In-Work Poverty

Ive Marx and Brian Nolan

GINI Discussion Paper 51
July 2012

Growing Inequalities’ Impacts
In-Work Poverty

Ive Marx
*University of Antwerp*

Brian Nolan
*University College Dublin*
Table of contents

1. Introduction .......................................................................................................................................................... 7

2. Current Debates about In-Work Poverty .............................................................................................................. 9

3. Defining and Measuring In-Work Poverty ........................................................................................................... 11


5. Low Pay: Prevalence and Trends ....................................................................................................................... 17

6. Low-Paid Work and In-Work Poverty ................................................................................................................ 21

   Who are the working poor? ...................................................................................................................................... 22

7. Tackling In-Work Poverty ................................................................................................................................... 25

   Augmenting existing provisions ................................................................................................................................ 26
   In-work benefits .......................................................................................................................................................... 30

8. Conclusion ......................................................................................................................................................... 33

References ............................................................................................................................................................... 35

Tables and Figures .................................................................................................................................................. 39

GINI Discussion Papers ........................................................................................................................................ 41

Information on the GINI project .......................................................................................................................... 45
1. Introduction

While in-work poverty is not a new problem, the degree of attention it is receiving in Europe is more recent, reflecting at least two concurrent sources of concern (Andreß and Lohmann 2008; OECD 2008; European Foundation 2010; Fraser et al. 2011; Crettaz 2011; European Commission 2011). Deindustrialisation, intensifying international trade and skill-biased technological change are said to be threatening if not effectively eroding the (potential) earnings and living standards of some workers in advanced economies. Yet at the same time, policy at EU level and in many countries has become focused on increasing the number of people relying on earnings, and particularly on drawing into the labour market those with the weakest education and work history profiles. The Europe 2020 target of boosting employment rates to 75 per cent of the population aged 20 to 64 shows this drive to be undiminished. Sharply increased unemployment in some countries following on from the onset of the economic crisis has only served to increase the emphasis on getting people into jobs. In light of these trends, there would appear to be legitimate concern that larger sections of the workforce are being expected to rely on jobs that do not generate sufficient income to escape poverty.

This paper starts with a discussion of current debates about in-work poverty and underlying driving forces. It turns to issues of definition and measurement of in-work poverty, which are central to adequate analysis and policy formulation, and then examines the variation across countries and over time in-work poverty using data from EU-SILC. With low-paid work often seen as a key driver, we look at the empirical evidence first about the extent and nature of low pay, and then at its complex relationship with in-work poverty. This brings out that in-work poverty is strongly associated not so much with low hourly pay per se but rather with single-earnership and low work intensity at the household level, as well as working part-time or part-year or on temporary contract at the individual level. Against this background, the remainder of the paper is devoted to what policy can do to prevent or address in-work poverty, starting with an examination of what an incremental augmentation/modification of the traditional minimum income protection provisions for workers could potentially achieve. We then ask whether innovative options such as EITC/WTC type negative income taxes offer a model for emulation. Finally we discuss the broader implications for effective anti-poverty tools and strategies, and how these may differ across institutional settings.
2. Current Debates about In-Work Poverty

In-work poverty is widely seen as a ‘post-industrial’ phenomenon, linked first and foremost to the growth of low-paid insecure employment in the service sector. The contrast is often drawn 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.” By the same token, 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.”

Research by labour economists shows that this picture of a uniform shift away from low skilled work needs to be nuanced (Autor et al. 2003). The post-industrial transition and particularly the impact of technological change have not simply entailed a demand shift away from low-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 (on which see also European Commission 2011). While wage dispersion appears to have increased in a majority of OECD countries over the past twenty-five years, this is more pronounced towards the top than the bottom (OECD 2011). None the less, the available evidence does provide a basis for legitimate concern about a possible rise in low-paid employment, exacerbated by the impact of the economic crisis.

At the same time an increased policy emphasis on 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; Dingeldey 2007; Eichhorst and Konle-Seidl 2008; Aurich 2009). These studies build on mainly qualitative assessments of policy changes, while the 2007 OECD Employment Outlook tentatively concludes, based on country questionnaires, that activation efforts have effectively intensified in a number of countries since the late 1990s. We still lack reliable indicators of actual activation intensity, mainly because implementation aspects are so difficult to measure (e.g. effective sanctioning or effective availability and take-up of training places, subsidized jobs etc.). Within the broad set of activation strategies deployed, an important number specifically target the long-term unemployed, including social assistance recipients. And within this set an important number of meas-
ures are aimed at stimulating these people, who generally have low levels of educational attainment, into relatively low-paid/minimum wage level jobs. Employment subsidies and employers’ social security contribution reductions also generally aim to stimulate the creation and take-up relatively low-paid, or at least minimum-wage level jobs.

From a poverty perspective, it is bound to matter who takes up low paid jobs and under what conditions this is done. If a single person moves from long-term benefit dependency into a minimum wage job this will reduce poverty if (net income at) the minimum wage exceeds the poverty threshold and benefits for the long-term unemployed (social insurance or social assistance) are below that threshold. Similarly, if a potential second earner (un- and non-employed partner of someone in work) moves into low-paid work there may also be a positive effect on (in-work) poverty, provided they are living in a household with disposable income below the poverty threshold and the net increase in income (taking any reduction in benefits or entitlements into account) is enough to bring them above that threshold.

However, even taking up a full-time minimum wage job may not suffice to bring the household out of poverty 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. 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. Similarly, taking up part-time employment may not suffice to bring the household above the poverty threshold, but that may be all that is available, or all that is feasible where affordable child-care cannot be accessed – a particular problem for lone parents.

It is also important to note that movement from unemployment or inactivity into work may also have an indirect effect on conventional poverty measures, in that relative income poverty thresholds may be pushed up. Depending on whether the increase in employment is for the most part occurring in households above or below the poverty threshold, that indirect effect could dampen down or offset the poverty-reducing effect of successful activation. Countries such as Spain or Ireland saw very rapid increases in labour force participation during the boom, which contributed to the rise in median income and thus poverty thresholds there (see for example Whelan et al. 2003).

Hence, the potential impact of such policies 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). We now go on to explore the empirical evidence on patterns and trends over time, first discussing issues of definition and measurement of in-work poverty.
3. Defining and Measuring In-Work Poverty

The literature on the working poor employs a variety of definitions, based on different approaches of what is meant by ‘poor’ and by ‘working’ (for an overview see: Crettaz and Bonoli 2010; Peña-Casas and Latta 2004). The definition adopted for the indicator of in-work poverty now produced by Eurostat as part of the EU’s set of social inclusion indicators is an important focus of attention. For that purpose the working poor are defined and measured 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 per cent of the median in the country in question. Employment status is measured on the basis of monthly calendars completed by survey respondents, with ‘in work’ taken to mean that the status he/she declares to have occupied for at least 7 months is employee or self-employed.

It is widely recognised that analysis of in-work poverty needs to distinguish between employees and the self-employed, both because self-employment is quite distinctive in nature and because survey information on self-employment income is normally less reliable than wages and salaries; the EU indicator can be broken down between these two types of employment, and also between full-time and part-time workers which is another important distinction.1

However, in considering this measure a number of other important issues arise:

- 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.
- Using a year as the reference period for labour market status and income position also complicates interpretation: those working for part but not all of the year may be in poverty on an annual basis for that reason even if they were not poor while working – and how much of the year does one have to work to be counted as ‘working’?

---

1 Studies that have looked specifically at the self-employed do find significant numbers to be at risk of financial poverty, also by the most severe thresholds. But for an important subset of those the overlap with other indicators of financial strain or material deprivation is found to be limited. This suggests that measures of current income are less valid when it comes to capturing the financial resources of the self-employed.
For these and other reasons, 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
- Number of dependent people (children) relative to income…

As we will bring out in reviewing what has been learned from studies of in-work poverty, also employing other measurement approaches can help to clarify the causal processes at work. Some of these are available as breakdowns of the EU’s social inclusion indicator – for example distinguishing employees from the self-employed, and part-time from full-time workers. Others go beyond them, such as measures concentrating on current labour force status and income, or on annual income for those in work all year. We return to these complexities and complementarities, but first look at key patterns and trends using the EU measure which is now playing a central role in analysis and policy debate.

Using data produced by Eurostat from the EU-SILC database for the social inclusion indicator described above, we can see how the prevalence of in-work poverty varies across EU countries. Looking first at the right-hand column of Table 1, this shows the percentage of persons in work living in households falling below 60 per cent of the median income in their own country for 2010 (or 2009 where that is the latest available). We see that the extent of in-work poverty ranges from a low of 4.5 per cent in Austria, Belgium, the Czech Republic, Finland, The Netherlands and Slovenia up to 13-14 per cent in Greece and Spain and 17 per cent in Romania.

Table 1: Percentage of Those in Work At Risk of Poverty, EU 2000–2010.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>6</td>
<td>6.4</td>
<td>6.4</td>
<td>4.9</td>
</tr>
<tr>
<td>Belgium</td>
<td>5</td>
<td>4.2</td>
<td>4.8</td>
<td>4.5</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>7*</td>
<td>5.4</td>
<td>7.5</td>
<td>7.6</td>
</tr>
<tr>
<td>Cyprus</td>
<td>7.2</td>
<td>6.4</td>
<td>7.6</td>
<td>7.0**</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3*</td>
<td>3.5</td>
<td>3.6</td>
<td>3.7</td>
</tr>
<tr>
<td>Denmark</td>
<td>3*</td>
<td>4.5</td>
<td>5.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Germany</td>
<td>4</td>
<td>5.5</td>
<td>7.1</td>
<td>7.2</td>
</tr>
<tr>
<td>Estonia</td>
<td>10</td>
<td>7.5</td>
<td>7.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Spain</td>
<td>8</td>
<td>9.9</td>
<td>10.7</td>
<td>12.7</td>
</tr>
<tr>
<td>Finland</td>
<td>5</td>
<td>4.5</td>
<td>5.1</td>
<td>3.6</td>
</tr>
<tr>
<td>France</td>
<td>8</td>
<td>6.1</td>
<td>6.8</td>
<td>6.6</td>
</tr>
<tr>
<td>Greece</td>
<td>13</td>
<td>13.9</td>
<td>14.3</td>
<td>13.8</td>
</tr>
<tr>
<td>Hungary</td>
<td>6</td>
<td>6.8</td>
<td>5.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Ireland</td>
<td>7</td>
<td>6.2</td>
<td>6.5</td>
<td>5.4**</td>
</tr>
<tr>
<td>Italy</td>
<td>10</td>
<td>9.6</td>
<td>8.9</td>
<td>9.4</td>
</tr>
<tr>
<td>Latvia</td>
<td>13</td>
<td>11.2</td>
<td>11.0</td>
<td>9.7</td>
</tr>
<tr>
<td>Lithuania</td>
<td>14</td>
<td>9.9</td>
<td>9.4</td>
<td>12.3</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>8</td>
<td>10.3</td>
<td>9.4</td>
<td>10.6</td>
</tr>
<tr>
<td>Malta</td>
<td>6</td>
<td>4.1</td>
<td>5.0</td>
<td>5.9</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>6</td>
<td>4.4</td>
<td>4.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Poland</td>
<td>11</td>
<td>12.8</td>
<td>11.5</td>
<td>11.4</td>
</tr>
<tr>
<td>Portugal</td>
<td>14</td>
<td>11.3</td>
<td>11.8</td>
<td>9.7</td>
</tr>
<tr>
<td>Romania</td>
<td>14</td>
<td>..</td>
<td>17.7</td>
<td>17.3</td>
</tr>
<tr>
<td>Slovenia</td>
<td>5</td>
<td>4.8</td>
<td>5.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Slovakia</td>
<td>5</td>
<td>6.3</td>
<td>5.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>5*</td>
<td>7.4</td>
<td>6.8</td>
<td>6.5</td>
</tr>
<tr>
<td>UK</td>
<td>6</td>
<td>7.8</td>
<td>8.5</td>
<td>6.8</td>
</tr>
</tbody>
</table>

* 2001;  ** 2009
Source: EU Social Inclusion Indicators website

Table 1 also shows the corresponding figures for 2006 and 2008, also from EU-SILC, and for 2000 drawn from the European Household Community Panel survey and national sources. It is noteworthy that there was no general tendency for in-work poverty to rise after 2006 despite the onset of the economic crisis: only in six of the
27 countries was a marked increase seen, and in-work poverty fell in a number of others. It could be that, at least in some countries, those who remained in employment during the economic crises were less likely to be below the income poverty threshold than those who lost their jobs, contributing to a decline in in-work poverty; however, unemployment will also have reduced some multi-earner households to a single earner, which would in itself be expected to drive up the number of in-work-poor. Taking the longer span from 2000 to 2010, in-work poverty is seen to have increased over the decade in countries such as Denmark, Germany, Spain, Luxembourg, Romania and Sweden, but fell in more countries than it rose. Abstracting altogether from the crisis period, comparison of 2000 with 2006 also fails to show a marked rise in in-work poverty in many countries. The common presumption of such a trend is therefore not supported, over the period from 2000, by this data and indicator. However, the fact that the sources of data for 2000, unlike the later years, are not EU-SILC means that the trends shown has to be treated with some caution.

The OECD has produced figures relating to trends in in-work poverty covering the decade from the mid-1990s to the mid-2000s, but ‘working’ is this instance is defined as having at least one person in work in the household (see OECD 2009). Drawing on a variety of sources but seeking to apply a uniform methodology, the OECD found in-work poverty to have increased substantially in EU countries such as Germany, The Netherlands and Luxembourg over this decade, but with some other countries such as Italy seeing substantial declines. The study by Airio (2008) of the period 1970-2000 covering six OECD countries (and mostly based on data from the Luxembourg Income Study) concludes that it is difficult to find any common trend in in-work poverty. Great care which must be exercised in drawing strong conclusions about levels and trends in in-work poverty across countries, since fundamental differences in approach and definitions, as well as in data and period covered, can all affect the outcome.

This caution must extend to the way ‘poverty’ as well as ‘working’ is defined: income poverty thresholds held constant in purchasing power terms over time are likely to give very different results to ones moving in line with median household income. The latter will be influenced not only by the trajectory of gross earnings but also by what is happening to other market income sources (notably rent, interest and dividends) and trends in cash transfers, direct taxes and social insurance contributions. Where profits are rising more rapidly than wages, where direct taxes or social insurance contributions are being cut so net wages grow more rapidly than gross wages, or where increasing employment is concentrated in households where there is already someone in work, relative income thresholds at the household level may rise considerably more rapidly than average gross earnings for individuals – as seen for example in Ireland, Italy, Poland and Spain in the period from 2000 up to the onset of the economic crisis. Alternative ways of framing income poverty thresholds can be helpful in disentangling the underlying pro-
cesses and interpreting headline in-work poverty indicators framed in purely relative terms, and can also usefully be complemented with measures of material deprivation (now included among the EU’s social inclusion indicators – see for example Nolan and Whelan 2011). However, most research on in-work poverty has focused on relative income measures, and for current purposes we follow that approach.
5. Low Pay: Prevalence and Trends

In view of the strong perceived link between low-paid work and in-work poverty in recent debates, as outlined earlier, we now consider what empirical analysis suggests about trends in low pay and its relationship to in-work poverty.

Is low-paid work becoming more pervasive across Europe?

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).

The OECD’s low pay database, the most widely-cited source of comparative data on the extent of low pay, shows the proportion of low-wage workers in rich countries ranging from around one in twenty in Sweden to around one in four in the United States. 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). In fact, the OECD database suggests that the largest increases in low pay (for full-time workers) have taken place in countries like Denmark, Germany and Poland (OECD 2011). The overall conclusion advanced by the OECD on the basis of this database, as already noted in section 2, is that wage dispersion has widened in a clear majority of OECD countries in recent years, with this being more pronounced towards the top than the bottom. National studies also show increasing levels of low pay in countries such as Germany, the Netherlands and the USA.

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 drastic labour market and social security reform has coincided with a rise in low-paid work (Bosch and Weinkopf 2008; Kenworthy 2011).

Most comparative research on low pay has compared the Angle-Saxon countries with the ‘continental’ and Scandinavian countries of the ‘old’ EU-15, but a more comprehensive picture of low pay in Europe can now be derived from data covering the enlarged EU. These come from the EU Statistics on Income and Living Conditions
(EU-SILC) data-gathering framework designed to produce a range of harmonised indicators for the Union, notably with respect to social inclusion.

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 is the 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.² 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 therefore use the microdata from EU-SILC for 2007 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).³ Seven countries had to be excluded because of extensive missing data on the relevant variables,⁴ so the results in Table 1 cover 20 of the 27 Member States. We see that for all full-year employees the low pay rate ranges from about 15 per cent to over 30 per cent.

² Studies show temporary workers and part-time workers, particularly involuntary part-time workers, to be at a higher risk of poverty, be it with very considerable cross-country variation (see i.a. Van Lancker 2012 and Horemans and Marx 2012).
³ To 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.
⁴ These were Bulgaria, Greece, Italy, Latvia, Malta, Portugal and Romania.
Table 2: Low Pay for Full-year Employees, Annual Income, EU 2007.

<table>
<thead>
<tr>
<th></th>
<th>% Below 2/3 Median Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Full-year Employees</td>
</tr>
<tr>
<td>Austria</td>
<td>21.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>15.0</td>
</tr>
<tr>
<td>Cyprus</td>
<td>23.8</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>19.0</td>
</tr>
<tr>
<td>Germany</td>
<td>31.1</td>
</tr>
<tr>
<td>Denmark</td>
<td>13.9</td>
</tr>
<tr>
<td>Estonia</td>
<td>23.2</td>
</tr>
<tr>
<td>Spain</td>
<td>20.0</td>
</tr>
<tr>
<td>Finland</td>
<td>14.4</td>
</tr>
<tr>
<td>France</td>
<td>16.3</td>
</tr>
<tr>
<td>Hungary</td>
<td>23.9</td>
</tr>
<tr>
<td>Ireland</td>
<td>27.7</td>
</tr>
<tr>
<td>Lithuania</td>
<td>27.5</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>27.9</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>24.8</td>
</tr>
<tr>
<td>Poland</td>
<td>24.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>20.7</td>
</tr>
<tr>
<td>Slovenia</td>
<td>19.4</td>
</tr>
<tr>
<td>Slovakia</td>
<td>17.4</td>
</tr>
<tr>
<td>UK</td>
<td>25.8</td>
</tr>
</tbody>
</table>

Source: Analysis of EU-SILC microdata

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.\(^5\) Concentrating on full-time full-year employees, the second column in Table 1 shows that the extent of low pay then ranges from a low of 10 per cent up to a high of 28 per cent.\(^6\) If one thinks in terms of the conventional categorisation into welfare regimes, Denmark and Finland from the Scandinavian regime are among the lowest with 11 per cent low paid, but Sweden is considerably higher at 16 per cent. Among the corporatist countries Belgium, France and the Netherlands have relatively low levels of 10-14 per cent, but Austria and Germany are higher at 16 per cent and 22 per cent respectively. The UK and Ireland, representing the Anglo-Saxon regime, are in the 19-22 per cent range. Spain is the only one of the Southern ‘old’ member states covered with 17 per cent, while Cyprus is at 23 per cent. The Czech Republic, Slovakia and Slovenia, among the more affluent post-socialist countries, are in the 16-19 per cent range, although Hungary is higher with Poland and Estonia at 23 per cent, with Lithuania a good deal higher at 27 per cent. (The change from the ECHP to EU-SILC as the base for common EU data makes assessment of medium-term trends over time difficult.)

---

\(^5\) Very few work part-time in the eastern European Member States but one-fifth of full-year workers in Belgium and the UK do so, rising to 40 per cent in the Netherlands where so many women work part-time.

\(^6\) 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.
These figures bring out that low pay affects a substantial proportion of those working full-time for the entire year in most EU countries, well in excess of 10 per cent in all but four of the countries covered. There is variation in the extent of low pay across the different welfare regimes conventionally distinguished but none entirely escapes it. This remains the case when we incorporate available estimates for other countries on the basis of the OECD low pay database. These figures confirm the comparatively high incidence of low pay in countries like Hungary and Poland, where the levels are similar to Canada and the USA.

Research on the varying extent of low-wage employment suggests that labour market institutions, in particular centralized wage-bargaining, union power and minimum wages, play a key role (Lucifora and Salverda, 2008). Here though our core concern is not chiefly with low pay per se, but with its implications for in-work poverty. In that context, the characteristics of the workers most likely to experience low pay are key. Low pay is generally highly concentrated not just in particular sectors of the economy but among particular kinds of worker – with those having low levels of education, those working part-time, non-nationals, women and young people having rates well above the average. This has fundamental implications for the relationship between low pay and household poverty, as we shall see.
6. Low-Paid Work and In-Work Poverty

While in-work poverty is clearly significant across the EU and OECD, 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. Marx and Verbist (1998), for example, using LIS data for the early 1990s found the overlap between low pay and poverty to be in the order of 5 to 10 per cent in most industrialized economies. Other studies have confirmed this (OECD, 2009). 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). Studies based on data from the European Community Household Panel (ECHP) showed that in the mid-late-1990s about 80 per cent or more of low paid in EU-15 countries were in the 3rd-5th disposable income quintile (Nolan and Marx 2001). (Some, however, were only just above the poverty line, which points to the role of low paid work in preventing income poverty.)

We can verify that picture for the enlarged EU by linking the EU-SILC data on earnings and low pay analysed in Table 2 to the incomes of the households involved. Table 3 compares the income poverty rates for low-paid workers across different household types. 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 (28 per cent) than it is for a second earner in a couple (2 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. 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.
Table 3: Income Poverty Risk for Low Paid Earners, by household position, EU 2007.

<table>
<thead>
<tr>
<th></th>
<th>SINGLE PERSON</th>
<th>SINGLE PARENT</th>
<th>SINGLE EARNER</th>
<th>DUAL EARNER, 1ST EARNER</th>
<th>DUAL EARNER, 2ND EARNER</th>
<th>OTHER FTFY WORKER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUSTRIA</strong></td>
<td>33</td>
<td>39</td>
<td>47</td>
<td>26</td>
<td>2</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td><strong>BELGIUM</strong></td>
<td>14</td>
<td>12</td>
<td>28</td>
<td>11</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td><strong>BULGARIA</strong></td>
<td>26</td>
<td>87</td>
<td>46</td>
<td>33</td>
<td>4</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td><strong>CYPRUS</strong></td>
<td>39</td>
<td>36</td>
<td>38</td>
<td>19</td>
<td>1</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td><strong>CZECH REPUBLIC</strong></td>
<td>26</td>
<td>46</td>
<td>19</td>
<td>11</td>
<td>1</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td><strong>GERMANY</strong></td>
<td>33</td>
<td>36</td>
<td>36</td>
<td>22</td>
<td>3</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td><strong>DENMARK</strong></td>
<td>42</td>
<td>46</td>
<td>24</td>
<td>24</td>
<td>1</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td><strong>ESTONIA</strong></td>
<td>29</td>
<td>82</td>
<td>26</td>
<td>24</td>
<td>2</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td><strong>SPAIN</strong></td>
<td>29</td>
<td>63</td>
<td>53</td>
<td>29</td>
<td>3</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td><strong>FINLAND</strong></td>
<td>28</td>
<td>14</td>
<td>29</td>
<td>9</td>
<td>2</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td><strong>GREECE</strong></td>
<td>13</td>
<td>29</td>
<td>78</td>
<td>18</td>
<td>3</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td><strong>HUNGARY</strong></td>
<td>41</td>
<td>57</td>
<td>40</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td><strong>IRELAND</strong></td>
<td>17</td>
<td>20</td>
<td>41</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>ICELAND</strong></td>
<td>35</td>
<td>65</td>
<td>44</td>
<td>34</td>
<td>7</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td><strong>ITALY</strong></td>
<td>38</td>
<td>54</td>
<td>73</td>
<td>39</td>
<td>3</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td><strong>LITHUANIA</strong></td>
<td>18</td>
<td>76</td>
<td>59</td>
<td>29</td>
<td>5</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td><strong>LUXEMBOURG</strong></td>
<td>40</td>
<td>67</td>
<td>59</td>
<td>12</td>
<td>0</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td><strong>LATVIA</strong></td>
<td>29</td>
<td>70</td>
<td>50</td>
<td>18</td>
<td>3</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td><strong>THE NETHERLANDS</strong></td>
<td>2</td>
<td>59</td>
<td>39</td>
<td>9</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td><strong>NORWAY</strong></td>
<td>30</td>
<td>31</td>
<td>37</td>
<td>15</td>
<td>3</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td><strong>PORTUGAL</strong></td>
<td>28</td>
<td>27</td>
<td>46</td>
<td>33</td>
<td>3</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td><strong>ROMANIA</strong></td>
<td>19</td>
<td>60</td>
<td>71</td>
<td>45</td>
<td>7</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td><strong>SWEDEN</strong></td>
<td>17</td>
<td>58</td>
<td>64</td>
<td>24</td>
<td>2</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td><strong>SLOVENIA</strong></td>
<td>43</td>
<td>15</td>
<td>43</td>
<td>25</td>
<td>4</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td><strong>SLOVAKIA</strong></td>
<td>39</td>
<td>67</td>
<td>56</td>
<td>33</td>
<td>2</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td><strong>SWITZERLAND</strong></td>
<td>43</td>
<td>62</td>
<td>51</td>
<td>51</td>
<td>11</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td>15</td>
<td>30</td>
<td>41</td>
<td>14</td>
<td>0</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Analysis of EU-SILC microdata

Who are the working poor?

The core of the working poor consists of workers who are sole earners and have a family to support. 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 for example European Foundation (2004) and European Commission (2011), the roots of in-work poverty are to be found in the interaction of a variety of factors at individual and house-
hold level: low education/skills, gender and age, but also the size and composition of the household – in particular distinguishing single-adult from couple or multi-adult households - and the proportion of working-age adults in work throughout the year.

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, 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. The analysis in European Commission (2011) brings out a similar complex set of interactions, highlighting inter alia the high risk faced by those working part-time or part-year, and those in temporary rather than permanent contracts.

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.
7. Tackling In-Work Poverty

We now move on to a discussion of policy options to tackle in-work poverty. Two prior considerations are in place. First, the working poor do not constitute a well-delineated, homogenous group, visible and easily ‘targetable’ for policy. While for example social assistance recipients, or more generally people wholly reliant on transfers, are unambiguously at a very high risk of poverty and (seen to be) deserving of policy intervention, the working poor are more heterogeneous. Only a small percentage of workers are at risk, and even the risks for low paid workers, or for that matter, part-time or atypical workers are not uniformly high. It is only within specific household configurations that workers face a substantial risk. They are also less visible, leading ‘below the radar’ normal lives, going out to work and raising children.

A second consideration is that 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-work poverty can be construed. In-work poverty in Europe, as it is conventionally measured, is to a considerable extent concentrated among low work intensity households, for example dual adult households with only one working adult. Whether their at risk of financial poverty status is construed as a problem of insufficient breadwinner earnings or as a problem of partner non-participation makes a fundamental difference as to what type of policy action is to be examined and possibly favoured. This is essentially requires a normative judgement. 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 tackle in-work poverty. One can think of that toolset as consisting of policies distinguishable on two dimensions, as shown in Figure 1. 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

---

7 The relevant normative considerations are likely to be more sophisticated and complex than we present them here. Vandenbroucke (2001) for example elaborates a normative framework that builds both on normative conceptions of personal responsibility for work effort as on normative conceptions of well-being.
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). 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 1: The policy toolbox to address in-work poverty.

<table>
<thead>
<tr>
<th>DIRECT INCOME SUPPORT</th>
<th>INCREMENTAL OPTIONS</th>
<th>NEW OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- raising the minimum wage/wage floors through regulation</td>
<td>- negative income taxes</td>
<td>- means-tested in work benefits</td>
</tr>
<tr>
<td>- (targeted) tax relief</td>
<td>- (targeted) reductions of employee social security contributions</td>
<td></td>
</tr>
<tr>
<td>- (targeted) child benefits</td>
<td>- Innovative demand oriented policies (e.g. service cheques)</td>
<td></td>
</tr>
<tr>
<td>INDIRECT SUPPORT</td>
<td>- upskilling/training</td>
<td>- Innovative supply focused policies (empowerment)</td>
</tr>
<tr>
<td>- demand policies (subsidized employment, wage cost subsidies)</td>
<td>- active labour market policies</td>
<td></td>
</tr>
<tr>
<td>- facilitating labour participation (e.g. child care)</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Augmenting existing provisions

For decades, gradual increases in legal minimum wages, or de facto minimum wages agreed in collective labour agreements, contributed to the improvement of the living standards of low paid workers and their families. Minimum wages, in combination with child related benefits, constituted the main pillar of minimum income protection for workers, while in work.

The number of European countries with a minimum wage has increased over the past two decades. The early 1990s saw the introduction of minimum wages in the formerly Communist countries that are now part of the European Union. The United Kingdom introduced a national minimum wage in 1999 and Ireland one year later. Recent developments in Austria point towards an introduction of a national minimum wage, since an agreement between the trade unions and the employers became applicable as of January 2009, establishing a minimum wage covering almost the entire private sector. In 2010, nineteen Member States of the European Union had a national minimum wage, set by government, sometimes in cooperation with or on the advice of the social partners, or by the social partners themselves in a national agreement.

What is their effectiveness today in terms of offering protection against poverty? Before we move on to address that question, we should note that, in large part, the historical function of the minimum wage has been to ensure ‘fair wages’ and to prevent ‘unfair competition’. Clearly, here we are mainly concerned with the role of
minimum wages in protecting workers against poverty. To gauge this we draw on the CSB Minimum Income Protection Indicators Database. This is a national expert sourced database containing data relating to social assistance and minimum wages for the EU25 countries. For the EU15 countries the database spans the period 1992-2009, for the EU10 countries the period 2001-2009.

Relative to average earnings there is considerable variation in Europe in 2009. As a percentage of gross average earnings, minimum wages range from around 30 to 50 per cent. This would suggest that there may be scope for substantial increases in some countries. However, given that most low-paid workers are not the principal earners in the household where they live, and thus not in poor households, increases in the minimum wage may have a relatively limited impact on poverty, with most of the benefit (even in the absence of possible negative effects on employment) going to non-poor households (Nolan and Marx 2001).

Still, it is relevant to ask how adequate minimum wages are for households that have to rely solely on that income. Table 3 shows the net income –taking into account taxes and personal social security contributions at minimum wage level for a single person household without dependent children. For single persons, net incomes at a full minimum wage exceed the 60 per cent poverty threshold comfortably in most of the EU15 countries, with Spain and the UK as notable exceptions. For the EU10 countries, the picture is more mixed.

Turning to a ‘traditional’ single breadwinner household with dependent children the picture becomes entirely different. As also shown in Table 3, not a single EU country, except Sweden, a two adult household with 2 children can subside on a net income at provided by the minimum wage. Note that the net income calculation in this graph takes account of child benefits and child related tax allowances. The gap is quite significant in most countries; in the best performing countries after Sweden it is 10 per cent of median equivalent income. This is in part a matter of taxation and social security contributions, but even without taxation the gap would remain quite significant in most countries.

If both partners work and have full-time job at minimum wage they are in few countries at risk of financial poverty unless they have a relative large number of dependents. Double earnership provides an almost watertight guarantee against financial poverty, including at minimum wage, provided that both partners work full time and that not too many dependents rely on that income.

Clearly, these cases are to be taken a stylized examples. In the real world these type cases are rare, if only because small proportions of workers actually work for the minimum wage. Minimum wages effectively serve a kind of benchmark purpose in many countries marking the ground floor of the wage building. Also, the stylized examples presented here assume full-time work, while low paid work is proportionally more prevalent among part-time workers.
These stylized cases do however help us to think about the potential benefits and limits of policy alternatives. In that context it is arguably particularly relevant to consider the policy options as these pertain to full time workers, simply because they could well be considered as those most deserving of direct income support or tax relief.

So what are the prospects for improvement? It is important to consider this question seriously because discussions about reducing in-work poverty tend to focus strongly on the question of raising minimum wages and/or reducing taxes on low-income households.

It is perhaps useful to consider trends over the past decade first. In real terms, minimum wages increased in most EU countries in the period 2001-2009, especially in the EU12 countries. However, these real increases translate into a far more diverse picture relative to average earnings. From Figure 1, 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 were they were highest in 2001, minimum wages generally declined relative to average wages.

Where average living standards, and hence relative poverty thresholds, have been pushed up not by real wage growth but by other factors, the minimum wage has had even more difficulty keeping pace. This is shown in figure 2b, which shows that relative to relative poverty thresholds, minimum wages did not keep pace in the period 2001-2009, except in a minority of countries where these were initially comparatively low. In circumstances where living standards rise faster than average wages, the minimum wage increases needed to improve their potential poverty impact would have to exceed average wage growth resulting in more compressed wages.

As for the potential of minimum wages at realistic, or at least effectively prevalent levels in some countries, it is clear that in the case of one adult alone, a sufficiently high minimum wage can clearly provide adequate protection on its own, if tax and social insurance deductions at that earnings level are not prohibitively high. For a single adult with children, a minimum wage at the upper range of the prevailing relative levels can be enough (depending on the number of dependent children), provided that taxes and social insurance contribution are sufficiently low, and child benefits provide sufficient additional income support. In the case of sole breadwinner couples with multiple dependent children, even a minimum wage significantly higher than the currently prevailing relative levels will not nearly suffice, even at hypothetical zero taxation.

In countries where minimum wages are presently low relative to average wages there may be scope for gradual but substantial increases; in countries where these have deteriorated relative to average wages there may be scope for some catch-up growth. However, it is essential to keep firmly in mind that, in most European countries, the vast majority of low-paid workers are not living in households in financial poverty. Studies suggest that even in those
cases where the overlap between low pay and household poverty is the greatest, as is the case in the United States, increases in the minimum wage have a relatively limited impact on poverty or income inequality and a substantial spill-over to the non-poor (see, for example, Horrigan and Mincey 1993; Neumark and Wascher 1997; Formby et al. 2005; 2010). Similarly, Gosling (1996) and Sutherland (2001) found the potential poverty-reducing effect of the national minimum wage in the UK context to be very small. Marx et al. (2012a) demonstrate that for Belgium, even substantially higher minimum wages would have a limited impact on in-work poverty, and at the cost of significant spill-overs to households in the middle and upper regions of the income distribution. Similar results are reported by Müller and Steiner (2008) for Germany, Figari (2009) for Southern European countries, Formby et al. (2010) for the United States.

It is worth stressing again at this point that we are considering minimum wage only from the perspective of their direct impact on living standards. It may well be the case that low pay forces families to opt for a level of work intensity that yields a suboptimal level of well-being in comparison with the level of well-being they could legitimately attain by working less – if wages would be higher. Minimum wages may also play a crucial role in countering the possible wage erosion effects of direct subsidies to low paid individuals and households.

Another potential policy route is not increasing the minimum wage itself but rather reducing the level that is taken away through taxes and social contributions. Social contributions are by their very logic taken from individual wages while taxes can be either personal or household based. The effective tax rate imposed by personal taxes and social security contributions tends to be substantial in many countries (Immervoll and Pearson 2009; Marx et al. 2012b). A lot depends on household composition, with households with dependent children generally being treated more favourably. Still, levels are substantial enough to effectively tax households into poverty in some cases.

Thus there is some scope for improving the income position of low wage households through cuts in employee social contributions and personal income taxes. The most substantial scope for manoeuvre remains at the level of social security contributions since these tend to be more substantial than taxes. Some countries have already effectively introduced reductions of employees’ social contributions on low wages, thus increasing the income progressivity of social contributions and taxes, a route to which there are arguably limits given that such contributions serve to open rights to social security benefits (Immervoll 2007; Marx et al. 2012b). The primary motivation here, however, has been to increase work incentives.
When it comes to payroll tax relief, policy makers face the same problem as with minimum wages, be it that the trade-off is even more severe given that any reduction in social security contributions very directly results in foregone income. Given the very limited overlap between low paid work and household poverty that is problematic. A limited number of poor households would see their income improve as a consequence, while most of the benefits would effectively flow to non-poor households.

Income tax alleviation can be better targeted because tax systems tend to take account of household income and circumstances, be it that the tendency is towards individualisation of taxation. Thus tax administrations are generally better equipped to implement measures targeted at low earnings households as opposed to low earnings individuals. The main limitation here is that low earnings households are already taxed very lightly. In addition, an analysis of gross minimum wages relative to poverty thresholds (not shown here, but available from the CSB MIPI dataset) makes clear that in many countries even a hypothetical zero taxation of minimum wage workers would not suffice to make that income sufficient to live free from poverty, especially the case for sole earner households with dependent children (Marx et al. 2012b).

A final incremental option are more generous child benefits and other forms of child contingent income support. Such payments could provide the additional income required to escape financial poverty, but this will depend on the set-up of the child support system. If such benefits are universal (i.e. not means tested), the overall increase required to lift a relatively small segment of the population out of poverty would be quite substantial in most countries, at a very substantial spill-over cost to non-poor households. Means-tested (additional) child benefits could be more effective, be it theoretically at the cost of severe wage mobility disincentives and disincentives for potential additional workers. Corak et al. (2005) show that the best performing countries in terms of poverty reduction tend to have systems of universal child benefits and tax concessions that are not particularly strongly targeted at low income children. Indeed, in the best performing countries more tends to be spent on non-poor children than on the poor. Strikingly, countries like the United Kingdom and Ireland, which rank as above average spenders on child contingent benefits, but target most by income, are among the worst performing countries in terms of child poverty outcomes.

In-work benefits

The option to consider, therefore, are other forms of (targeted) income supplements for households having to make ends meet on low earnings. But governments face a trade-off here. Kenworthy (2011, 44): “Given the importance of employment and working hours for the market incomes of low-end households, policy makers

---

8 See also Bradbury and Jantti (2001), Whiteford and Adema (2006).
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”.

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.”

Under these schemes households with low earnings do not pay taxes but instead they get 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 of working age. The United Kingdom has also implemented and extended several schemes (and it fact did so earlier than the US), culminating in the Working Tax Credit (WTC) of 2003 (Brewer et al. 2006). 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) and the ‘Revenu de Solidarité Active’ (rSa) in France, the ‘Combination Credit’ in the Netherlands, and a ‘Low Wage Tax Credit’ in Belgium (Marx and Verbist 2008a). Yet the reality is that most of these schemes exhibit only a faint resemblance to the EITC or the WTC. The UK Working Tax Credit, to be replaced by the Universal Credit, remains the most important measure of its kind in Europe, both in terms of scope and budget.

Nevertheless, interest remains strong, in the public debate and in the academic literature (Marx and Verbist 2009; Kenworthy 2011; Figari 2011, Allègre and Jaerhling 2011; Crettaz 2011, Marx et al. 2012). That interest seems entirely legitimate. The empirical evidence shows the EITC, in combination with other policy reforms and several increases in the minimum wage, to have produced some striking 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).

Yet whether EITC type schemes can work elsewhere, as Kenworthy (2011) and others suggest, is not so self-evident. It is worth remembering that 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.
As Marx et al. (2012) demonstrate in a micro-simulation for Belgium, 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 given that the lower end of the household earnings distribution is so densely populated in Belgium, as is the case in some other 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. In addition, from the perspective of horizontal equity and public support for the system there are probably also limits to strongly targeted tax measures.

A similar simulation by Figari (2011) for four southern European countries (Italy, Spain, Portugal and Greece) sheds similar doubt over the universal applicability of EITC or WTC type systems. 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 (with female employment rates already low there). Figari also notes that the presence of extended families in southern Europe does not allow for such policies to be well targeted at the very poorest.

In one of the earliest studies, 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. They 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 another settings. 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.
8. Conclusion

In-work poverty has become a major preoccupation at the same time that policy has become strongly focused on maximizing levels of labour market participation. This paper has brought out that this may reflect a degree of mis-perception, that in-work poverty has been increasing strongly in most countries and is very tightly linked to increasing levels of low pay. Empirical analysis of microdata in a comparative setting reveals a much more nuanced picture. Trends in in-work poverty vary across countries, and in-work poverty is strongly associated not so much with low pay as with single-earnership and low work intensity at the household level, linking in turn to institutional settings and structures in the labour market, tax and benefit system and broader welfare state.

However, employment oriented policies are centre stage and this is reinforced by the challenges posed by the economic crisis. The problem of in-work poverty, as it is conventionally measured and reported, is to a large extent associated with low work intensity at the household level. This brings into view a wide variety of potential policies that can help households to optimize, if not maximize their work intensity. 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. At the supply side, policy can stimulate (e.g. through fiscal reform) or support (e.g. through childcare) people to take up work or to increase working hours. What mix of policies will work best in a given context will depend on the composition of the low work intensity population and on the underlying causes of low work intensity. These may vary considerably across countries and across population segments (Corluy and Vandenbergroucke forthcoming).

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 (Marx et al. 2012c). 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.

In some EU countries minimum wages remain non-existent or low relative to average wages. As we have seen, minimum wages in a range of European countries do suffice to keep single persons reliant on these out of poverty. Thus it would appear sensible for countries with non-existent or very low minimum wages to contemplate introducing or increasing these. However, the route of introducing or boosting minimum wages to the upper ranges currently prevailing in Europe (relative to average earnings) would, even in the absence of negative employment
effects, not be sufficient to eradicate in-work poverty. Even in countries where minimum wages are comparatively high they do not suffice to keep sole breadwinner household out of poverty, especially when there are dependent others or children. Minimum wages have probably become inherently constrained in providing minimum income protection to sole breadwinner households, especially in countries where relative poverty thresholds have become essentially determined by dual earner living standards.

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. We have emphasised that the socio-demographic, economic and institutional context remains vastly different in much of the rest of Europe and that such ‘tax credits’, while demonstrably effective in particular settings and for particular groups, do not appear to offer a model for wholesale emulation. Moreover, Anglo-Saxon type tax credits are strongly targeted, which implies a potential cost in terms of mobility ‘traps’ and wage erosion. From the perspective of horizontal equity and public support for the system there may also be limits to such strongly targeted measures. By contrast, less strongly targeted income supplements, like for example universal (but possibly categorically or otherwise modulated) child benefits, can have an immediate impact on poverty among those at high risk (i.e. child rich households) without adversely affecting work incentives between workers and non-workers, although an income effect may have a dampening effect on labour supply among both categories. But for such benefits to be effective across the board as an anti-poverty device they need to be high, even when to some extent categorically differentiated or income modulated. This inevitably comes at a significant budgetary cost.
References


Table 4: Net disposable income of a minimum wage earner as a percentage of equivalent median income, by household type, EU, 2009.

<table>
<thead>
<tr>
<th></th>
<th>Single</th>
<th>Couple</th>
<th>Couple, two children</th>
<th>Lone parent + 2 children</th>
<th>Lone parent + 1 child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>66</td>
<td>50</td>
<td>47</td>
<td>57</td>
<td>84</td>
</tr>
<tr>
<td>Belgium</td>
<td>78</td>
<td>61</td>
<td>51</td>
<td>61</td>
<td>66</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>47</td>
<td>31</td>
<td>32</td>
<td>41</td>
<td>35</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>53</td>
<td>46</td>
<td>48</td>
<td>53</td>
<td>41</td>
</tr>
<tr>
<td>Denmark</td>
<td>91</td>
<td>47</td>
<td>36</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Estonia</td>
<td>47</td>
<td>35</td>
<td>26</td>
<td>37</td>
<td>45</td>
</tr>
<tr>
<td>Finland</td>
<td>76</td>
<td>51</td>
<td>41</td>
<td>62</td>
<td>68</td>
</tr>
<tr>
<td>France</td>
<td>72</td>
<td>53</td>
<td>44</td>
<td>51</td>
<td>64</td>
</tr>
<tr>
<td>Germany</td>
<td>80</td>
<td>61</td>
<td>49</td>
<td>57</td>
<td>62</td>
</tr>
<tr>
<td>Greece</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hungary</td>
<td>57</td>
<td>42</td>
<td>42</td>
<td>51</td>
<td>52</td>
</tr>
<tr>
<td>Ireland</td>
<td>71</td>
<td>47</td>
<td>42</td>
<td>53</td>
<td>29</td>
</tr>
<tr>
<td>Italy</td>
<td>70</td>
<td>55</td>
<td>50</td>
<td>45</td>
<td>61</td>
</tr>
<tr>
<td>Latvia</td>
<td>77</td>
<td>53</td>
<td>38</td>
<td>48</td>
<td>46</td>
</tr>
<tr>
<td>Lithuania</td>
<td>49</td>
<td>33</td>
<td>26</td>
<td>33</td>
<td>44</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>54</td>
<td>55</td>
<td>51</td>
<td>52</td>
<td>55</td>
</tr>
<tr>
<td>Netherlands</td>
<td>73</td>
<td>57</td>
<td>46</td>
<td>61</td>
<td>72</td>
</tr>
<tr>
<td>Norway</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Poland</td>
<td>66</td>
<td>45</td>
<td>38</td>
<td>46</td>
<td>47</td>
</tr>
<tr>
<td>Portugal</td>
<td>57</td>
<td>37</td>
<td>27</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Romania</td>
<td>74</td>
<td>50</td>
<td>45</td>
<td>58</td>
<td>56</td>
</tr>
<tr>
<td>Slovakia</td>
<td>54</td>
<td>36</td>
<td>31</td>
<td>40</td>
<td>49</td>
</tr>
<tr>
<td>Slovenia</td>
<td>50</td>
<td>39</td>
<td>40</td>
<td>51</td>
<td>45</td>
</tr>
<tr>
<td>Spain</td>
<td>51</td>
<td>34</td>
<td>24</td>
<td>31</td>
<td>42</td>
</tr>
<tr>
<td>Sweden</td>
<td>74</td>
<td>74</td>
<td>60</td>
<td>67</td>
<td>76</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>44</td>
<td>36</td>
<td>41</td>
<td>53</td>
<td>54</td>
</tr>
</tbody>
</table>

Note: Data for FI, SE, DE and DK refer to 50% of average wage. Data for Italy are based on the minimum wage in the low-paid leather and fur sector.
Source: net disposable income: CSB-MIPI (Van Mechelen et al. 2010); exchange rates and poverty thresholds from Eurostat online data base (extracted in June 2010); own calculations
Figure 2A: The evolution of gross minimum wages relative to average wages 2001–2009, countries ranked from left to right by initial level in 2001.

Source: CSB-MIPI database (Van Mechelen et al., 2010)
Note: Note: LU is not included as no information is available on gross average wage in 2008. EL is not included as we did not yet receive the Greek data.

Figure 2B: Evolution of real minimum wages relative to real relative poverty thresholds, 2001–2009.

Source: CSB-MIPI Database (Van Mechelen et al., 2010)
GINI Discussion Papers

Recent publications of GINI. They can be downloaded from the website www.gini-research.org under the subject Papers.

Natascha Van Mechelen and Jonathan Bradshaw
July 2012

DP 49  From Universalism to Selectivity: Old Wine in New Bottles for Child Benefits in Europe and Other Countries
Tommy Ferrarini, Kenneth Nelson and Helena Höög
July 2012

DP 48  Public Opinion on Income Inequality in 20 Democracies: The Enduring Impact of Social Class and Economic Inequality
Robert Andersen and Meir Yaish
July 2012

DP 47  Support for Democracy in Cross-national Perspective: The Detrimental Effect of Economic Inequality
Robert Andersen
July 2012

DP 46  Analysing Intergenerational Influences on Income Poverty and Economic Vulnerability with EU-SILC
Brian Nolan
May 2012

DP 45  The Power of Networks. Individual and Contextual Determinants of Mobilising Social Networks for Help
Natalia Letki and Inta Mierina
June 2012

DP 44  Immigration and inequality in Europe
Tommaso Frattini
January 2012

DP 43  Educational selectivity and preferences about education spending
Daniel Horn
April 2012

DP 42  Home-ownership, housing regimes and income inequalities in Western Europe
Michelle Norris and Nessa Winston
May 2012

DP 41  Home Ownership and Income Inequalities in Western Europe: Access, Affordability and Quality
Michelle Norris and Nessa Winston
May 2012

DP 40  Multidimensional Poverty Measurement in Europe: An Application of the Adjusted Headcount Approach
Christopher, T. Whelan, Brian Nolan and Bertrand Maître
July 2012

DP 39  Socioeconomic gradient in health: how important is material deprivation?
Maite Blázquez, Elena Cottini and Ainhoa Herrarte
March 2012

DP 38  Inequality and Happiness: a survey
Ada Ferrer-i-Carbonell and Xavier Ramos
March 2012
DP 37 Understanding Material Deprivation in Europe: A Multilevel Analysis
Christopher T. Whelan and Bertrand Maître
March 2012

Christopher T. Whelan and Bertrand Maître
July 2012

DP 35 Unequal inequality in Europe: differences between East and West
Clemens Fuest, Judith Niehues and Andreas Peichl
November 2011

DP 34 Lower and upper bounds of unfair inequality: Theory and evidence for Germany and the US
Judith Niehues and Andreas Peichl
November 2011

DP 33 Income inequality and solidarity in Europe
Marii Paskov and Caroline Dewilde
March 2012

DP 32 Income Inequality and Access to Housing in Europe
Caroline Dewilde and Bram Lancee
March 2012

DP 31 Forthcoming: Economic well-being... three European countries
Virginia Maestri

DP 30 Forthcoming: Stylized facts on business cycles and inequality
Virginia Maestri

DP 29 Forthcoming: Imputed rent and income re-ranking: evidence from EU-SILC data
Virginia Maestri

DP 28 The impact of indirect taxes and imputed rent on inequality: a comparison with cash transfers and direct taxes in five EU countries
Francesco Figari and Alari Paulus
January 2012

DP 27 Recent Trends in Minimum Income Protection for Europe’s Elderly
Tim Goedemé
February 2012

DP 26 Endogenous Skill Biased Technical Change: Testing for Demand Pull Effect
Francesco Bogliacino and Matteo Lucchese
December 2011

DP 25 Is the “neighbour’s” lawn greener? Comparing family support in Lithuania and four other NMS
Lina Salanauskait and Gerlinde Verbist
March 2012

DP 24 On gender gaps and self-fulfilling expectations: An alternative approach based on paid-for-training
Sara de la Rica, Juan J. Dolado and Cecilia García-Peñalos
May 2012

DP 23 Automatic Stabilizers, Economic Crisis and Income Distribution in Europe
Mathias Dolls, Clemens Fuestz and Andreas Peichl
December 2011

DP 22 Institutional Reforms and Educational Attainment in Europe: A Long Run Perspective
Michela Braga, Daniele Checchi and Elena Meschi
December 2011
DP 21  Transfer Taxes and Inequality  
Tullio Jappelli, Mario Padula and Giovanni Pica  
December 2011  

DP 20  Does Income Inequality Negatively Effect General Trust? Examining Three Potential Problems with the Inequality–Trust Hypothesis  
Sander Steijn and Bram Lancee  
December 2011  

DP 19  The EU 2020 Poverty Target  
Brian Nolan and Christopher T. Whelan  
November 2011  

DP 18  The Interplay between Economic Inequality Trends and Housing Regime Changes in Advanced Welfare Democracies: A New Research Agenda  
Caroline Dewilde  
November 2011  

DP 17  Income Inequality, Value Systems, and Macroeconomic Performance  
Giacomo Corneo  
September 2011  

DP 16  Income Inequality and Voter Turnout  
Daniel Horn  
October 2011  

DP 15  Can Higher Employment Levels Bring Down Poverty in the EU?  
Ive Marx, Pieter Vandenbroucke and Gerlinde Verbist  
October 2011  

DP 14  Inequality and Anti–Globalization Backlash by Political Parties  
Brian Burgoon  
October 2011  

Olivier Pintelon, Bea Cantillon, Karel Van den Bosch and Christopher T. Whelan  
September 2011  

DP 12  Factor Components of Inequality. A Cross–Country Study  
Cecilia García–Péñalosa and Elsa Orgiazzi  
July 2011  

DP 11  An Analysis of Generational Equity over Recent Decades in the OECD and UK  
Jonathan Bradshaw and John Holmes  
July 2011  

DP 10  Who Reaps the Benefits? The Social Distribution of Public Childcare in Sweden and Flanders  
Wim van Lancker and Joris Ghysels  
June 2011  

DP 9  Comparable Indicators of Inequality Across Countries (Position Paper)  
Brian Nolan, Ive Marx and Wiemer Salverda  
March 2011  

DP 8  The Ideological and Political Roots of American Inequality  
John E. Roemer  
March 2011  

DP 7  Income distributions, inequality perceptions and redistributive claims in European societies  
István György Tóth and Tamás Keller  
February 2011
DP 6  Income Inequality and Participation: A Comparison of 24 European Countries + Appendix  
    Bram Lancee and Herman van de Werfhorst  
    January 2011

DP 5  Household Joblessness and Its Impact on Poverty and Deprivation in Europe  
    Marloes de Graaf-Zijl  
    January 2011

DP 4  Inequality Decompositions – A Reconciliation  
    Frank A. Cowell and Carlo V. Fiorio  
    December 2010

DP 3  A New Dataset of Educational Inequality  
    Elena Meschi and Francesco Scervini  
    December 2010

DP 2  Are European Social Safety Nets Tight Enough? Coverage and Adequacy of Minimum Income Schemes in 14 EU Countries  
    Francesco Figari, Manos Matsaganis and Holly Sutherland  
    June 2011

DP 1  Distributional Consequences of Labor Demand Adjustments to a Downturn. A Model–based Approach with Application to Germany 2008–09  
    Olivier Bargain, Herwig Immervoll, Andreas Peichl and Sebastian Siegloch  
    September 2010
Information on the GINI project

Aims

The core objective of GINI is to deliver important new answers to questions of great interest to European societies: What are the social, cultural and political impacts that increasing inequalities in income, wealth and education may have? For the answers, GINI combines an interdisciplinary analysis that draws on economics, sociology, political science and health studies, with improved methodologies, uniform measurement, wide country coverage, a clear policy dimension and broad dissemination.

Methodologically, GINI aims to:

- exploit differences between and within 29 countries in inequality levels and trends for understanding the impacts and teasing out implications for policy and institutions,
- elaborate on the effects of both individual distributional positions and aggregate inequalities, and
- allow for feedback from impacts to inequality in a two-way causality approach.

The project operates in a framework of policy-oriented debate and international comparisons across all EU countries (except Cyprus and Malta), the USA, Japan, Canada and Australia.

Inequality Impacts and Analysis

Social impacts of inequality include educational access and achievement, individual employment opportunities and labour market behaviour, household joblessness, living standards and deprivation, family and household formation/breakdown, housing and intergenerational social mobility, individual health and life expectancy, and social cohesion versus polarisation. Underlying long-term trends, the economic cycle and the current financial and economic crisis will be incorporated. Politico-cultural impacts investigated are: Do increasing income/educational inequalities widen cultural and political ‘distances’, alienating people from politics, globalisation and European integration? Do they affect individuals’ participation and general social trust? Is acceptance of inequality and policies of redistribution affected by inequality itself? What effects do political systems (coalitions/winner-takes-all) have? Finally, it focuses on costs and benefits of policies limiting income inequality and its efficiency for mitigating other inequalities (health, housing, education and opportunity), and addresses the question what contributions policy making itself may have made to the growth of inequalities.

Support and Activities

The project receives EU research support to the amount of Euro 2.7 million. The work will result in four main reports and a final report, some 70 discussion papers and 29 country reports. The start of the project is 1 February 2010 for a three-year period. Detailed information can be found on the website.

www.gini-research.org