unemployment trends. Although many authors have argued that post-industrial economies face a sharpening trade-off between increasing earnings inequality (more low paid jobs in services) or large scale structural unemployment, especially among the least skilled, the evidence is weak at best (Blau and Kahn, 2008).

In empirical studies of low pay, two broad approaches are used: one focuses on the hourly earnings of those currently working as employees, while the other concentrates on annual earnings for those who worked during the previous year. Each has its own value, with hourly earnings being most strongly related to the pattern of reward for education and skills but annual earnings more directly related to the income measure by which household poverty is usually assessed (including in the EU’s Social Inclusion indicators). Since low annual earnings arising from spending much of the year away from work is a very different phenomenon from low weekly or hourly pay, however, in employing an annual perspective it is essential to also know how much of the year was actually spent in work. It is then common (for example for many countries in the earnings and low pay database compiled by the OECD) to focus on those who worked all year – “full-year workers”. This runs the risk that those who move in and out of work during the year, who clearly constitute a high-risk group from both a low pay and poverty perspective, will receive insufficient attention – and this may well be a group particularly affected by the enhanced activation efforts of governments in recent years. It is none the less important to hone in first on persons with low annual earnings when working all year, since they pose a particular challenge for income support and broader welfare and labour market policies.

We use the microdata from EU-SILC for 2010 to identify those who were in work in all twelve months of the previous year, and whose employee income for that period falls below two-thirds of median annual earnings of full-year workers in the country in question (the most widely-used threshold in
the low pay research literature). A number of countries had to be excluded because of extensive missing data on the relevant variables, so the results in Table 2 only cover a subset of Member States.

[Table 2: Low Pay for Full-year Employees, Annual Income]

While most of these employees are working full-time, a significant minority in some countries is only working part-time and may have low annual earnings simply for that reason. Concentrating on full-time full-year employees, the second column in Table 2 shows that the extent of low pay then ranges from a low of 10 per cent up to a high of 30 per cent. In estimating low pay rates for full-time full-year employees we follow the OECD in deriving the two-thirds threshold from the median calculated over those employees only.

While in-work poverty is clearly significant across the EU, then, what is the role of low pay, and the relationship between low pay and household poverty? It is essential to understand that low-paid work and “in-work” poverty are in fact largely separate phenomena. This is because poor households generally do not contain an employee, whether low paid or not, while most low-paid workers (70-80 per cent in most countries) live in households with more than one earner. A crucial influence on whether a low-paid employee is in a poor household is thus the extent to which the household relies on his or her earnings. Particularly for low-paid women and young people, their earnings most often constitute a secondary source of income for the household - sometimes a deliberate strategy (Gardiner and Millar, 2006). As a consequence, low paid workers are often reasonably high up the distribution (in terms of disposable household income relative to need).

Table 3 compares the income poverty rates for low-paid workers across different household types, based on an analysis of EU SILC 2010 data. We see that the risk of poverty depends very strongly on the household/income configuration of the low-paid worker. For example, in Belgium 8 per cent of low-paid workers find themselves in financial poverty, which in the context of the overall poverty rate for the working age population is not a particularly high share. Yet the risk is much greater for low paid person being the sole earner in couple (37 per cent) than it is for a second earner in a couple (1 per cent). More generally, low-paid workers who are the sole or primary earner in their household are at a very substantial risk of poverty, especially when there are dependent children. However, if the low-paid worker is the second earner the poverty risk drops to very low levels.

3To identify those in work all year we rely on responses to the SILC questions on the number of months in the previous year spent at full-time work and the number spent in part-time work. In principle it should be possible to use the monthly activity calendar where respondents describe their main activity for each month (employee full-time, employee part-time etc.) for this purpose. However, this calendar information was missing for many countries in the SILC microdata released for research purposes.
Actually, low-paid workers in this situation have poverty risks far below the average level of working age persons, pointing to the role low-paid work can have in preventing poverty. Figure 8 shows the results of a very rudimentary but revealing analysis. This table shows the hypothetical impact on poverty if the income from the low-paid earner was deducted from the household income package under ceteris paribus conditions, i.e. not taking into account behavioural responses from other household members or potential tax liability and/or transfer entitlement changes. The table shows that in the hypothetical absence of earnings from low-paid work, poverty rates would be much higher in many countries. Of course, a better paid job is to be preferred over a low-paid (and possibly tedious) job but if this is the only option available than this may be preferable from a poverty perspective over no job at all.

[Table 3: Income Poverty Risk for Low Paid Earners, by household position]

[Figure 8. Percentage point increase in poverty risks for FYFT low paid earners if their earnings were excluded, by household position]

4.3 Part-time work and poverty

A related question concerns the poverty risk associated with part-time work. During the last decades part-time employment has been increasing gradually and it is now the most prevalent form of non-standard work. A priori, we cannot expect the link between part-time work and financial poverty to be a clear-cut one. Low working hours obviously go together with lower earnings and thus with a higher likelihood of inadequate financial resources at the household level. On the other hand, workers are unlikely to opt for part-time work unless income needs are sufficiently met. In effect, part-time work may well provide the additional income a household needs to have total household income package that exceeds the poverty threshold. Horemans and Marx (2013) show that the extent to which part-time work is associated with poverty varies quite considerably across the EU15, far more so than for full-time workers (Table 4). Involuntary part-time work clearly stands out as most problematic, although an increased poverty exposure is not confined to that segment of part-time work. Part-time work for care reasons also carries a higher poverty risk in some countries. Part-time work is most problematic where demand and supply related factors reinforce each so as to make part-time work an involuntary and inferior choice from the perspective of preferred working hours, earnings and employment security. Moreover, part-timers sometimes face a ‘double income penalty’ in that they are more likely to lose their job and less likely to be eligible for income replacement benefits at the same time. However, there is again quite considerable cross-country variation in this respect. In some countries actually the reverse is the case and part-timers are in
effect more likely to receive social transfers, impacting in a stronger way on their post-transfer poverty position than is the case for full timers. Taken together, the regulatory drivers shaping part-time work and the welfare state arrangements supporting, or failing to support, part-time work play key roles in accounting for the wide variation in poverty risks associated with part-time work across the EU15.

[Table 4. At-risk of poverty rate (in %) total population, poverty rate not working individuals age 18-64: and IWP (in %) full-time workers and part-time workers by gender ]

4.4 Who are the working poor?

The core of the working poor consists of workers who are sole earners and have a family to support. The poverty rate for persons in work varies markedly depending on the type household involved, with lone parents or those in households with a couple (and perhaps children) but only one earner facing much higher poverty risks than those in households with two or more earners. Although single parents (lone mothers) are overrepresented, the majority of the working poor are traditional two adult/male breadwinner households with dependent children. Even a moderately well-paid job may not suffice to meet household income needs, depending on the extent of those needs and the other sources of income available to the household.

It is clear, then, that having only one earner in the household has become a poverty risk in an era in which the average living standard, and hence the relative poverty threshold, is increasingly determined by the living standard of double-earner households. As brought out in European Foundation (2004), the roots of in-work poverty are to be found in the interaction of a variety of factors at individual and household level: low education/skills, gender and age, but also the size, composition and number of earners in the household.

This helps to explain why in-work poverty is pervasive across Europe and the OECD, and why its extent does not simply reflect the size of the low-wage sector (Lohmann and Andress, 2008; Lohmann, 2009). Since in-work poverty is strongly associated with single-earnership, and more generally low work intensity at the household level, it is also associated with a multiplicity of institutional factors that affect household labour market participation patterns, particularly double and multi-earnership. Lohmann and Marx (2008), comparing the EU-15 countries, argue that these institutional factors – relating to decommodification and defamilization - are generally most favourably aligned in the Nordic countries and least favourably in the South, while the institutional constellations in the Anglo-Saxon and Continental European countries have mixed and sometimes
contradictory effects. The country differences in in-work poverty risks broadly fit this pattern, albeit with very considerable within cluster variation, particularly within the Continental European countries. A multi-level model by Lohmann (2009) adds explanatory power, but again highlights the multi-causal nature of in-work poverty, in part an inherent consequence of the way in-work poverty is commonly defined. In a similar vein, the expert reports on in-work poverty collected through the EU Network of Independent Experts on Social Inclusion and summarised in Frazer and Marlier (2010) highlight the interaction of a very complex set of factors including individual and household characteristics, institutional factors such as the minimum wage and tax and social protection, and the structure of the labour market and economy. Maitre, Nolan and Whelan (2011) show that among those employed all year, the likelihood of living in a poor household is much higher for the low paid than others, but only a minority are in such households; whether the low paid employee is the only earner in the household is key, bringing one back to the interaction of individual and household characteristics with institutional and labour market structures.

Hence, in-work poverty does not lend itself to a simple and uniformly applicable analysis of policy failure. As already emphasised above and explored in Eurostat (2010), this has implications for the way in-work poverty is defined and measured, with alternative approaches having potential for useful insights. From a policy perspective, the implication is that in-work poverty patterns are influenced by a whole range of factors, ranging from labour market institutions (wage decentralisation and coordination, minimum wages), over dual earner support arrangements (tax incentives, child care provisions) to the set-up of social security systems.
5. Policy options to achieve a better marriage between work and poverty reduction

5.1 Normative considerations

Which policy action, or set of policy actions, is most appropriate cannot be seen as entirely independent from normative notions that underlie the various ways in which the causes of working-age poverty in relation to work can be construed. Take for example a two adult household with three dependent children and only one adult working. The male breadwinner, in this particular example, has a low-paid job, yet is paid well above the minimum wage. Child benefits are modest in the country where they live. The household finds itself living in financial poverty. Whether, and to what extent, their poverty status is construed as a problem of insufficient breadwinner earnings, or as a problem of partner non-participation, or as a problem of insufficient child support makes a fundamental difference as to what type of policy action is to be examined and possibly favoured. In the case of traditional breadwinner type households with insufficient earnings, the preponderance of opinion in Europe appears to be that this is to be seen as a matter of partner non-participation or under-participation. But other cases may be less clear-cut. Even if in-work poverty is construed as largely a problem of low household work intensity, the question arises what can be deemed to be sufficient level of work intensity. It is not self-evident that that this is to equal all working-age, work capable adults in the household to be in full-time work the whole year round. Societal norms may differ across countries. In the Netherlands, for example, a 4/5th job per adult appears to be closer to the norm of full-work intensity. Also, household composition may be deemed to matter. It is not self-evident that a lone parent with young children is expected to work full-year, full-time before additional income support is to be considered legitimate if his or her earnings fall short of the poverty threshold.

A variety of potential tools are available to bring about a stronger link between work and poverty reduction. One can think of that toolset as consisting of policies distinguishable on two dimensions, as shown in Figure 9. One dimension of differentiation is whether the policy in question seeks to have a direct or indirect impact in income. Minimum wages, (child) benefits and tax measures have a direct impact on personal or household income. Indirect measures can either seek to increase individual earnings potential (education, training) or to accommodate/stimulate higher work intensity at the individual or household level (e.g. child care policies). These include policies aimed at
boosting the demand for workers, and particularly the demand for people with low levels of education or weak work experience. Employer subsidies or reductions in employers’ social security contributions are an example here. At the supply side, policy can stimulate (e.g. through fiscal reform) or support (e.g. through child care) people to take up work or to increase working hours. Another dimension is whether the policy instrument is incremental (i.e. builds on or augments existing provisions) or whether the policy tool is new and seeks to replace or complement existing policies. Among the set of innovative direct income support measures belong the so-called ‘negative income taxes’ and in-work benefits that are increasingly promoted as solution for in-work poverty. In what follows, the discussion will focus on direct income support measures.

[Figure 9. The policy toolbox]

Yet, and this is crucial, it must be recognised that even if such policies succeeded in getting every single non-employed person into work, or every household to a level of full work intensity for that matter, (and all empirical evidence to date suggests this to be highly unlikely), this would not guarantee the elimination of poverty. What policy can do to help households in these circumstances is again likely to depend on such factors as the institutional and policy context in place, labour market conditions and the profile of the population in need of support.

5.2 Getting those most in need of work into work

As we have argued in this paper, in-work poverty as it is conventionally measured is to a very large extent associated with low household work intensity. What increasingly matters in advanced economies is the combined labour market position of all the members of a given household. Single earnership, and more generally low household work intensity, has to a considerable extent become a poverty risk in an era in which the average living standard – and hence the relative poverty threshold – is increasingly determined by the living standard of dual-earner households.

Non-employment rates remain particularly high for those with lower levels of education. In some countries this is particularly the case for women with relative low levels of educational attainment. Esping-Andersen (1996;1999) has long argued that in some continental welfare states the (male) breadwinner bias in the labour market/social security nexus remains too strong through, among other things, high (minimum) wages, strong employment protection (e.g. limits on temporary and part-time employment), but also extensive breadwinner biased social security rights and taxation systems.
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The problem of persistently low employment levels among the less skilled can be addressed through a range of policies. The next section offers a concise discussion of some policy options with references to relevant literature.

5.2.1 Demand side measures: Making less-skilled work cheaper

The cost of labour, especially less-skilled labour, is generally perceived to hamper the labour market prospects of the less skilled, especially in European countries where the lowest wages are relatively high compared to average earnings, and where social security contributions are substantial.

It has long been argued that non-employment rates for the less-educated are bound to remain high unless more flexible, relatively low-paid jobs are “allowed” to emerge in the domestic services sector. Many governments have resorted to employment subsidies and cuts in employers’ social security contributions to lower the cost of less skilled labour and to improve the labour market prospects of the less skilled as well as other vulnerable groups in the labour market. According to OECD figures, such programmes account for a significant share of expenditures on active labour market programmes in Europe.

There are basically two types of subsidies: First, there are subsidies aimed at boosting the employment prospects of very specific groups, such as the long-term unemployed. These tend to be quite substantial, but are provided only for a limited time. Second, there are subsidies (or social security reductions) aimed at low-skilled workers in general. These tend to be permanent, but they also tend to be more modest in magnitude compared to highly targeted subsidies.

In some countries entirely innovative schemes have been implemented in efforts to boost the demand for less skilled labour. In Belgium, for example, a so-called “service cheque” scheme aims to boost the formal demand for domestic services like cleaning, gardening or shopping. Consumer pay for such specific domestic services with a heavily subsidized ‘service cheque’, making the out-of-pocket cost more in line with informal market prices than with the cost in the formal labour market.

Theoretical models and simulations generally suggest that wage subsidies and reductions in employers’ social security contributions should have a substantial impact on employment for the less skilled and other vulnerable groups like the unemployed (Jongen, 1998; Malinvaud, 1998; Phelps, 1997; Sneessens and Shadman, 2000; Snower, 1994; 1997). However, the outcomes have been shown to be highly sensitive to the theoretical and parametric assumptions underlying the models. More importantly, the empirical evaluation studies which are available to date also provide reason for scepticism. This is particularly the case for employers' social security reductions that aim to boost
the demand for less-skilled labour in general. For an overview of such studies see Marx (2001); Card et al. (2010); OECD (2009). When it comes to drawing into the labour market persons with the weakest profiles in terms of skills, experience and aptitudes, demand oriented active labour market policies appear to have their limits.

5.2.2 Supply side measures: Facilitating the combination of work and caregiving

The range of potential indirect supply side responses is again very large. These could include education and training policies to enhance earnings potential of workers and potential earners, policies to facilitate and encourage the take up of paid employment.

There is a vast literature on the potential benefits and limits of education and training programmes. For extensive reviews see for example Quintini (2011a and 2011b).

While concerns about dependency traps loom large in public debates, full-time work at the lowest prevailing wage levels tends to be financially significantly more attractive than long-term dependency on unemployment or social assistance benefits in most European countries. (In the case of early retirement or disability benefits the situation is different in many countries.) This is certainly the case for single person households. For lone-parents financial dependency traps may be more of a reality, especially if potential child care costs are accounted for. Transitions to part-time work are also not always attractive, especially again for lone parents (Immervoll, 2012; Marchal and Van Mechelen, 2012).

Raising household work intensity is also about activating potential second earners. Second earners sometimes face adverse work incentives. This is certainly the case in countries which operate joint tax systems. In individualized tax systems, low-wage earners are often taxed at low rates or are exempt altogether from paying taxes. But in joint tax systems, they can face quite formidable effective marginal tax rates. In some countries low-paid (67% of the average wage of a production worker (APW)) second earners face effective marginal tax rates of 50 to 60 percent (Immervoll and Barber, 2006; OECD Tax Benefits Database). Another very important impediment can be the cost of childcare. In some countries, the gross cost of having one child in full-time care can amount to one third of an average production worker’s wage (Immervoll and Barber, 2006; OECD Tax Benefits Database). Even after deducting all relevant subsidies, tax deductions and other forms of government support, the net costs can remain prohibitive.

As we know, the ways and extent to which governments intervene to alleviate the cost of childcare differ greatly across Europe. The extent of progress that has been made in making childcare more
available and affordable has been impressive in some countries, but a wide degree of variation remains, not only in the extent of support but also in the mode of support. Often childcare expenses are (partially) tax deductible. A problem here is that low-income earners often do not pay any taxes at all, or they pay only very low rates. Tax deductions, therefore, tend to be most advantageous for moderate to high earners. An equally important problem is the temporal mismatch between the timing of the actual expenses and that of the tax benefits, which tend to come after tax returns have been filed and approved (often more than a year later, that is).

A better alternative, therefore, may be to subsidize the suppliers rather than the parents. This makes sense insofar as providing childcare at a good quality level tends to be expensive (with considerable fixed start-up and investment costs), and in many countries, a shortage of adequate childcare is as much if not more of a problem than its cost. The problem with subsidizing suppliers may, again, be that the benefits flow disproportionately to middle and higher-income households. However, this problem could be alleviated by making fees in some way directly related to income, as is the case in a number of countries.

There does not seem to be a very strong, let alone consistent link between the extent of policy support for maternal employment and effective labour market participation has been confirmed by many studies (see, for example, Gornick and Meyers, 2003; Del Boca and Viuri, 2005; Steiber, 2007). The European Commission (2009) does report evidence from country studies according to which the availability of childcare facilities intensifies mothers’ labour market participation rates. However, in most countries the actual use of child care services remains socially stratified. This is even the case in some countries where the consumer cost of such services is close to zero for those on the lowest incomes (Van Lancker, 2013). This is perhaps because factors other than net cost are likely to play a role. The effective availability of childcare places is likely to be a major factor, especially when it comes to the availability of childcare at non-regular hours – which may be of particular importance to less-skilled women seeking employment in the personal services sector. The (perceived) quality of childcare is probably another factor.

5.3 Minimum wages and institutionally imposed wage floors

We now turn to policies that can have a more direct impact on the income position of workers, or the living standards of households mostly dependent on income earned in the labour market.

A prime (potential) policy instrument here are statutory minimum wages and other forms of regulations that set effective wage floors. Minimum wages are not just, or for that matter even
principally, about minimum income protection. Other considerations matter, not least (perceived) fairness, inequality and the desire to maintain adequate work incentives for those outside the labour market (International Labour Organization, 2008). Here, however, we are concerned with the question of whether minimum wage earners succeed in living a life free from severe financial hardship. This concern is also voiced by the EU, when calling for decent wages. Another perceived function of minimum wages is that when subsidies are directed towards low wage earners, that these will not be pocketed by employers or lead to wage erosion (Immervoll, 2007).

In 2013, twenty Member States of the European Union had a national minimum wage, set by government, often in cooperation with or on the advice of the social partners, or by the social partners themselves in a national agreement. The federal minimum wage in the United States is determined by the federal government. The states can set higher minimum wages. Table 5 presents an overview of the minimum wages assessed in this paper, and the estimated share of the labour force working at this minimum wage. The methodology behind these estimates differs considerably between the countries included.

[Table 5: Overview of minimum wage schemes in EU 27, plus Norway and three US states]

Notwithstanding these reservations, it seems that the prevalence of minimum wage workers varies greatly between the countries in our sample, though no clear patterns are apparent. In some countries the primary purpose of the “headline” minimum wage is to act as a benchmark: it marks the floor of the wage hierarchy. “Real” minimum wages (i.e. pay scales for the youngest, least qualified and least experienced workers as stipulated in collective agreements) are sometimes considerably higher than the nationwide minimum wage as sectoral negotiations may overbid the national minimum wage. In other countries, like Greece or France, it appears that more workers work effectively for the minimum wage.

There are few countries without a minimum wage. In Cyprus, Denmark, Finland, Italy, Norway and Sweden, workers are at most covered by sectorally applicable minimum wages. Although the proportion of covered employees can be quite large, considerable differences in minimum wages between various sectors or regions may exist (for instance, see database on sectoral minimum wages in Germany of the Wirtschafts- und Sozialwissenschaftliche Institut (2011)) (Immervoll, 2007). Therefore, we tried to gather information on a sectoral minimum wage in one of the countries’ low wage sectors.

Minimum wage levels differ considerably across the set of countries we consider. We build here on the CSB MIPI (Minimum Income Protection Indicators) dataset; for details we refer to Van Mechelen et al, 2011.
Figure 10 presents the minimum wage level applicable for a 35-year old worker, as do all figures and tables in this paper. For some countries this means that we present a somewhat higher minimum wage than the one commonly used, and this is due to experience-related upgrades. As can be seen from Figure 10, minimum wage levels range in 2012 from around 30 per cent of gross male average wage to a maximum of over 45 per cent. In PPS the range is understandably even wider, with minimum wages in the more generous countries exceeding those in the least generous countries by a factor of six. Note that the newest EU member states generally have national minimum wages that are among the least generous when considering purchasing power standards. Relative to average wages, however, minimum wages there are not particularly low. Likewise, Portugal and Greece have minimum wages in the middle of the distribution in terms of PPS, but relative to average male wages these countries have among the most generous minimum wages (in 2012).

[Figure 10: Gross monthly minimum wage levels in 2012, PPS, euro and relative to average wages]

5.4 Net incomes at minimum wage level relative to the poverty threshold

We now turn to the main focus of attention, the level of net disposable incomes at minimum wage relative to the poverty threshold.

Figures 11 and 12 present the net disposable income of a single person household and a family with two children, with the earner working at the minimum wage. For a single person household, net disposable income suffices in more than half the countries of our sample to avoid the risk of being poor. Note, however, that gross minimum wages are above or very near to the national at-risk-of-poverty threshold in all but a few countries. It is taxes and social security contributions which cause net disposable income at the minimum wage to be below the poverty threshold in a significant number of countries. Some countries, for instance the Czech Republic, Spain and the Slovak Republic, levy no income taxes on the income of minimum wage earners. The UK awards an income tax credit, but the impact of this measure is dampened by high local taxes. Other countries awarding income tax credits to minimum wage earners are Austria and France. In two countries, the Netherlands and Belgium, income taxes for single persons earning a minimum wage remain substantial. However, social security contributions are limited in these cases.

[Figure 11: Breakdown of net disposable income of a single minimum wage earner, 2012, relative to the 60% at-risk-of-poverty threshold]

\[\text{Likewise, gross average wages refer to the average wage for a 35-year old male worker.}\]
Single minimum wage earners rarely receive additional allowances. Only Latvia, Italy, France, Austria and the Czech Republic award housing allowances to single minimum wage earners. There is no European country providing social assistance top-ups to single minimum wage earners. Compared to social assistance recipients, single minimum wage earners are relatively well off, even when not reaching the at-risk-of-poverty threshold (see Van Mechelen and Marchal, 2013).

The situation is different when there are dependents, especially children, present in the household. Figure 12 shows the net disposable income and its components relative to the 60 per cent-at-risk-of-poverty threshold for a sole breadwinner couple with two children. Strikingly, a family in this situation does not escape poverty in any country. This points again to the importance of policies (e.g. child care policies) that enable and encourage potential second earners to take up work and also to policies that ensure that jobs for second earners are available. In fact, the gap between their income and the poverty threshold is quite substantial in most countries, indicating that even a wage substantially above the minimum wage would not suffice. Yet in many countries child cash benefits are quite substantial, most notably in the UK. Likewise, families with children often receive income top-ups, such as the family income supplement in Ireland, regular social assistance top-ups in Lithuania, Luxembourg and the Czech Republic and SNAP benefits in the US states. Also, families in the situation simulated here can apply for housing allowances in a considerable number of countries. Moreover, following the design of most tax systems, wherein generally tax allowances are granted for dependent household members, income taxes very nearly disappear in most countries, or become positive tax credits (Slovak Republic, Austria, Czech Republic, France, UK, US).

Figure 12: Breakdown of net disposable income of a one-earner family with two children at minimum wage, 2012, relative to the 60% at-risk-of-poverty threshold]

Figure 13 shows the income package of a lone parent with two children. In most countries, this family type does somewhat better than a couple with two children. In a small number of countries, a lone parent raising two children and working full time for the minimum wage has an income package just above or around the poverty threshold. This is mainly because lone parents receive the same (or almost the same) supportive measures as a couple with two children, while having the advantage of having one adult mouth less to feed. The effect, in other words, stems from the way the equivalence scale is calculated and not from more generous support. The few countries that provide additional measures towards lone parent families mainly do so by increased child benefits (like Belgium and Estonia) or by a more favorable tax treatment (as in the Netherlands). Note that the model family type calculation presented here assumes full time work. It goes without saying that many lone
parents do not find it easy to combine a full time job with raising children. Minimum wage workers in particular are often employed in service sectors jobs with non-standard work times, including weekend and night work. They face particular difficulties finding appropriate child care and actually working full time.

[Figure 13: Breakdown of net disposable income of a lone parent with two children at minimum wage, 2012, relative to the 60% at-risk-of-poverty threshold]

5.5 What governments have done to support the incomes of workers and households mainly reliant on earnings

Let us now turn to trends over the past decade, the period 2001-2012 to be more precise. Figure 14 shows gross minimum wages and net income packages at minimum wages relative to median equivalent income and thus to relative poverty thresholds. Clearly, the scale of variation in trends is considerable, across countries but also across family types within countries. Note also that this picture is to some extent influenced - if not distorted - by the economic crisis which caused median household income to drop significantly in a number of countries. Had we presented the trend up until 2008, the overall picture would have been one of general decline.

Interestingly, in most countries net incomes at minimum wage increased more strongly, or declined less sharply than gross minimum wages, be it again with significant variation by family type. In Lithuania, for example, the level of the gross minimum wage declined relative to the poverty threshold yet net incomes for minimum wage earners improved, especially for those with dependent children. In France, to take another example, the gross minimum wage fell vis-a-vis the poverty threshold but this did not translate into a proportional drop in net incomes for minimum wage workers. Such divergent trends point to changes in the components that make up net disposable income. Thus we turn our attention to what happened with the various components.

[Figure 14: Evolution (in %) of net disposable income for a one-earner family with the working adult earning a minimum wage relative to poverty thresholds, 2001-2012]

5.5.1 Gross minimum wages

In real terms, minimum wages increased in most EU countries in the period 2001-2012, especially in the EU12 countries. However, these real increases translate into a far more diverse picture relative to
average earnings. From Figure 15, in which countries are ranked by their initial level in 2001, it can be seen that by and large the strongest increases occurred in the countries where the initial levels in 2001 were lowest. In the countries where they were highest in 2001, minimum wages generally declined relative to average wages. The figure also shows trends relative to relative poverty thresholds. Clearly the picture is more mixed. It is again important to stress that the overall picture would have been of declines had we compared 2001-2008, that is, before the crisis caused a drop in median equivalent incomes. It is also important to stress that this figure may suggest a continuity in trend that is not really there in fact. For example, in the United States, the minimum wage eroded, both in real terms as well as relative to gross average wages for the largest part of the decade before gross minimum wage levels were finally substantially raised again.

[Figure 15: Evolution (in %) of gross minimum wage relative to gross average wage and median equivalent income, ranked by 2001 level relative to gross average wage]

5.5.2 Income taxes

We have seen that in most countries net incomes at minimum wage increased more strongly, or declined less sharply, than gross minimum wage levels, suggesting changes in the components that affect net disposable income. We first look at the impact of income taxation policy changes. The overall picture, presented in Figure 16, is one of declining taxation levels, where and for whom there was still room for such declines. That was generally only the case for single person households; single breadwinner households with dependent children already paid close to zero taxes a decade ago. In a limited number of countries we can see an effective shift towards negative taxation, i.e. towards single persons receiving income supplements through the tax system.

Turning to couples and lone parents with two children, the first thing to note is that income taxes were in general already minimal or non-existent a decade ago. A few observations stand out. The Czech Republic introduced a comparatively generous tax credit for families with children as part of its 2008 flat tax reform, but this measure did not suffice to keep net disposable income in line with the standard of living (see Figure 14). Lithuania, the only country with a relatively high income tax in 2001, has drastically cut back this tax. The personal income tax rate was substantially reduced (from 33 to 15 per cent) and the amount of the non-taxable income base was increased for low income families. In the Slovak Republic, the 2004 tax and welfare reform changed the existing child tax allowances into refundable tax credits. In France, the maximum value of the refundable Prime pour l’emploi (PPE, a working tax credit) was substantially raised between 2005 and 2008. From 2009 on, low-wage earners benefit from the newly introduced social assistance benefit (rSa) that supports the
working poor with a considerable top-up. Since the calculation of the PPE and the rSa interact, the net effect of both measures is included in Figure 16. For the UK, a reform of the working families’ tax credit into the working tax credit and the child tax credit in April 2003 apparently had divergent consequences for different family types, with generosity declines for the two households types with dependent children presented here. The UK government will introduce a far-reaching reform of the benefit structure, including the tax credits, into a ‘universal credit’. Striking also is the substantial impact, relatively speaking, of the Earned Income Tax Credit in the United States. This federal tax credit is the country’s pre-eminent anti-poverty program for families of active working age. Although the EITC was expanded for families with three children or more in reaction to the crisis, the substantial increase in refundable tax credits observed for families with children in Figure 16 is due to two other crisis measures. The 2009 American Recovery and Reinvestment Act temporarily introduced the Making Work Pay tax credit, and issued a temporary expansion of the refundable Additional Child tax credit. Especially the latter had a substantial impact on the net disposable income of minimum wage earners with children.

[Figure 163: Income taxes as a % of gross minimum wage, various family types, 2001, 2009 and 2012]

5.5.3 Social security contributions

Social security contributions are levied on individual earnings and do not vary by family type. These continue to have a substantial impact on the net incomes of minimum wage workers, reducing net income by as much as a fifth in some countries. As can be seen from Figure 13, in a country like France a lone parent with two children working full time for the minimum would actually be above the poverty threshold if employee social security contributions were slightly lower. In the period under scrutiny here, social security contributions, while remaining substantial in most countries, decreased (marginally) in Poland, the Czech Republic, Romania and (more substantially) in Belgium (Figure 17). In the Czech Republic, a reduction took place in 2009. Since 2002, Estonian employees contribute to the unemployment insurance fund, as well as to the funded pension scheme. In Lithuania, social insurance contributions were raised from three per cent of gross wage income to nine per cent, of which three per cent for pension insurance and six per cent for health insurance. In the Belgian case, the prime objective has been to increase work incentives, particularly the net pay-

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5 The PPE still exists, but is only partly cumulative with rSa. The activity-related part of the social assistance benefit is therefore taken into account when calculating the working tax credit.
6 The reform also caused non-working families with children to receive the child tax credit.
7 The Making Work Pay Tax credit supported workers in 2009 and 2010. The refundable part of the Child Tax Credit is scheduled to return to its former levels after 2012.
off to making the transition from dependence on a social assistance or unemployment benefit to a low-paid job.

[Figure 17: Social security contributions relative to gross minimum wage, 2001, 2009 and 2012]

5.5.4 Child benefits

There is a very important overlap between poverty among households mainly reliant on the labour market and child poverty. In 2010 the majority of countries in the European Union have more than 20% of poor children living in households with all working age members in employment (work intensity of 1) and all but Belgium, Bulgaria, Czech Republic, Finland, Hungary, Ireland and the UK have more than half of their poor children living in households with a work intensity of 0.5 or over (Van Mechelen and Bradshaw, 2013).

Countries use different mixes of tax benefits and cash benefits for delivering help to families with children. One can distinguish between income related and universal – i.e. non-income related – cash benefits. Income related benefits aim to target direct cash transfers to low income families. Governments may decide to target benefits to other specific groups, for example lone parents or disabled children. Tax instruments are also used to redistribute income from childless families to families with dependent children – either in the form of tax allowances or tax credits specifically aimed at families with children. Tax allowances are deducted from taxable income whereas tax credits are subtracted from the amount of tax due. Tax credits may be wastable or non-wastable. Non-wastable or refundable tax credits are tax benefits that can be paid as cash transfer to the taxpayer whenever the benefit exceeds tax liability. Wastable tax credits can only be used if tax liability is positive. Both cash and tax benefits tend to vary by the age and the number of children (Bradshaw and Finch, 2002; Van Lancker et al 2012).

Child benefit packages as a whole play an important role in preventing against financial poverty (cfr. Figures 12 and 13. Nevertheless, in many countries child benefit packages fail to protect low wage earners against poverty. In all countries the incomes of single earner couples on minimum wages is below the poverty line (Figure 12). The child benefit package for a lone parent is more generous in most countries (Figure 13). However, how and whether child care costs are subsidised makes a big difference to the package especially for lone parents. The costs of childcare can undermine the value of the package in some countries. Whereas during the 1990s child benefit package have been able to escape welfare erosion, over the past decade the value of the package relative to median equivalised income has fallen in more countries than it has increased (Van Mechelen and Bradshaw, 2013). This trend of decreasing child benefits has affected both low paid families and the better off.
Various studies have looked in detail at the structure of the child benefit package (e.g. Bradshaw and Finch, 2002; Bradshaw, 2010). Corak et al. (2005), Matsaganis et al. (2005), Bäckman and Ferrarini (2011), Van Lancker et al. (2012) have documented the adequacy of child support arrangements in terms of poverty alleviation using empirical income surveys. Corak, Lietz and Sutherland (2005) find that universal child related benefits that also have some degree of targeting at the poorest protect best against poverty. Their conclusion that targeting within universalism yields the best outcomes is echoed by Van Mechelen and Marchal (2012). They find that cross-country variation in the level of child benefit packages for single earner families on low pay largely overlaps with the degree of low income targeting. Model family type simulations suggest that comparatively generous packages for low paid workers are to be found in countries where financial help for families with children is well-targeted at low-income households by means of income-related cash benefits, refundable income-related tax credits or social assistance top-ups. However, model family type simulation effectively assume full-take up of benefits and full granting of rights. In reality selective benefit systems may be quite ineffective with regard to poverty alleviation due to take-up problems and labour market disincentives (Notten and Gassman, 2008). Van Mechelen and Bradshaw (2013) also show that child benefit packages are often also above average in countries with universal cash benefits, but combined with income-related cash benefits, housing allowances or supplementary benefits from social assistance (Ireland, France, Austria, Finland). This finding may in effect confirm and reinforce the assertion in empirical literature that that targeting may be not so bad, if embedded in a universal social insurance context (Whiteford 2008; Kenworthy, 2011; Van Lancker et al 2012).

Looking finally at the previous decade, child benefits have generally lost ground (Figure 18). For a couple with two children, the size of the child benefits package, expressed as a percentage of the gross minimum wage, declined in the majority of countries awarding these benefits. For lone parents with two children the trend was somewhat more favourable in a number of countries. The largest decreases occurred in the Eastern-European countries Estonia, Hungary, the Slovak Republic, the Czech Republic (from a rather generous level), Slovenia (couple with two children) and Latvia. On the other hand, Lithuania introduced a means-tested child cash benefit, amounting to 13 per cent of the gross minimum wage. Also in Italy, Ireland and Luxembourg, the value of child cash benefits increased. As already mentioned, the decrease of child benefits in the UK is caused by the split of the former working families’ tax credit into the working tax credit and the child tax credit.

[Figure 18: Child benefits relative to gross minimum wage, 2001, 2009 and 2012]

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8 In the Czech and Slovak Republics compensated by a child tax credit.
5.5.5 Other income components: housing allowance and social assistance top-up

Two other important income components of net disposable income of minimum wage earners are the housing allowances and social assistance top-ups awarded in some countries.

In 2012, ten countries of our sample award housing allowances in order to help low income families meet housing costs. These allowances are more common and generally more substantial for families with children. A couple with two children receives housing allowances ranging from around eight (in Poland) to 25 per cent (in France) of gross minimum wage. Singles without children on the other hand, are only eligible in five countries, for substantially lower benefits, ranging from four (France) to 12 per cent (Czech Republic) of the gross minimum wage. Housing allowances in Latvia are exceptionally high for all family types considered, and amount to more than half the gross minimum wage.

There was no common trend in either the awarding or the level of housing allowances over the past decade. In three countries, the housing allowance decreased substantially, or was even abolished for some (or all) of the family types considered here (CZ, PL, SK). In other countries, benefit levels remained stable (FR), increased (LV, HU, SI) or became less haphazard over time (IT).

Social assistance top-ups are benefits paid by the minimum income scheme up to at least the level guaranteed by the minimum income scheme. Usually, it lifts income (somewhat) above the minimum income level, since earnings disregards apply that aim to make work pay.

Once again, it is mainly families with children that receive social assistance top-ups. Top-ups are less often awarded to lone parent families. Unlike for single persons, top-ups received by couples with children and lone parents are substantial, although large variation exists between countries.

As with housing allowances, trends in social assistance top-ups over the past decade were fairly mixed. In two countries, family types that were eligible for a top-up in 2001 are no longer so in 2009. In the Slovak Republic, this was due to a profound tax and welfare reform whereas in Estonia, social assistance benefit levels eroded despite substantial real increases (see Van Mechelen and Marchal, this volume). In another two countries, the Czech Republic and Hungary, social assistance top-ups decreased substantially relative to gross minimum wages. They declined only marginally or remained stable in Slovenia and the US states and increased in Luxembourg, Lithuania and Portugal.

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9 In the Czech Republic, a reform of the social assistance scheme lowered eligibility thresholds. In Hungary, the substantial rise of gross minimum wages compared to the evolution of the social assistance threshold led to a decreasing importance of the social assistance top-up in net disposable income.

10 In Lithuania and Portugal, this is a consequence of the rise of social assistance benefits. However, in both countries, respondents note that actual take-up of social assistance top-ups to minimum wages is fairly limited.
In France, the 2009 reform of the social assistance scheme into the “revenue de solidarité active” had as one of its main aims to make sure that employment protects against poverty (Anne and L’Horty, 2008; République Française, 2008). The rSa top-up supplements and/or replaces the previous working tax credit, and was presented under the paragraph on taxes. In Ireland, couples and lone parents in work with children are eligible for a means-tested Family Income supplement.

5.6 What governments could do to support workers’ incomes: innovative options

It is increasingly argued that more effective poverty relief will not come from augmenting/expanding the traditional channels of income support, for example more generous social insurance or social assistance levels, or from higher minimum wages. These are seen as not only as failing to address today’s social risks and needs, but as exacerbating underlying problems such as exclusion from the labour market and entrapment in passive benefit dependency.

For low-earnings households, only direct household income supplements may offer a reasonable prospect to a poverty free existence, especially when there are dependent children. Such ‘in-work benefits’ are now often associated with Anglo-Saxon-type “tax credits” such as the EITC in the United States and the WTC in the United Kingdom.

The option to consider, then, are other forms of (targeted) income supplements for households that provide some level of income protection but that are also conducive to labour market participation. Kenworthy (2011: 44): “Given the importance of employment and working hours for the market incomes of low-end households, policy makers must guard against programs that provide attractive benefits without encouraging or requiring employment. An ideal transfer would be one that both boosts the incomes of low-earning households and promotes employment by able working-aged adults. As it happens such a program exists. Referred to variously as “in-work benefit” or “employment-conditional earnings subsidy”, it is best exemplified by the Working Tax Credit (WTC) in the United Kingdom and the Earned Income Credit (EITC) in the United States”.

Under these schemes households with low earnings do not pay taxes but instead they receive additional money through the tax system. In the United States, the 1993 expansion of the Earned Income Tax Credit (EITC) turned it into the country’s pre-eminent anti-poverty program for families.

The low take-up rate of the social assistance top-up in Poland, as well as numerous additional conditions, led our respondent to advise us to not include this top-up in our calculations of net disposable income.
of working age. The United Kingdom has also implemented and extended several schemes (and in fact did so earlier than the US), culminating in the Universal Credit. Clearly, Anglo-Saxon style negative income taxes have been garnering increased interest of late. Immervoll and Pearson, 2009: “Even in the mid-1990s, twenty years after such schemes were first introduced in the United Kingdom and the United States, such schemes were seen as interesting but unusual [...] it seems reasonable to conclude that IWB schemes are now mainstream policies in many countries.”

That is perhaps somewhat of an overstatement. Several European countries have contemplated introducing Anglo-Saxon-style tax credits, or have done so in some form. Examples here include the ‘Prime Pour l’Emploi’ (PPE) in France, the ‘Combination Credit’ in the Netherlands, and a "Low Wage Tax Credit" in Belgium. Yet the reality is that most of these schemes exhibit only a faint resemblance to the EITC or the WTC. Sweden has a scheme that goes by the same name in English as its American counterpart EITC. It was introduced in 2007, and was reinforced in 2008, 2009 and 2010. The stated motive of the reform was to boost employment; in particular to provide incentives for individuals to go from unemployment to, at least, part-time work. The scheme is different from the American scheme in that it is a non-refundable tax credit. Also, because the tax unit in Sweden is the individual and not the household it works in effect as tax relief on low individual earnings. In that respect it is similar to personal social security contributions relief measures elsewhere.

While tax channelled in-work benefits targeted at households with low earnings remain of limited significance in most European countries, it is of course the case that many countries have child benefit systems that provide an additional income to workers and their families (Van Mechelen and Bradshaw, 2013). Child benefits have generally lost ground. For a couple with two children, the size of the child benefits package, expressed as a percentage of the gross minimum wage, declined in the majority of countries awarding these benefits. For lone parents with two children the trend was somewhat more favourable in a number of countries. The decline of child cash benefits, both in value as in their importance in net disposable income, is discussed more extensively in Van Mechelen and Bradshaw (2013).

Interest in EITC type schemes remains strong however, in the public debate and in the academic literature (Marx and Verbist, 2009; Kenworthy, 2011; Figari, 2011,Allègre and Jaehrling, 2011; Crettaz, 2011, Marx et al., 2012). That interest seems entirely legitimate. The empirical evidence shows the American EITC, in combination with other policy reforms and several increases in the minimum wage, to have produced some significant results, including marked increases in labour market participation and declines in poverty among some segments of the population, especially single-parent households (Hotz and Scholz, 2003; Eissa and Hoynes, 2004). It needs to be noted, however, that these initial results happened in favourable economic circumstances, including strong
labour demand and low unemployment. The relatively strong increases in labour supply of lone mothers in the American setting also resulted from welfare reform, notably the transformation of the social assistance scheme into a temporary support system with time limits on the duration of benefits. This clearly provided a strong push incentive, with the EITC acting as pull incentive. Not all who were forced out of passive dependence found their way to work (Grogger, 2003; 2004).

There are potential downsides to subsidizing low paid work. While EITC is intended to encourage work, EITC-induced increases in labour supply may drive wages down, shifting the intended transfer toward employers. Rothstein (2009) simulates the economic incidence of the EITC under a range of supply and demand elasticities and finds that in all scenarios a substantial portion of the intended transfer to low income single mothers is captured by employers through reduced wages. The transfer to employers is borne in part by low skill workers who are not themselves eligible for the EITC. There is some empirical evidence that corroborates the potential wage erosion effect of EITC (Leigh, 2010; Chetty et al, 2013).

Yet whether EITC type schemes can work elsewhere, as Kenworthy (2011) and others suggest, is not self-evident. The socio-demographic make-up of the US differs from that in most European countries; there are more single adult (and parent) households but also more multi-earner households. The dispersion in earnings is also much more compressed in most European countries, where, in addition, benefits are generally higher relative to wages (including minimum wages) and less subject to means-testing if they derive from social insurance. This also implies that benefit entitlements of household members are less interdependent, possibly weakening the potential impact on labour supply. Many countries have individual taxation, and the trend is away from joint taxation of couples.

In order to be effective as an anti-poverty device and at the same time affordable within reasonable limits, such measures need to be strongly targeted. However, strong targeting at households with low earnings is bound to create mobility traps, which can only be avoided if taper-off rates are sufficiently flat. That comes at a very considerable cost if the lower end of the household earnings distribution is densely populated, as is the case in many European countries. This cost can only be avoided by making the amount of the tax credit itself smaller, but in that case the anti-poverty effect is reduced. Simulations by Bargain and Orsini (2007) for Germany, France and Finland, by Figari (2011) for four southern European countries (Italy, Spain, Portugal and Greece) and by Marx et al. (2012) for Belgium shed doubt over the applicability of EITC type systems in other settings. In an earlier study, Bargain and Orsini (2007) investigated the effects on poverty of the hypothetical introduction of the British scheme (as it was in place in 1998) in Germany, France and Finland, using EUROMOD for 2001. They found that the anti-poverty effects of a UK type tax credit (similar in design and relative overall spending) would be very small in these countries, especially relative to the
budgetary cost. For Belgium, the hypothetical introduction of the UK’s WTC is shown to yield a limited reduction in poverty at the cost of possible weakened work incentives for second earners (Marx et al., 2012). Figari (2012) notes that the presence of extended families in southern Europe does not allow for such policies to be well targeted at the very poorest. Bargain and Orsini (2007) have concluded that “interest in such schemes is destined to fade away”. Whether that is true remains uncertain and indeed doubtful, but EITC type negative tax credits are not obviously suitable for wholesale emulation throughout continental Europe. In Germany, for example, the labour market has undergone some profound changes over the past decade. Low paid employment has become far more prevalent and in-work poverty seems to have increased. It is not unlikely that a simulation like the one performed by Bargain and Orsini on 2001 data would yield different results today.

Clearly, simulations demonstrate that in-work benefit schemes that work well in certain settings do not necessarily perform equally well in a different context. Family composition, individual earnings distributions and family income structures drive outcomes in a very substantial way. It remains to be explored whether alternative designs are conceivable that have better outcomes in continental European settings and that are realistically affordable.
6. Conclusion and prospects for improvement

Past employment growth in Europe and elsewhere - and we should not forget that there were very strong net employment gains prior to the crisis - did not deliver the hoped-for declines in poverty and inequality. The assumed natural “marriage” between employment growth and poverty reduction did not materialize. In fact, the contrary was true for the most part. Employment growth, where it occurred, did not primarily benefit poor people, and this happened in a context of eroding income support as provided through social insurance and social assistance.

The reasons why job growth does not benefit the poor to the degree one would hope for are complex. One important reason is that poor people do not tend to be the prime beneficiaries from job growth, while the resulting income gains in other parts of the income distribution may increase their relative economic disadvantage. A second reason is that for a poor person getting a job does not always raise income enough to escape poverty. In some cases, full work intensity at the household level does not generate sufficient income to have a living standard above the poverty threshold. There is a substantial overlap here with child poverty.

Policy options exist to make sure that the poor partake more when new job opportunities arise. Active labour market policies can play an important role here. Similarly, policies supporting labour market participation, notably child care policies, can help individuals and households to realize their earnings potential. But we should be under no illusion. When it comes to improving the plight of persons with the weakest profiles in terms of skills, experience and aptitudes, such indirect policies appear to have their limits. Active labour market policies often fail to reach let alone benefit the weakest. In some countries very strong social gradients persist in child care take-up rates, despite policy design efforts to the contrary.

Moreover, there are simply no examples of countries that achieve low poverty just by having high employment rates and without extensive direct income redistribution mechanisms. The Nordic countries stand out in having high employment rates in combination with low poverty rates and overall inequality levels. It should not be forgotten that precisely these countries also spend heavily on direct income transfers, including towards those already in work. The combination of work and welfare state income is more pervasive there than anywhere else. In addition, income support provisions for those with no work attachment are among the most generous and adequate from the point of view of poverty relief.
The European Commission recently stated that social protection is an additional cornerstone of an effective policy to combat poverty and social exclusion in Europe, complementing the effects of growth and employment. Improving minimum income provisions for those out of work is clearly needed.

At the same time there is a clear need to provide income support to workers and to households mainly reliant on earned income. Wage floors, set by government or through collective bargaining, underpin minimum income protection for workers in most European countries. In 2013, twenty EU countries have a national minimum wage, set by law or through collective bargaining at the national level. Across the EU, there is substantial variation in minimum wage levels relative to average wages, ranging from under 30 per cent to almost 50 per cent.

What matters from a poverty perspective are net income packages at minimum wage level, taking into account the impact of taxes and social security contributions, but also benefits (including child benefits) and additional allowances. In the period 2001-2012, net incomes at minimum wage generally increased more, or decreased less, than gross minimum wages, reflecting a shift towards tax alleviation and additional income support for low-paid workers.

Net disposable incomes for full time single persons working for the minimum wage are at least as high as the 60 per cent at-risk-of poverty threshold in more than half the countries of the EU where there is a minimum wage. The picture changes drastically when the focus is shifted to households with dependent children and other dependent persons. Net incomes at minimum wage for full time working lone parents are below the poverty threshold almost everywhere. For sole breadwinner couples with children net income packages at minimum wage level fall well short everywhere, generally by a very substantial margin.

What are the prospects for improvement? When it comes to the question of whether, how and to what extent minimum income protection for workers can be improved many questions remain open. The debate about the question of whether minimum wages destroy jobs, or stifle job growth, is as old as the minimum wage itself. A wealth of empirical evidence has been amassed by labour economics. It seems fair to state that the measured effects of minimum wage increases have sometimes been positive, sometimes negative, sometimes neutral, but never very large (Dolado et al., 1996; 2000; Freeman, 1996; OECD, 1998; 2004; Kenworthy, 2004). As Martin and Immervoll (2007) state: “On balance, the evidence shows that an appropriately-set minimum wage need not have large negative effects on job prospects, especially if wage floors are properly differentiated (e.g. lower rates for young workers) and non-wage labour costs are kept in check.”
In some EU countries minimum wages remain non-existent or low relative to average wages. Thus in countries where minimum wages are presently not in place or relatively low there may be scope for gradual but substantial increases. In countries where they have deteriorated relative to average wages there may be scope for some catch-up growth. However, the route of boosting minimum wages to the upper prevailing ranges (relative to average earnings) would not be sufficient to eradicate in-work poverty, even in the absence of negative employment effects and large spill-overs to non-poor households. Essentially that is because minimum wages have become inherently constrained in providing minimum income protection to sole breadwinner households in countries where relative poverty thresholds are strongly determined by dual earner living standards. The increases in minimum wages required to keep sole earners supporting families relying on it above the poverty threshold are in fact by now so substantial that they are hardly conceivable.

Yet minimum wages still constitute the foundation of minimum income protection for workers, and, given their role as a benchmark level, not only for those effectively working for the minimum wage. Moreover, in an encompassing anti-poverty strategy, minimum wages can play a crucial role in dampening the possible wage erosion effects of in-work benefits and tax credits. This points to the importance of maintaining minimum wages and making sure that these keep pace with average wage growth to the extent possible.

As we have seen in this paper, rather than pushing for higher minimum wages, many governments in Europe have undertaken measures to increase the net incomes of workers paid at or around the minimum wage. Minimum wage workers have generally seen their taxes fall over the past decade. In most countries, they pay very low or no taxes, especially when there are children. Only in a small number of countries have there been declines in social security contributions. There thus remains some theoretical scope for increasing net disposable incomes via this route. But even with hypothetical zero taxation minimum wage earners solely supporting families would in most countries not have an income sufficient to reach the poverty threshold. This is even true in countries where minimum wages are already comparatively high relative to average wages.

This brings us to the option seen to hold the most promise these days: negative income taxes or equivalent in-work benefits for low income households. As we have seen, housing allowances and social assistance top-ups already exist in a number of countries. One type of scheme, however, is garnering most interest of all: earned income tax credits. Under such schemes low income households do not pay taxes but instead they get additional money through the tax system.

These still exist only in a handful of countries in any significant form, with the United States and the United Kingdom standing out in particular. The United Kingdom has implemented and extended
several schemes, culminating in the Working Tax Credit (WTC). In the United States, the Earned Income Tax Credit (EITC) is now the country’s pre-eminent anti-poverty program for families of working age. Several European countries have contemplated introducing Anglo-Saxon-style tax credits, or have done so in some form, most notably the Czech Republic, Slovakia and Sweden. Interest remains strong, in the public debate and in the academic literature (Kenworthy, 2011; Marx and Verbist, 2008; European Commission, 2011).

In order to be effective as an anti-poverty device, such income supplements need to be quite substantial. As this paper has demonstrated, even in countries where minimum wages are comparatively high, net incomes for lone parents and sole breadwinners with children fall far short of the poverty threshold. However, strongly targeted, generous negative income taxes are bound to create mobility traps which can only be avoided if taper-off rates are sufficiently flat. This would come at a very considerable cost given that the lower end of the household earnings distribution is so densely populated in most Continental European countries. This cost can only be avoided by making the amount of the tax credit itself smaller, but in that case the anti-poverty effect is reduced. Simulations clearly show that negative income tax schemes that work well in one particular setting do not necessarily perform equally well in other settings (Bargain and Orsini, 2007; Figari, 2011; Marx et al., 2012b).

Increasing child benefits, finally, is a route that was largely neglected over the previous decade, as Ferrarini et al. (2012) and Van Mechelen and Bradshaw (2013) document in greater detail than we have done here. It also emanates from these studies, and from other studies (e.g. Corak, 2005), that the best performing countries in terms of poverty reduction tend to have systems of child benefits and tax concessions that are broadly awarded yet direct resources proportionally more at the poorest.

When it comes to effectively alleviating in-work poverty through income supplements for households mainly reliant on earnings, be it in the form of child benefits, negative income taxes or other equivalent schemes, the reality is that there are unlikely to exist cheap solutions, especially if one is also concerned about work and mobility incentives. It is also clear that there are no optimal one-size-fits-all solutions exist. The socio-demographic composition of the population and particularly of the working poor matters. Child benefits, for example, will obviously have less of an effect when single person households are affected by in-work poverty, or when this is the case for multi-generation households. The distribution of wages and working hours, across the population and within households, matter greatly to the potential effectiveness and cost of negative income tax or equivalent schemes. Other elements of institutional and policy context are likely to be relevant, not
in the least existing national tax/benefit schemes. In that sense policy packages that optimally fit national contexts and constraints will need to be developed on a case by case basis.
Appendix

Figure 1: Poverty and employment trends in the EU, 1995-2011

Source: Eurostat
Note: The poverty threshold is 60 per cent of the equivalized median household disposable income. The poverty rates are for the population less than 65 years, based on EU-SILC. The employment rates are for the population aged 15-64, based on EU-LFS.
Figure 2. Employment and poverty trends in individual member states, 1995-2011

Source: Eurostat
Source: Eurostat
Figure 3: Poverty and in-work poverty (IWP) by work intensity at the individual and household level: EU-27, 2005-2011

Source: Eurostat
Figure 4: Country positioning on employment and poverty dimensions in 2005, 2008 and 2011
Note: The poverty threshold is 60 per cent of the equivalized median household disposable income. The poverty rates are for the population less than 65 years, based on EU-SILC. The employment rates is for the population aged 15-64, based on EU-LFS.
Source: Eurostat
Figure 5: Poverty rates before and after increase of employment to 75 percent using shift-share and RB approach (fixed and floating poverty line), active age population

Source: Marx et al., 2012
Baseline: current poverty rates; 2020_SS: poverty rates after increase of employment rates with shift-share methodology; 2020_M1_RB_Fix: poverty rates after increase of employment rates with RB methodology and poverty line fixed; 2020_M1_RB_Float: poverty rates after increase of employment rates with RB methodology and poverty line recalculated. Countries are ranked from low to high current employment rates.
Figure 6: At risk of poverty rate by work intensity in the working-age population (20-59)

Source: EU-SILC 2010
Figure 7: The distribution of household work intensity in the working-age population (20-59) living in relative income poverty

Source: EU-SILC 2010
Figure 8: Percentage point increase in poverty risks for FYFT low paid earners if their earnings were excluded from the household income, by household position

Source: EU-SILC 2010
Note: Net earnings were subtracted from disposable household income. When net earnings were not available, gross earnings were used as a proxy (CY, DE, DK, FI, MT, NL, NO and SK). Base levels, see table 3.
Figure 9: The policy toolbox to address in-work poverty

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<tr>
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<th>New options</th>
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<td>- raising the minimum wage/ wage floors through regulation</td>
<td>- negative income taxes</td>
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<td>- (targeted) tax relief</td>
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<td>- (targeted) child benefits</td>
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<td>- Innovative supply focused policies (empowerment)</td>
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Figure 10: Gross monthly minimum wage levels in 2012, PPS, euro and relative to average wages

Source: CSB MIPI (Van Mechelen et al., 2011); PPP and exchange rates retrieved from Eurostat (2013)
Note: Gross average wages for a 35 year old male worker. Gross minimum wages for a 35 year old worker. For some countries (BG, EL) this differs with commonly presented minimum wage levels, due to experience premiums. No gross male average wage available for the US states. For IT, DK, DE and FI, data refer to the minimum wage applicable within a low wage sector. In AT, non-statutory national minimum wage.
Figure 11: Breakdown of net disposable income of a single minimum wage earner, 2012, relative to the 60% at-risk-of-poverty threshold

Source: CSB MIPI (Van Mechelen et al., 2011); poverty thresholds retrieved from Eurostat
Note: ndi: net disposable income, SS: social security. AT: non-statutory minimum wage. or IT, DK, DE and FI, data refer to the minimum wage applicable within a low wage sector.

Figure 12: Breakdown of net disposable income of a one-earner family with two children at minimum wage, 2012, relative to the 60% at-risk-of-poverty threshold

Source: CSB MIPI (Van Mechelen et al., 2011), poverty thresholds retrieved from Eurostat (2013)
Note: ndi: net disposable income, SS: social security. AT: non-statutory minimum wage. or IT, DK, DE and FI, data refer to the minimum wage applicable within a low wage sector.
Figure 13: Breakdown of net disposable income of a lone parent with two children at minimum wage, 2012, relative to the 60% at-risk-of-poverty threshold

Source: CSB MIPI (Van Mechelen et al., 2011); poverty thresholds retrieved from Eurostat (2013)
Note: ndi: net disposable income, SS: social security. AT: non-statutory minimum wage. or IT, DK, DE and FI, data refer to the minimum wage applicable within a low wage sector.

Figure 14: Evolution (in %) of net disposable income for a one-earner family with the working adult earning a minimum wage relative to poverty thresholds, 2001-2012

Source: CSB-MIPI (Van Mechelen et al., 2011); Poverty thresholds retrieved from Eurostat (2013), U.S. Bureau of the Census and Bureau of Labour Statistics (2013)
Note: NL not included due to break in series. No minimum wage in Austria in 2001. Housing allowances included if comparable over time. Countries are sorted by evolution of gross minimum wage over period. Trends for EE and ES are limited to 2009. Data for IT refer to a minimum wage applicable within a low wage sector. Ndi: net disposable income. C2C: couple with two children. LP2C: lone parent with two children.
Figure 15: Evolution (in %) of gross minimum wage relative to gross average wage and median equivalent income, ranked by 2001 level relative to gross average wage

Source: CSB MIPI (Van Mechelen et al., 2011); poverty thresholds retrieved from Eurostat (2013)
Note: NL not included due to break in series. No minimum wage in Austria in 2001. Trends for ES are limited to 2009. Data for IT refer to a minimum wage applicable within a low wage sector.
Figure 163: Income taxes as a % of gross minimum wage, various family types, 2001, 2009 and 2012

Source: CSB MIPI (Van Mechelen et al., 2011)
Note: C2C: couple with two children. LP2C: lone parent with two children. Within household types, countries are sorted by 2001 level. Gross minimum wage for a 35-year old worker. In case of couple with children, the worker is married.
Figure 17: Social security contributions relative to gross minimum wage, 2001, 2009 and 2012

Source: CSB-MIPI (Van Mechelen et al., 2011)
Note: gross minimum wage for a 35-year old worker. Countries are sorted by 2001 level.

Figure 18: Child benefits relative to gross minimum wage, 2001, 2009 and 2012

Source: CSB-MIPI (Van Mechelen et al., 2011)
Note: gross minimum wage for a 35-year old worker
### Table 1: Percentage of Those in Work at Risk of Poverty, EU 2000-2010

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* 2001
b=break in time series
Source: EU Social Inclusion Indicators website
Table 2: Low Pay for Full-year Employees, Annual Income

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Source: EU-SILC 2010
### Table 3: Income Poverty Risk for Low Paid Earners, by household position

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Source: EU-SILC 2010
Table 4: At-risk of poverty rate (in %) total population, poverty rate not working individuals age 18-64: and IWP (in %) full-time workers and part-time workers by sex

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</tbody>
</table>

Note: t-test significance levels H0: IWP FT = IWP PT: (*) p < 0.1, * p < 0.05, ** p <0.01, *** p<0.001
Source: Horemans and Marx (2013)
### Table 5: Overview of minimum wage schemes in EU 27, plus Norway and three US states

<table>
<thead>
<tr>
<th>Country</th>
<th>Minimum wage</th>
<th>% of working population (employees)</th>
<th>Minimum wage setting (ICTWSS database of Visser, 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>Mindestlohn</td>
<td>n/a</td>
<td>National agreement between unions and employers</td>
</tr>
<tr>
<td>BE</td>
<td>Gewaarborgd Minimum Maandinkomen</td>
<td>3.65%&lt;sup&gt;a&lt;/sup&gt;</td>
<td>by agreement, but extended and made binding by law or ministerial decree</td>
</tr>
<tr>
<td>BG</td>
<td>минимальна работная заплата</td>
<td>n/a</td>
<td>by government after non-binding tripartite consultations</td>
</tr>
<tr>
<td>CY</td>
<td>None (in some sectors only)</td>
<td>n/a</td>
<td>by government, bound by fixed rule</td>
</tr>
<tr>
<td>CZ</td>
<td>Minimální mzda</td>
<td>2.5%</td>
<td>by government, no fixed rule</td>
</tr>
<tr>
<td>DK</td>
<td>None.</td>
<td></td>
<td>by agreement, but extended and made binding by law or ministerial decree</td>
</tr>
<tr>
<td>EE</td>
<td>Riiiklik alampalk</td>
<td>4.6% of full-time employees&lt;sup&gt;b&lt;/sup&gt;</td>
<td>by agreement, but extended and made binding by law or ministerial decree</td>
</tr>
<tr>
<td>ES</td>
<td>Salario Minimo Interprofesional</td>
<td>2.6%&lt;sup&gt;c&lt;/sup&gt;</td>
<td>by government after non-binding tripartite consultations</td>
</tr>
<tr>
<td>FI</td>
<td>None.</td>
<td></td>
<td>sectoral collective agreements or tripartite wage boards in some sectors</td>
</tr>
<tr>
<td>FR</td>
<td>Salaire minimum interprofessionnel de croissance</td>
<td>10.6%&lt;sup&gt;d&lt;/sup&gt;</td>
<td>by government, without fixed rule</td>
</tr>
<tr>
<td>GR</td>
<td>Quasi statutory minimum wage, name: n.a.</td>
<td>20.4%&lt;sup&gt;e&lt;/sup&gt;</td>
<td>by government, bound by fixed rule</td>
</tr>
<tr>
<td>HU</td>
<td>Teljes munkaidőben foglalkoztatottak minimálbére</td>
<td>2.7-2.8%&lt;sup&gt;f&lt;/sup&gt;</td>
<td>through tripartite negotiations</td>
</tr>
<tr>
<td>IE</td>
<td>National Minimum Wage</td>
<td>n/a</td>
<td>by judges or experts committee</td>
</tr>
<tr>
<td>IT</td>
<td>None.</td>
<td></td>
<td>sectoral collective agreements or tripartite wage boards in some sectors</td>
</tr>
<tr>
<td>LT</td>
<td>Minimali mėnesinė alga</td>
<td>6.98%&lt;sup&gt;g&lt;/sup&gt;</td>
<td>by government after non-binding tripartite consultations</td>
</tr>
<tr>
<td>LU</td>
<td>Salaire Social Minimum&lt;sup&gt;h&lt;/sup&gt;</td>
<td>11.2%&lt;sup&gt;i&lt;/sup&gt;</td>
<td>by government, bound by fixed rule</td>
</tr>
<tr>
<td>LV</td>
<td>Minimālā mēneša darba alga</td>
<td>18%&lt;sup&gt;j&lt;/sup&gt;</td>
<td>by government, without fixed rule</td>
</tr>
<tr>
<td>MT</td>
<td>Statutory minimum wage, name: n.a.</td>
<td>n/a</td>
<td>by government, bound by fixed rule</td>
</tr>
<tr>
<td>NL</td>
<td>Wettelijk minimumloon</td>
<td>1.6%&lt;sup&gt;k&lt;/sup&gt;</td>
<td>by government, bound by fixed rule</td>
</tr>
<tr>
<td>NO</td>
<td>None.</td>
<td></td>
<td>(sectoral) collective agreements or tripartite wage boards in some sectors</td>
</tr>
<tr>
<td>PL</td>
<td>Placa minimalna</td>
<td>2%&lt;sup&gt;l&lt;/sup&gt;</td>
<td>by government after non-binding tripartite consultations</td>
</tr>
<tr>
<td>PT</td>
<td>Retribuição Mínima Mensal Garantida (RMMG)</td>
<td>8.7% of full-time employees&lt;sup&gt;m&lt;/sup&gt;</td>
<td>by government, without fixed rule</td>
</tr>
<tr>
<td>RO</td>
<td>Salarul minim pe economie</td>
<td>n/a</td>
<td>by government after non-binding tripartite consultations</td>
</tr>
<tr>
<td>SE</td>
<td>None.</td>
<td></td>
<td>(sectoral) collective agreements or tripartite wage boards in some sectors</td>
</tr>
<tr>
<td>SI</td>
<td>minimalna plaëa</td>
<td>2.8%&lt;sup&gt;n&lt;/sup&gt;</td>
<td>by government, bound by fixed rule</td>
</tr>
<tr>
<td>SK</td>
<td>minimálna mzda</td>
<td>n/a</td>
<td>by government, without fixed rule</td>
</tr>
<tr>
<td>UK</td>
<td>National minimum wage</td>
<td>4.3%&lt;sup&gt;o&lt;/sup&gt;</td>
<td>by judges or experts committee</td>
</tr>
<tr>
<td>US</td>
<td>Minimum wage</td>
<td>4.9% overall; 8.5% for Texas; 5.8% for New Jersey and Nebraska&lt;sup&gt;p&lt;/sup&gt;</td>
<td>by government, without fixed rule</td>
</tr>
</tbody>
</table>

Source: CSB-MIPI (Van Mechelen et al., 2011, p. 10); (Visser, 2011)

Note: Figures are not fully comparable. a EU-SILC 2004 estimate on the share of minimum wage earners; b 2006: % of full-time employees that receives wages less than or equal to minimum wage (interval EEK 2500-3000, minimum wage in 2006: 3000 EEK); c No official data; d Data based on DARES, a survey excluding employees in agriculture, in public administrations (State, local, hospital, social security), in interim enterprises, in associations working in the sector of social action and in family employment; e Rough estimate based on LFS 2007 (percentage of working population earning between €500 and €750, minimum wage in 2007: €658); f2008; g In LU the minimum wage varies between qualified workers and non-qualified workers. The percentage here refers to all employees working for a wage around a minimum wage (both qualified and non-qualified workers). The percentage for non-qualified workers is 6.2%; h 2007; i March 2008, statistics based on the number.
of persons paid around the minimum wage. Statistics refer to private sector only. Not possible to distinguish between resident workers and cross-border workers; j Second quarter of 2009. Minimum (and below) wage earners; k: 2006; l 2007, percentage based on official data of Ministry of Labour and Social Policy. However, this percentage is contested by trade unions; m October 2009; n February 2009; o April 2008 (earning minimum wage or less); p 2009 annual averages.
References


European Parliament (2009), *Active Inclusion of People Excluded from the Labour Market*.


Ferrarini, T., Nelson, K. and Hoog, H. (2012),


Horemans, J. and I. Marx (2013), Part-time work and poverty: an analysis for the EU15., Bonn IZA DP (forthcoming)


Visser, J. (2011), The ICTWSS Database Amsterdam Institute for advanced labour studies (AIAS) University of Amsterdam: http://www.uva-aias.net/207

