



Low pay and in-work poverty: preventative measures and preventative approaches

Evidence Review

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Low pay and in-work poverty: preventative measures and preventative approaches

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Background

The London School of Economics and Political Science (LSE) was contracted to conduct three evidence reviews on behalf of the DG for Employment, Social Affairs and Inclusion of the European Commission (EC). The aim of these reviews is to provide the EC with high-quality empirical evidence on the effectiveness of interventions in three policy areas – 1) The Link between Income Support and Activation, 2) Preventative Measures and Preventative Approaches to Low Pay and In-Work Poverty, and 3) Creating More Equal Societies. These reviews are intended to help promote the development of comprehensive policy strategies, are designed to help inform the EC's future impact assessments and hopefully inspire future reforms across the EU.

The scope of the review is defined by:

- Identifying evidence that closely matches the European Commission's interest (in terms of intervention, target group and outcome);
- The type of evidence: net impact studies are not always available and therefore the review will consider a broad range of evaluation evidence;
- The geographical area: maximising the evidence available from within the European Union and across the OECD conditional on language constraints.

Here we report the findings from the second evidence review: *Low Pay and In-Work Poverty: Preventative Measures and Preventative Approaches*.

Executive Summary

Poverty and social exclusion are often associated with long-term unemployment and household worklessness. Yet in today's European labour market, a job is not always sufficient to provide a decent livelihood for workers and their families. In many Member States, in-work poverty is on the rise, driven by a combination of factors including low pay, low work intensity, instability of employment, and the way that tax-benefit systems work (or do not work) to redistribute market incomes and support households with additional needs. These factors are themselves shaped by the economy, the functioning of the welfare state, the balance of power and influence, and by choices made by individuals and families.

The antecedents of precarious working lives can often be traced back to childhood, meaning that an effective policy response must not simply tackle consequences but also address root causes, including education and childhood poverty. The immediate focus of the current review is not on childhood, but on measures that can be taken to prevent low pay and in-work poverty among today's adults. But reducing poverty in these households would also reach children, creating a virtuous circle with consequences reaching far into the future.

This review pulls together the existing evidence from across the European Union on the effectiveness of different policy interventions aimed at reducing low pay and in-work poverty. In Part 1 we focus on low pay, before turning in Part 2 to consider the wider question of in-work poverty.

Findings from Part 1: Low wage employment

The incidence of low pay varies widely across OECD and EU countries. In recent years, low wage employment has increased in some countries while falling in others. We find a positive relationship between earnings inequality and the incidence of low pay; more unequal countries tend to have higher shares of employees in low paid work than more equal countries.

Cross-country variation in the incidence of low pay is shaped, in part, by differences in the composition of the workforce and the structure of employment. The reason for this is that some groups of workers are more likely to be low paid than others: women; young workers; low-skilled workers; disabled people; members of ethnic minorities. Part-time jobs and temporary jobs are more likely to be low paid than full-time jobs or permanent jobs. In addition, concentrations of low paying jobs are found in particular occupations and industries. Variation in the prevalence of low pay within particular groups and their numerical size in the labour market plays a role in shaping differences in the incidence of low pay between countries.

The size of the low wage labour market is also affected by the dynamics of low pay. Evidence shows that a significant proportion of low paid workers become trapped in low wage careers. This may take the form of cycling between low pay and periods out of work or being stuck in a low paid job for many years. Low paid work is less secure than higher paid jobs and therefore low paid workers are more likely to experience unemployment. Research has shown that the experience of unemployment and low pay has a direct negative impact on workers' future employment prospects. The extent to which scarring effects vary between countries, and more generally differences in the opportunities available for low paid workers to progress into higher paid jobs, will also impact on cross country variation in the incidence of low pay.

A number of preventative policies and approaches are found to be effective at reducing the incidence of low pay and preventing individuals from becoming low paid, as well as increasing the chances of low paid workers progressing to higher paid jobs. In this review we examine the evidence on education and skills policies, active labour market programmes, minimum wages and wage floors, the design of tax and benefit systems and policies aimed at reducing labour supply constraints.

Education and skills policies

In general higher levels of skill acquired through education or training reduce the risk of low pay. However, evidence on mobility suggests that education and training doesn't guarantee upward mobility from a low paid job to a higher paid job. This is likely to be due to the types and the quality of education and training that low paid workers have access to, and the relevance of the skills acquired. There is also evidence that skills are underutilised. It is not clear if this is the result of a mismatch between supply and demand or because low paid workers are constrained in some way, preventing them from commanding the full economic return to their skill sets. There is evidence that the experience of low-pay, unemployment or the underutilisation of skills has a negative impact on individuals' longer-term employment prospects.

Active labour market programmes

Active labour market programmes have the potential to play an important role in helping to prevent the experience of low wage employment through targeting the group of individuals most at risk of low pay. However, the objective of many activation programmes is to return job seekers to the labour market as quickly as possible and the result is that in many cases these jobseekers are simply pushed into low wage jobs. This does little to improve long term outcomes and it is highly likely that a significant proportion of these individuals will cycle back to unemployment. One problem is that the types of ALMPs that could be most beneficial to those at great risk of low pay (for example, education and training programmes) are restricted to long-term unemployed jobseekers and therefore exclude workers who are cycling between low paid jobs and unemployment. Policies should focus on assisting low paid workers to progress into

higher paid jobs either through access to high quality, relevant education and training programmes or helping them move into jobs that fully utilize their existing skills.

ALMP budgets are small relative to need and potential impact. More research is required to inform the design of interventions most effective at reducing the experience of low pay and breaking the low-pay, no-pay cycle. Extending access to high quality ALMPs (eg training) beyond the long-term unemployed to groups cycling between low pay and unemployment could be a successful strategy for improving upward mobility and reducing the experience of unemployment in the longer term. More research is required to understand how such a policy could work in practice and which activation strategies are the most effective at achieving this goal.

Minimum wages and wage floors

The evidence suggests that a well-managed minimum wage policy through statutory minimum rates or collectively bargained wage floors can be effective at improving the wages of low paid workers without negative effects on employment rates. However, to reduce the incidence of low pay, minimum wages need to be set high enough up the wage distribution. The 'bite' of the minimum wage (the value of the minimum wage relative to median pay) is shown to be negatively correlated with low pay incidence. Where single rates are set through statutory minimums rather than collective wage bargaining there is a risk that minimum wages can become the 'going rate' for many low paying jobs. This can create a low pay trap and limit wage progression. More research is required to understand how minimum wages can be successfully combined with other policies to ensure that career ladders are maintained to provide opportunities for workers to progress out of minimum wage jobs.

Tax and in-work benefit systems

The main objectives of in-work cash transfers are to boost the incomes of low earning workers living in low income households, increase the financial incentive for unemployed workers to accept available job opportunities and improve employment sustainability. However, in-work benefits can also create an incentive for employers to create low paid jobs as they are effectively subsidised by tax-payers. Employers may not be in a position to observe whether or not employees can top-up wages through in-work benefits, but the fact that workers are willing to supply labour for low hourly rates of pay makes it feasible for employers to adopt a business model taking advantage of this supply. These distortions can increase the size of the low wage labour market at the expense of higher quality, more productive, work opportunities; impacting not only on individuals but also on productivity, economic growth and inequality.

Co-ordinated policy action needs to take into account the inter-relationship between minimum wage rates, ALMPs and the tax and benefit systems. This includes ensuring that minimum wage rates are set at a level that creates a financial incentive for unemployed workers to find work. Careful design of income tax schedules needs to

reflect minimum wage rates (tiers, exemptions, etc) and to help maximize the net pay of minimum wage workers. Thoughtful design can mean that these policies work in harmony, with the minimum wage acting as a wage floor and preventing employers from dropping wages to very low levels in the presence of in-work cash transfers (where effectively employers of low paid workers are subsidised by the State (tax-payers)). Tax schedules can reduce the labour cost of minimum wage workers to employers and can reduce the impact of minimum wages on employment.

Labour supply constraints

Labour supply constraints - factors that limit the type or amount of work that an individual can do - are one of the key aspects that increase the risk of working, and becoming trapped in, low paying jobs. Individuals can be constrained by caring responsibilities, their health, how far they are able to travel to work or the need for flexible hours of work. There is a clear gap in the literature on how reducing these constraints can reduce the risk of low pay and in identifying which policies are the most effective at achieving this goal.

It has been shown that a number of policies which aim to improve the pay of low paid workers can have unintended consequences, increasing the size of the low wage labour market and trapping individuals in low paid jobs with limited prospects of progression.

The evidence suggests that coordinated policy development across minimum wage policy, active labour market policies, income taxation and in-work cash transfer systems, alongside concerted efforts to improve the productive skills of those at greatest risk of low pay and a reduction in the underutilisation of skills through addressing labour supply constraints, are necessary to prevent low pay blighting the lives of workers in the 21st Century.

The OECD has expressed concern about recent evidence identifying how critical the first ten years of individuals' working lives are in terms of shaping their careers (OECD, 2015). The protracted nature of the recent economic crisis, which has led to very high rates of youth unemployment in most of the countries that have been affected by the crisis, has severe long-run implications for young people entering the labour market over this period. Rising earnings inequality, increased experience of unemployment and low pay and limited upward mobility into higher paid, more secure employment are likely to lead to further increases in earnings inequality. This places limits on the extent to which the gains from future growth will be shared fairly.

Findings from Part 2: In-Work Poverty

In-work poverty is driven by a combination of low pay, low work intensity at household level, and household structure. Low pay is a risk factor for in-work poverty, but high risks are also faced by those working part-time or part-year; those on temporary rather than permanent contracts; those who are the sole earner in the household; and those with family responsibilities. Workers are most at risk of poverty where these factors overlap – so a lone parent working part-time in a low paid job is especially vulnerable. Both absolute and relative risks vary across countries, because of differences in the structure of the labour market (such as the extent of wage inequality, and the degree to which part-time work carries a pay penalty), differences in household composition and female labour force participation, and differences in the extent of state support, especially for family responsibility.

This part of the review examines the evidence on a range of alternative policy directions, and suggests four broad avenues for action in reducing in-work poverty: tackling low pay; improving job stability and quality; facilitating maternal employment, including improving the quality of part-time options; and – crucially – increasing state financial support for households with children. Changes to taxes and social insurance contributions were also considered, but these appear less effective in reducing poverty than other strategies.

Low pay

Tackling low pay must be considered a key plank in an anti-poverty strategy. In parts of the European Union in which minimum wages are low or not rigorously enforced, improvements in minimum wages can be expected to have an impact on in-work poverty. More broadly, while the majority of gains from a rise in minimum wages will accrue to households who are already above the poverty line, they are still an important tool in increasing household security and resilience over the long-term. *However*, policymakers should be very clear that there are limits to what a reduction in low pay can achieve in reducing in-work poverty: even generous minimum wages will not be sufficient to meet the needs of households with children, while the interaction between wages and other benefits received by low income households can leave households gaining little in practice from a minimum wage rise. Policy to improve household earnings also needs to go well beyond a focus on minimum wages, addressing continued wage progression as well as low work intensity within the household.

Job stability and quality

Permanent contracts, and jobs that offer incremental pay increases and prospects for progression are important in securing stable work. There is evidence that stronger unions help to promote the stability and security of employment and that, conversely, the weakening of unions in many European countries in recent decades has been damaging to the situation of lower paid workers. On the other hand, there is also

evidence that both union power and the enforcement of employment protection legislation can have the effect of protecting labour market insiders at the expense of outsiders, including those most at risk of being low paid.

Facilitating maternal employment and improving part-time options

Increasing maternal employment has an important role to play in reducing in-work poverty – especially for single parents but also in dual adult households. There is strong evidence that paid maternity leave in the first year after birth, and publicly subsidised childcare, both help maintain women's labour market attachment after childbirth. Not much of this research looks directly at the effects on poverty, but there are likely to be two poverty-reducing mechanisms: by increasing household work intensity, these policies reduce the risk of poverty in the short-term, and by limiting the loss of labour market experience as a result of childbearing, they increase mothers' earnings in the longer-term.

Making it possible for good jobs to be done flexibly and part-time is also crucial. In many countries where part-time opportunities are available, they are concentrated in jobs that are lower skilled and lower paid per hour than full-time work. Increasing the availability of high quality part-time jobs will help reduce the gender pay gap and should reduce in-work poverty without requiring full work intensity in households with children. To achieve this, legislation has an important role, but changing social norms is also key and not easy to accomplish.

At the same time, policy needs to focus explicitly on how to involve more men in taking up flexible and part-time working – though again changing norms is not straightforward. There is some evidence in favour of dedicated 'daddy months' in the year after birth, and these should be explored further. Certainly it is clear that parental leave needs to be properly remunerated and flexible working available in well-paid and high-quality jobs if men are to be persuaded to take these opportunities up. The rise of the two-earner household is part of the explanation for increased in-work poverty in Europe, as this growing standard has pushed up the average standard of living and with it the poverty line. Sharing paid work more evenly within couples, rather than pushing further towards a model of two full-time earners, may be one way to resolve this tension.

The role of taxes and Social Insurance Contributions

While reducing the total tax wedge (the burden of tax and social contributions as a share of gross pay) is seen as important to boosting employment, manipulating tax rates do not appear to be very effective at tackling poverty. This is both because many low paid and part-time workers are already paying little tax, and because these measures are not well targeted at household level. Reducing social security contributions also raises political questions, especially in Bismarckian welfare states. If a drop in contributions reduces a worker's later claims on the social security system, it may prove

a shortsighted policy, while a weakening of the link between contributions and later benefits undermines the very logic of contributory social insurance and may weaken political support. Tax measures targeted at household rather than individual level are more promising as anti-poverty policies, though they also lead to disincentives to work for second earners.

State support through cash transfers and tax credits

The increased needs of households with several dependents make it very difficult – even impossible – for relatively low paid workers to lift themselves out of poverty without some assistance from the state. Thus universal child allowances, and/or a system of targeted transfers to working households (such as the UK tax credit system) become an essential part of an anti-poverty strategy.

Universal child allowances have many advantages, including low administration costs and high take-up, as a result of their simplicity and the lack of the stigma attached to means-tested support. Crucially, they also have no work disincentive effects. But to protect lower income families from poverty they need to be generous, and in countries with higher levels of wage inequality, a universal transfer of the size required may simply not be politically or economically feasible. In such countries they may still have a useful role to play in poverty reduction (and there are other reasons to value universal benefits beyond their poverty reduction potential), but they cannot be the only form of state support for families.

The main concern about in-work targeted support is the work disincentive effect on second earners: the means-test must be based on household rather than individual income to be effective in reducing poverty, and the withdrawal of the benefit as income rises inevitably creates high marginal effective tax rates for second earners, almost always women. In-work support will also be expensive in countries where there are many relatively low paid workers.

Concluding remarks

The evidence presented in this review highlights the benefit of preventing individuals entering low paid work, as the experience of low pay can have a long term negative impact on future working lives. Collective wage bargaining went out of favour in many countries in the second half of the 20th Century. In these countries governments have been forced to piece together a number of policies to replace the role they played in creating wage floors and reducing inequality. These include minimum wages and (costly) in-work benefits. Atkinson (2015) recommends that the UK (and other countries) should consider reinstating a form of collective wage bargaining. This has the advantage of shifting the costs of employment and production back onto employers and away from tax-payers.

Reducing the incidence of low pay also has the benefit of reducing in-work poverty. However, the review emphasises that an effective anti-poverty strategy requires a portfolio of additional measures as well. These include improving job stability and quality, increasing maternal employment and encouraging greater sharing of paid and unpaid work within the household, and – crucially – supporting families with children through universal child benefits and/or tax credits to lower earning households. The role of the latter is particularly important, both because of the higher incidence of in-work poverty in households with children, and because of the long-term consequences of growing up in poverty for children's lives and opportunities.

Introduction

Poverty and social exclusion are often associated with long-term unemployment and household worklessness. Yet in today's European labour market, a job is not always sufficient to provide a decent livelihood for workers and their families. In many Member States, in-work poverty is on the rise, driven by a combination of factors including low pay, low work intensity, instability of employment, and the way that tax-benefit systems work (or do not work) to redistribute market incomes and support households with additional needs. These factors are themselves shaped by the economy, the functioning of the welfare state, the balance of power and influence, and by choices made by individuals and families.

An effective policy response must not simply tackle consequences but must also seek to address root causes. Preventative measures can have much greater long run financial returns than measures simply designed to tackle poor outcomes. In recent analysis conducted by the UK Early Intervention Foundation on the cost of late intervention (the cost of not taking effective preventative action) it was estimated that picking up the pieces from damaging social problems affecting young people such as mental health problems, going into care, unemployment and youth crime, costs the UK Government almost £17 billion a year (Chowdry and Oppenheim, 2015). Very few estimates of the savings arising from early intervention are available due to the complexity of computing such estimates. Although the types of childhood intervention considered by these studies are not the focus of this review, the two topics we cover (low pay and in-work poverty) are critical in terms of determining the financial well-being of families in the short term and the long term. The research we draw on identifies low pay and in-work benefit traps, highlighting the need for interventions that prevent individuals from becoming low paid or income-poor whilst in-work, with the potential to improve outcomes and reduce costs in the longer term.

This review compares the existing evidence on the effectiveness of different preventative measures that have been applied across countries or at different times within countries. The focus is on low pay (Part 1) and in-work poverty (Part 2). There are clearly overlaps but also important differences in these two topics. Low pay is measured at the individual level while in-work poverty is generally assessed at a household level. Low pay is positively associated with in-work poverty but not all low paid workers are living in households classified as working poor and not all households in in-work poverty contain low paid workers. The consequence of this is that preventative measures and preventative approaches also overlap but will vary in important ways.

The review also covers measures and approaches that reduce the long-run experience of low pay or in-work poverty. This means that we will look at measures that increase

progression out of low pay or in-work poverty alongside those that reduce the risk of entry.

Part I: Low Wage Employment

1.1 Introduction to low pay

The aim of this part of the evidence review is to identify which preventative measures and preventative approaches are most effective at reducing the risk of low pay and improving the prospects of low paid workers progressing into better paid, more secure employment. It examines the evidence on policies which limit the experience of low pay and limit the size of the low wage labour market.

Low wage employment can increase the risk of poverty and financial hardship and because many low paid jobs are insecure and generally are of low quality, low paid workers can face a number of disadvantages. Some workers are at greater risk of being low paid and becoming trapped in low paid jobs or cycling between unemployment and low pay. On the one hand, the presence of low paying jobs can provide opportunities for jobseekers but large low wage labour markets can signal low levels of productivity and underutilization of workers' skills, limiting economic growth and prosperity. An understanding of which preventative measures and preventative approaches are the most effective at reducing the incidence of low pay could be used to develop policy advice that is beneficial to individuals most at risk of being low paid and for the wider economy.

Low wage employees are low paid on an hourly basis but people can be defined as low paid in terms of weekly, monthly or annual earnings. In this review we follow the convention of using low wage employment to define low hourly paid workers and low earnings to define low weekly, monthly or annual pay. We use the internationally recognised low pay cut-off of two-thirds median pay but the review also includes evidence that uses a variety of different low pay definitions. Some research on low wage employment focuses on workers earning the minimum wage; some define the low paid group as workers with earnings or wages in the lowest percentiles of the respective distributions (lowest decile, quintile, etc.); some use a fixed cut-off which could be the minimum wage or benchmarked at a point in time. Lucifora *et al.*, (2005) provide a discussion on the relative merits of different definitions of low pay.

The two-thirds median pay threshold is a relative measure of low pay and although we recognise that individuals can be low paid relative to their skill sets (e.g. graduates employed in non-graduate jobs) here we focus on the lowest paid workers. As the low pay threshold is set relative to the median (pay at the 50th percentile of the wage distribution), changes in median pay can affect the number of workers classified as low paid and the real value of the threshold can vary over time and between countries.

There are a number of drivers of low pay. Wages, to a greater or lesser extent, reflect workers' productive value. Low paid workers tend to be low skilled or have skills which are not in demand, or where supply exceeds demand. In addition, individuals can lack the ability to take full advantage of their skill sets. For example, language barriers,

disabilities, or labour supply constraints. Caring responsibilities can limit employment options either through working hours constraints or the need for flexible working arrangements and restrictions on travel to work times. Discrimination can increase the risk of some groups being low paid (women, disabled people, migrants, ethnic minorities, younger and older workers are typically at greatest risk) even though most forms of labour market discrimination are illegal in EU countries, recruitment practices can still give rise to some groups being discriminated against and marginalized in the labour market.

Segmentation can also be a problem if the result is that there are limited opportunities for low paid workers to progress into higher paid jobs, effectively becoming trapped in low paid work. Low paid jobs tend to be less secure and short-term and many low paid workers end up cycling between periods of low pay and time out of work.

Distortions in the labour market can affect the incidence of low pay and increase the risk of different types of individuals being low paid.

There are a number of reasons why individuals can be low paid:

- Low skills (low education, low vocational skills).
- Mismatch between supply of skills and demand for skills.
- Labour supply constraints (caring responsibilities, location/transport).
- Low labour demand (economic cycle, industrial restructuring, demand shifts).
- Discrimination in the labour market (gender, ethnicity, disability, criminal record, etc.).
- Labour market distortions (tax/benefit system, non-competitive practices, wage-setting practices and agreements, non-wage labour costs).
- Lack of opportunities for progression: limited career ladders out of low pay (segmented labour markets).
- 'Scarring effects' of low pay and unemployment (state dependence or churning).

We begin by examining the incidence of low wage employment across countries to assess variation in the size of the low wage labour market. It also provides an indication of which countries have managed to limit the incidence of low pay and where policy solutions may be found. Next we examine the characteristics of low paid workers and examine how the risks associated with these characteristics vary between countries. Understanding the factors that increase the risk of low pay helps to inform us about the types of measures that are likely to be the most effective at reducing these risks. We then focus on the dynamics of low pay before examining the evidence on the effectiveness of a range of preventative measures and preventative approaches.

There are a number of preventative measures and preventative approaches to tackling low pay which we consider in this review. These include:

- Education and training;
- Active Labour Market Programmes;

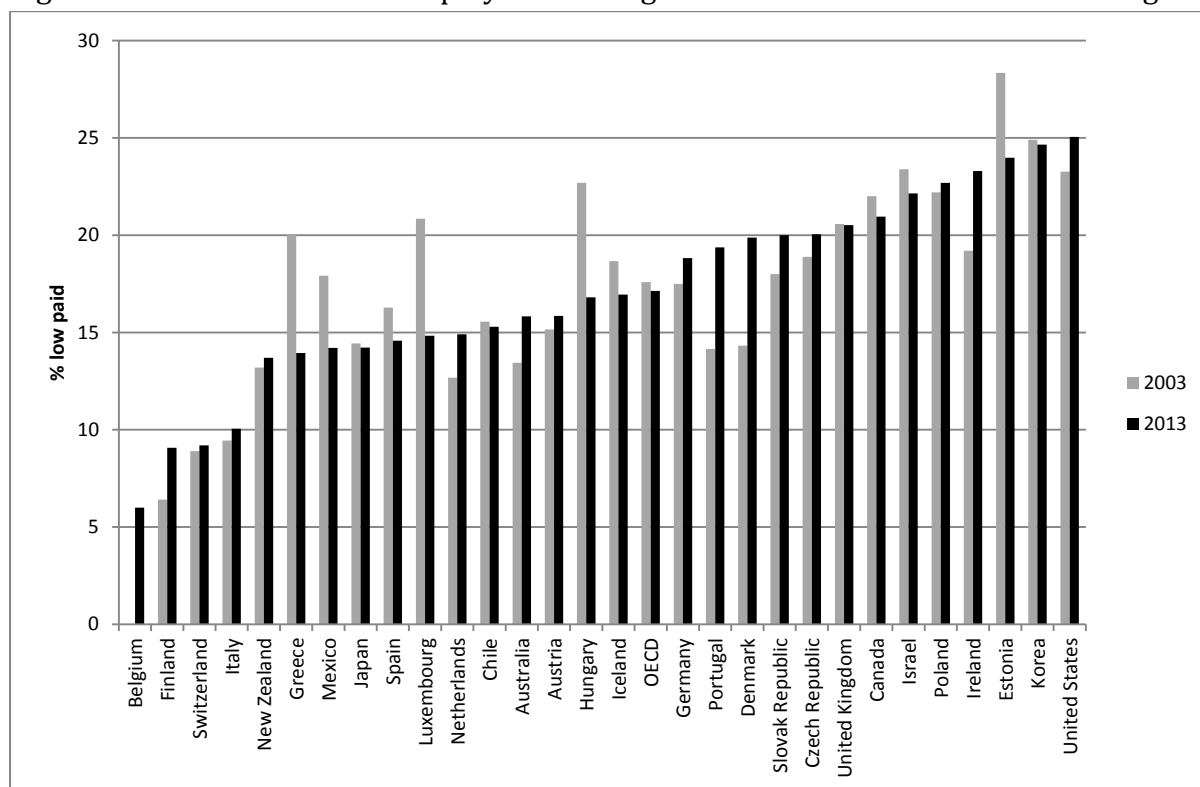
- Minimum wages;
- Collective wage-bargaining;
- Design of Tax and Benefit systems;
- Reducing labour supply constraints.

1.2. The Incidence of Low Wage Employment

There is considerable cross country variation in the incidence of low wage employment. One of the most readily available comparable international series is produced by the OECD but unfortunately it measures the share of full-time employees earning less than two-thirds of the median gross earnings of all full-time employees. It is well-documented that employees working part-time are more likely to be low paid than those working full-time and this series excludes this group. Depending on the prevalence of part-time working within countries and the incidence of low pay among part-time workers relative to the share of low paid full-time employees, the country rankings and overall incidence of low pay could be affected.

In 2013 low earnings incidence ranged between 25% in the United States – one in four full-time employees were low paid according to this definition - to 9% in Finland and 6% in Belgium (Figure 1.1). Over the 10 year period 2003-2013 the incidence of low earnings increased in a number of countries. The largest percentage point increases occurred in Finland (6.4% to 9.1%), Denmark (14.3% to 19.9%) and Ireland (19.2% to 23.3%). While an increase in the incidence of low pay didn't occur in all countries, there are examples where increases are found within countries with low, medium and high initial rates. In some countries the incidence of low pay fell over this 10-year period. Relatively large falls occurred in Greece (20% to 13.9%), Luxembourg (20.8% to 14.8%), Hungary (22.7% to 16.8%), Mexico (17.9% to 14.2%) and Estonia (28.3% to 24%).

Figure 1.1 Share of full-time employees earning less than two-thirds median earnings



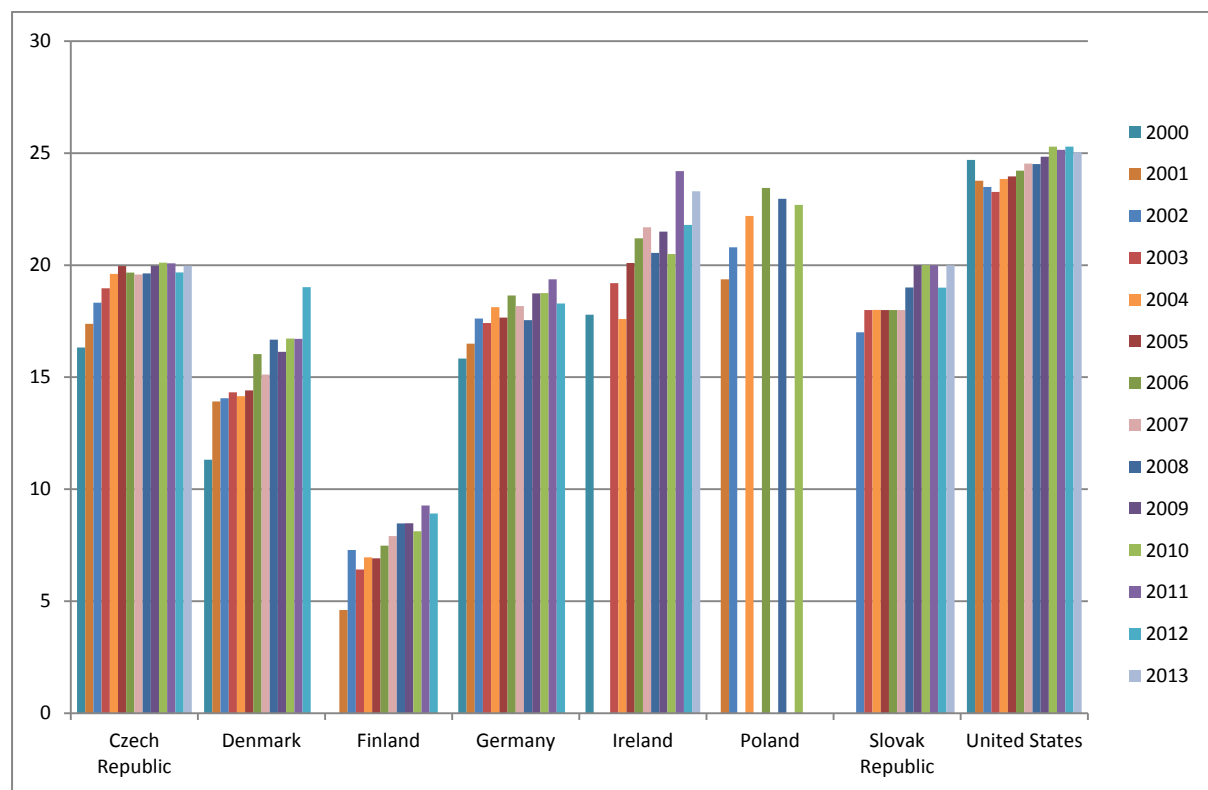
Source: OECD.Stat

Figure 1.2 shows a longer more detailed time series for a selection of countries where the incidence of low pay increased between 2003 and 2013. Figure 1.3 shows a selection of countries where the incidence of low pay fell over the same period. This more detailed time series shows that quite big changes can occur between one year and the next.

Finland is a country which has a relatively low incidence of low pay and although the incidence increased over this 10-year period it still remains one of the countries with the lowest rates of low wage employment. The US is one of the countries with the highest incidence of low pay but has also experienced an increase over this time period. The Czech Republic experienced an increase in rates of low wage employment between 2000 and 2005 and since then rates have plateaued at around 20%.

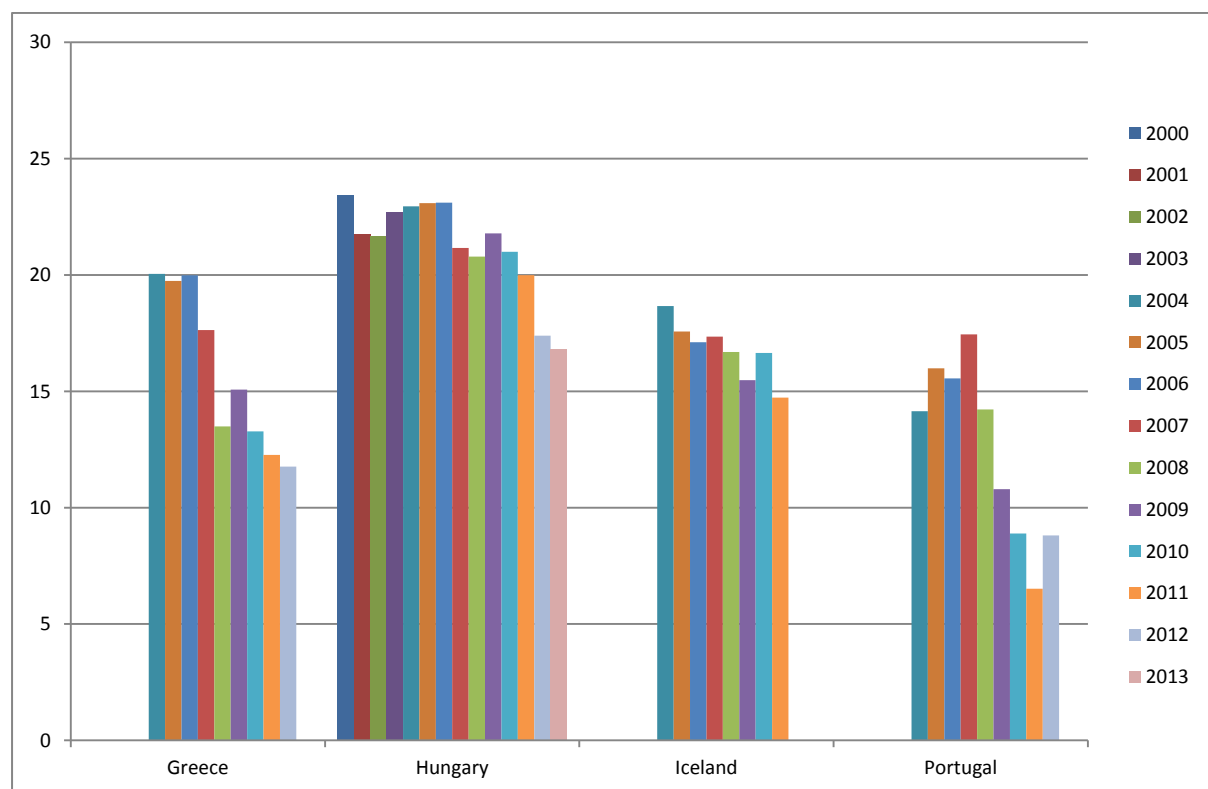
Hungary experienced one of the largest falls in the incidence of low pay over this period (falling from 23% to 17%) with much of the fall occurring after the financial crisis (2009-2013). Greece also experienced very large falls in the incidence of low pay with the largest annual fall occurring between 2007 and 2008. Given the large impact of the financial crisis on the wages of Greek employees this could be the result of a fall in median pay leading to a fall in the share of workers earning less than two-thirds of the median. Large falls in the incidence of low pay are also shown for Portugal after 2007, which may also be due to falling rates of median pay for full time employees.

Figure 1.2 Increasing incidence of low pay among full-time employees



Source: OECD.Stat

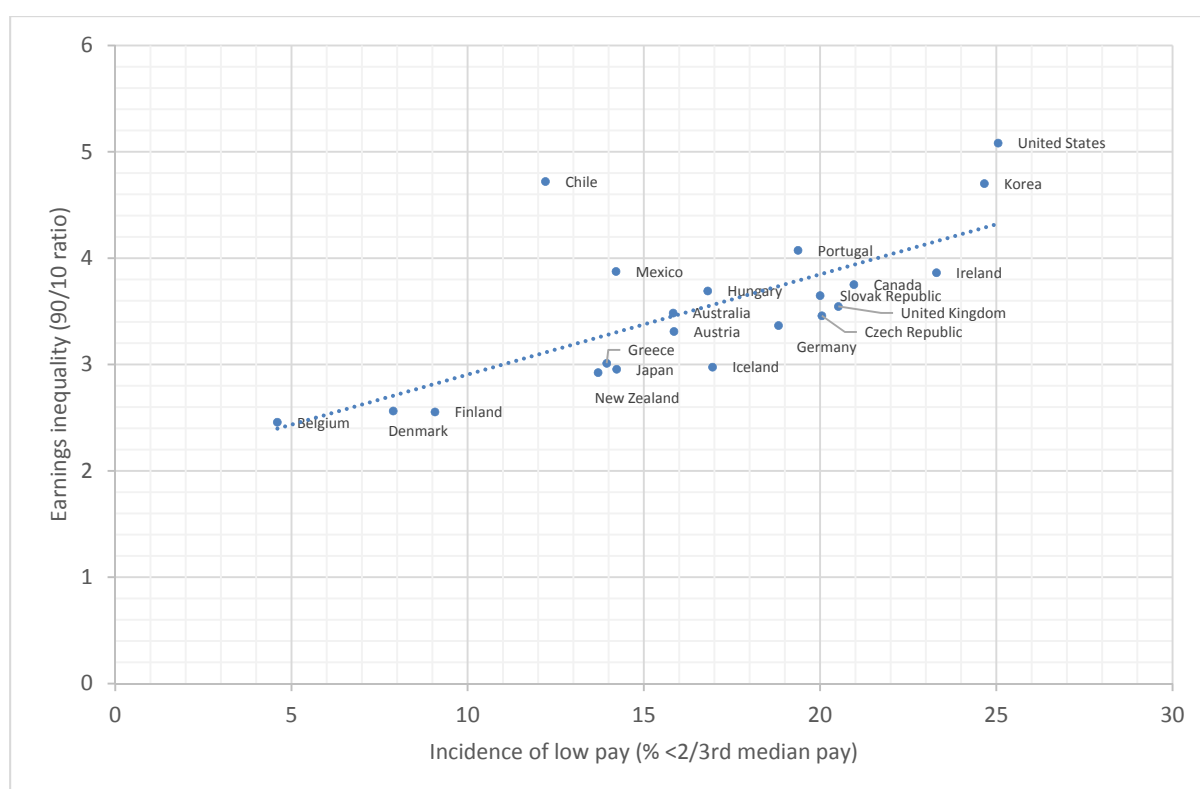
Figure 1.3 Falling incidence of low pay among full-time employees



Source: OECD.Stat

Previous research has shown that in some countries a greater dispersion in wages (higher inequality) has given rise to a higher share of workers who are low paid (Lucifora *et al.*, 2005). An examination of the cross-country relationship between the incidence of low pay and earnings inequality using the most up to date OECD data series shows that there is a positive correlation between the two (Figure 1.4). Countries, such as the US, which have high earnings inequality also have a large share of employees who are low paid and countries, such as Belgium, with low earnings inequality have a low incidence of low wage employment. This synergy means that policies which are effective at reducing earnings inequality are likely to share features with those that are effective at reducing low wage employment.

Figure 1.4 Relationship between earnings inequality and low pay incidence (2013)



Source: OECD.Stat

1.3. The Characteristics of Low Paid Workers and Low Paying Jobs

Some workers are more likely to be low paid than others. Women, younger workers, people with disabilities, ethnic minorities and individuals with low skill levels are all more likely to be low paid than their counterparts. However, although the same groups of individuals tend to be at greatest risk of being low paid across countries, the extent to which these individual level characteristics are associated with a higher incidence of low pay varies between countries (Lucifora *et al.*, 2005).

Eurostat publishes data from the 4 yearly Structure of Earnings Survey which provides useful descriptions of the incidence of low pay across European countries and for different worker characteristics. The advantage of this data series is that part-time employees are included and therefore provides a more accurate picture of low pay. The most recent data available are for 2010. Table 1.1 shows the low wage threshold (in Euro) set at two-thirds of the median wage, the proportion of all employees who are low-wage earners and the proportion of male and female employees who are low paid. There is considerable variation across EU countries in the low wage threshold ranging from €1 per hour in Bulgaria to €16.6 per hour in Norway and Denmark, reflecting cross-country variation in median pay and purchasing power. Across EU-27 countries, 17% of all employees were low paid in 2010 but there was considerable variation across countries, with only 2.5% of employees low paid in Sweden, 5.9% in Finland and 6.1% in France. Latvia had the highest share of low paid employees (27.8%), followed by Lithuania (27.2%) and then Romania (25.6%). Female employees were more likely to be low paid than male employees; 21.2% across EU-27 countries compared to 13.3%. The share of female employees who were low-wage earners ranged from 3.1% in Sweden and 7.9% in France, through to 29.4% in Lithuania and 30.1% in Estonia. The incidence of low pay for female employees relative to male employees also varies across countries. In Belgium and Austria, employees who are women are three times more likely to be low paid than their male counterparts, while in Romania men and women have a fairly equal chance of being low paid and in Bulgaria, exceptionally, male employees are more likely to be low paid than are female employees.

Table 1.2 shows the share of low-wage earners by age group and by skill level with countries ranked by % low paid from highest to lowest. Younger employees (under 30 years) are the most likely to be low paid across EU-27 (30.4%) and employees aged 30-49 are the least likely (13.7%). In the two countries with the highest incidence of low pay (Latvia and Lithuania) there is very little variation in the incidence of low pay between age groups. Younger employees are most likely to be low paid in the Netherlands (46.1%), the United Kingdom (40.6%) and Ireland (39.4%). In some countries younger workers are considerably more likely to be low paid than employees aged 30-49. In Sweden, where the overall incidence of low pay is very low, younger employees are nine times as likely to be low paid, in the Netherlands younger employees are around six times as likely to be low paid and in Denmark younger employees are around five times more likely to be low paid than employees aged 30-49.

Workers under the age of 24 years in the Netherlands can be paid less than the minimum wage and this explains both the high incidence and the greater concentration of low pay among this age group (Bosch, 2009). The UK has a lower minimum wage rate for young adults and Ireland has lower rates for trainees and for labour market entrants. In Denmark there are no legally stipulated minimum wage rates but collective bargaining agreements set wage rates and these cover around 80-90 percent of Danish

workers. Lower wage rates are set for workers under 18 years and for workers with limited work experience. Minimum wage rates are also set through collective bargaining agreements in Sweden and are set at the sectoral and regional level and often depend on age and experience.

Low skilled employees are considerably more likely to be low paid (29%) than are high skilled employees (5.8%) across EU-27 countries. However, the incidence of low pay within skill groups varies between countries. More than half of all low skilled employees were low paid in Germany (54.6%) and Slovakia (51.5%) in 2010. The smallest shares of low skilled employees low paid in 2010 was in Sweden (4.2%) followed by Finland (11.5%). However, more than one-in-ten high skilled employees were low paid in Lithuania (13.3%), Ireland (12.9%) and Latvia (12%). High skilled employees were least likely to be low paid in Belgium (0.2%), followed by Luxembourg (0.7%). This variation suggests that successful preventative measures and preventative approaches to tackling low pay cannot be limited to pure supply-side policies such as those focused on raising skill levels without considering the demand-side. Bosch (2009) does not find evidence of a correlation across countries between the size of the less skilled labour force and the incidence of low pay.

Table 1.1 Low-wage threshold, % of all employees low paid and by gender – 2010

	Low-wage threshold (EUR)	Proportion of low-wage earners (%)		
	2/3 of the median	Total	Men	Women
EU-27	-	17.0	13.3	21.2
EA-17	-	14.8	11.0	19.2
BE	10.9	6.4	3.3	10.3
BG	1.0	22.0	22.5	21.6
CZ	3.0	18.2	12.9	24.5
DK	16.6	7.7	5.4	9.8
DE	10.2	22.2	17.0	28.7
EE	2.7	23.8	15.5	30.1
IE	12.2	20.7	17.6	23.6
ES	6.3	14.7	9.2	21.0
FR	9.2	6.1	4.5	7.9
IT	7.9	12.4	10.3	15.1
CY	6.2	22.7	14.9	31.4
LV	1.9	27.8	26.7	28.7
LT	1.8	27.2	24.5	29.4
LU	11.9	13.1	9.3	20.2
HU	2.3	19.8	18.1	21.5
MT	5.0	18.3	15.6	22.4
NL	10.2	18.1	15.3	21.2
AT	8.6	15.0	8.2	24.8
PL	2.6	24.2	21.8	26.8
PT	3.4	16.1	10.2	22.1
RO	1.3	25.6	25.5	25.8
SI	4.8	17.1	15.3	19.3
SK	2.6	19.0	14.6	23.7
FI	10.6	5.9	3.3	8.0
SE	9.9	2.5	1.9	3.1
UK	8.4	22.1	16.7	27.6
IS	6.7	9.1	5.7	12.0
NO	16.6	7.3	6.0	8.6
CH	14.9	11.0	6.1	16.9
HR	3.2	18.2	15.7	20.7
MK	1.7	28.3	26.4	30.3
TR	1.4	0.2	0.2	0.2

Note: Data refer to enterprises with 10 employees or more and to NACE Rev.2 sections B to S excluding O.

Source: Eurostat, Structure of Earnings Survey (earn_ses_pub2).

Table 1.2 Incidence of low pay across countries and by age and skill level - 2010

Country	% low-wage earners (total)	% low-wage earners age <30	% low-wage earners age 30-49	% low-wage earners age 50+	% low-skilled employees which are LWE	% of medium-skilled employees which are LWE	% of high-skilled employees which are LWE
EU-27	17.0	30.4	13.7	14.5	29.0	19.3	5.8
EA-17	14.8	27.5	12.0	12.6	27.8	14.2	3.1
LV	27.8	28.6	26.9	28.6	42.6	35.5	12.0
LT	27.2	28.0	26.3	28.3	44.1	39.4	13.3
RO	25.6	32.7	25.6	20.5	49.4	31.9	5.0
PL	24.2	31.3	21.8	23.8	44.9	31.6	6.1
EE	23.8	21.3	19.1	31.2	44.1	30.9	7.0
CY	22.7	37.6	18.8	17.1	33.9	33.6	4.5
DE	22.2	38.1	18.0	20.8	54.6	19.1	2.1
UK	22.1	40.6	14.7	18.3	34.6	31.3	11.4
BG	22.0	27.7	21.4	19.9	40.7	27.9	5.7
IE	20.7	39.4	17.4	17.4	30.9	25.6	12.9
HU	19.8	23.1	19.4	18.7	40.8	21.6	2.1
SK	19.0	20.9	18.0	19.8	51.5	20.9	3.3
MT	18.3	27.7	13.0	16.7	29.5	11.3	2.7
CZ	18.2	21.1	16.6	19.1	40.9	19.2	2.2
NL	18.1	46.1	8.0	8.5	37.1	15.7	3.8
SI	17.1	24.3	16.4	14.3	40.0	18.3	1.5
PT	16.1	25.0	14.2	12.8	25.3	10.1	1.0
AT	15.0	24.3	11.9	12.5	35.2	12.4	3.2
ES	14.7	23.3	13.6	11.0	22.4	15.3	5.0
LU	13.1	22.7	11.0	9.2	33.7	9.8	0.7
IT	12.4	25.0	11.6	9.1	20.9	8.5	2.6
DK	7.7	27.8	5.6	3.7	14.8	9.3	2.9
BE	6.4	15.3	4.7	3.0	13.0	7.4	0.2
FR	6.1	12.4	5.0	4.7	11.9	6.5	2.8
FI	5.9	13.2	4.2	4.7	11.5	8.4	1.7
SE	2.5	9.5	1.0	0.7	4.2	2.6	2.1
HR	18.2	26.3	18.2	12.1	35.5	21.4	2.6
MK	28.3	37.6	30.2	21.2	55.4	37.9	5.9
TR	0.2	0.2	0.2	0.2	0.2	0.2	0.1
IS	9.1	22.5	6.6	5.4	16.5	7.0	3.0
NO	7.3	26.2	2.3	1.3	18.3	4.9	1.6
CH	11.0	21.2	8.9	7.8	33.9	10.4	1.4

Note: Data refer to enterprises with 10 employees or more and to NACE Rev.2 sections B to S excluding O. LWE – Low Wage Earners

Source: Source: Eurostat, SES (earn_ses_pub1)

Workers who are employed on a part-time basis are also at greater risk of being low paid (Eurostat, 2013; Lucifora and Salverda, 2009; Bernstein and Gittleman, 2003). Consequently, countries with a relatively high incidence of part-time working are also those which are typically found to have relatively high rates of low wage employment (e.g. the Netherlands and the United Kingdom). This is affected by the pay-penalty associated with working part-time (Manning and Petrongolo, 2008) and because part-time jobs tend to be disproportionately concentrated in low wage occupations (more the case in the UK; less so in the Netherlands). Splitting a low-wage job into two jobs (i.e. employing two part time workers rather than one full time worker) doubles the number of people in low wage work (even if employment rates are higher and aggregate hours of work are the same).

Disabled people are also at a greater risk of being employed in low wage jobs. There exists a complex relationship between disability, ill health, and low wage employment. Low quality, insecure work can have a negative impact on individuals' health, and poor health consequently increases the risk that an individual will be low paid or out of work. In a study estimating the impact of the National Minimum Wage in the UK, it was found that disabled people were nearly twice as likely to be earning less than the NMW rate prior to its introduction in 1999 (Burchardt and McKnight, 2003). The fact that there were no measureable negative effects on their employment rates following the introduction of the NMW, suggests that this group were being underpaid and potentially being discriminated against.

Some occupations are more likely to be associated with low pay than others (see, for example, Cuesta, 2008; Bernstein and Gittleman, 2003; Aria *et al.*, 1998; McKnight, 1998) with some requiring low levels of skill and very little training. Occupations typically associated with low pay include: social care and child care occupations, catering, cleaning, sales and customer service occupations (Corlett and Whittaker, 2014). These are frequently occupations in which employment is dominated by women. Lower rates of pay within these occupations reflects a range of factors including the value society places on these areas of work, imbalances in wage bargaining power, labour supply constraints among women and the presence of segmented labour markets.

Low pay is also concentrated within particular industries (hotel and catering, retail trade, cleaning, personal services) (See, for example, Pennycook and Whittaker, 2012; OECD, 1996) but the incidence of low pay within these sectors does vary between countries (Bosch, 2009; Lucifora and Salverda, 2009). Mason and Salverda (2010) show that variation in the incidence of low wage employment between countries can sometimes be explained by differences in the incidence of low pay within the industries which are typically low paying and sometimes by differences in the sectoral distribution of employment. For example, they find that the lower incidence of low pay within

typically low-paying industries in Denmark and France explains the large difference in the overall incidence of low pay between these countries and the United States.

Short-term contracts and working for a small employer are also associated with a greater incidence of low paid work (Eurostat, 2013; Cuesta, 2008; Salverda *et al.*, 2001). Ethnic minorities (and particularly non-nationals) are also more likely to be low paid (Brynin and Longhi, 2015; Salverda *et al.*, 2001).

1.4 Dynamics of Low Pay

A simple lifecycle model of wages would predict that new entrants to the labour market start at relatively low rates of pay, differentiated by differences in education and training acquired before labour market entry. As they gain experience and work-related skills their wages should grow, peaking towards the end of their working lives before falls in productivity for some workers can lead to falls in wage rates prior to retirement. Research on the dynamics of low pay shows that rather than workers simply starting their careers in relatively low paid jobs before progressing to higher paid jobs, many have what can be described as 'low wage careers' (McKnight, 2002). These 'careers' characterise working lives where individuals have become stuck in low paid jobs for long periods of time (Cappellari, 2007; Clark and Kanellopoulos, 2013; Vieira, 2005) or cycle between low paid work and unemployment/non-employment (Stewart and Swaffield, 1999; Cappellari and Jenkins, 2008; Hurrell, 2013; Thompson, 2015; Cuesta, 2008). There is evidence that workers can become 'scarred' by the experience of unemployment and low wage employment (Stewart, 2007; Cappellari, 2000). In this case periods of unemployment or employment in low paid jobs have a negative effect on individuals' future employment prospects. Many low paid workers do progress into higher paid jobs but recent evidence for Germany, the Netherlands and the UK finds that mobility out of low pay is likely to have been overstated in some previous studies due to measurement error (Pavlopoulos *et al.*, 2012).

To break this cycle of labour market disadvantage it is necessary to identify the factors and policies that help low paid workers sustain employment and increase upward mobility from low paid work to secure higher paid jobs.

Evidence from the UK suggests that taking a low paid job rather than remaining unemployed does not significantly improve the prospects of being in work in the future (Stewart, 2007). Some evidence from Germany suggests that low qualified workers who take low paid work have a lower risk of future non-employment but workers with middle or higher level qualifications are no better-off taking a low paid job than remaining unemployed, in terms of their future risk of non-employment (Mosthaf, 2014).

Some research has suggested that in countries, such as the UK, that experienced increases in earnings inequality over recent decades there was also a ‘hollowing-out’ of the occupation distribution with a fall in medium level skilled jobs and occupations, and increases in low and high skilled jobs (Goos and Manning, 2007). This has caused concern that the rungs of the career ladder are now much further apart or no longer exist in a way that allows low paid worker to work their way up to high paid jobs. A number of studies for the UK have shown that during the period that earnings inequality increased the most (over the 1980s and early 1990s), earnings mobility fell (McKnight, 2000; Dickens, 2000; Dickens and McKnight, 2008a).

The 2015 OECD Employment Outlook (OECD, 2015) outlines the need for countries to address the fact that the scarring effects of the crisis are compounded by longer-run trends making it difficult for low-skilled workers to move out of precarious, low-paid jobs into better-paid higher-quality jobs. They refer to ‘missing rungs of the jobs ladder’ and raise a concern that the legacy of the crisis could be further increases in inequality. They urge governments to take action to avoid permanent increases in the number of workers stuck in chronic unemployment or cycling between unemployment and low-paid jobs. The concern is that without policy action the legacy of the recent crisis could be to leave additional workers either permanently excluded from work or trapped in low-paying and insecure jobs. They believe that this will lead to further increases in inequality:

“...[M]ost OECD economies had already become significantly more unequal in the distribution of income during the decades preceding the crisis, reflecting a large rise in earnings inequality. It follows that the challenge to promote upward mobility at the bottom of the jobs ladder is much more than a cyclical issue related to the global crisis. It is also a key to helping all workers to participate successfully in a rapidly evolving economy. Technological change and the digital revolution in particular have been important drivers of this trend by skewing job demands towards high-level skills and putting downward pressure on the pay of less skilled workers. These structural changes in the economy are part of a continuous process of adaptation to new technologies and processes, as well as globalization. In this context, workers must have the opportunity to build the skills needed by employers, but also to adapt them to changes in labour demand and to use their skills fully on the job. This is crucial importance to ensure human capital plays its expected role in boosting innovation and productivity, but also to make growth inclusive.”
(OECD, 2015, p.12)

They suggest that three types of policy measures are required to help workers currently stuck at the bottom of the labour market to climb out. These are: (1) Effective activation measures to match jobseekers with suitable jobs; (2) Address skill deficits; (3) Direct measures to raise job quality.

However, some of the policies that can be effective at preventing low wage employment can lead to unintended consequences. Minimum wages can be very effective at eradicating extreme low pay but can become a 'going rate', limiting the chances of workers progressing in the labour market and increasing their pay. In-work benefits provide a welcome boost to the incomes of low paid workers living in low income households but they can create disincentives to progress to higher paid jobs, particularly where the withdrawal rates are very high. Employers can also use in-work benefits to keep wages down in the knowledge that low paid workers' incomes will be topped-up. Employers do not even need to be aware that low paid workers' incomes are topped up as the fact that individuals are willing to supply labour at given wage rates makes it feasible, and profitable, for firms to offer these jobs.

Qualitative evidence has linked the low-pay, no-pay cycle to 'recurrent poverty' and while Part II of this review focuses specifically on in-work poverty it is informative to examine this issue here. While quantitative evidence allows us to quantify aspects of low wage employment and estimate the impact of various factors and policies on low pay, qualitative evidence can provide a rich source of information that helps us to gain a better understanding of low wage careers. A sample of 60 individuals aged 30-60, selected on the basis that they had experienced churning between low paid work and periods out of work, were interviewed to explore the relationship between low pay, unemployment and the recurrence of poverty (Shildrick *et al.*, 2010). Among this group there was evidence of an inter-relationship between the low-pay, no-pay cycle and what was defined as recurrent poverty¹. Employment was typically of low quality, insecure, often temporary work through employment agencies, very low levels of skills were required and employers had no interest in helping workers advance their careers. Increasing skills had not necessarily helped to secure better work in the depressed region where the research was undertaken (the study was based in an area of industrial decline). There was a ready supply of workers prepared to fill job opportunities often without the need for formal methods of recruitment. Many employers showed little sympathy for those needing time off to care for others or due to sickness. Claiming out of work benefits was reported to be complex, degrading and uncertain and this led to some avoiding the welfare system altogether, stretching resources until the next job was found or going into (further) debt. Participants reported frustration that it was difficult to access back to work support, which tended to be made available to long-term unemployed people rather than those churning between low paid jobs and short spells of unemployment or those with a disability. Debts, for many of the interviewees, substantially reduced the final value of earnings or welfare payments and meant that many were managing on very low incomes.

¹ The 'recurrently poor' were defined as those whose fluctuations in income over time swing them above and below the official poverty line (but who probably never move far away from it).

Churning between low paid work and spells out of work does not only create hardship for the workers and their families but is a financial burden on the welfare state where individuals access support. The costs include unemployment benefits and other out of work cash transfers (help with housing costs etc.), as well as the cost of any activation programmes, and any in-work cash transfers to top-up the wages of low paid workers living in low income households (Thompson, 2015). Costs are even higher when the negative impact on health is taken into account. Investing in policies that improve job security and the pay of low paid workers could ultimately save on public expenditure in the longer term.

The UK is introducing a new single benefit to cover most of the means-tested benefits (including working tax credits) called Universal Credit. Within the legislation it allows for what is referred to as ‘in-work conditionality’. This means that working people in receipt of in-work benefits can be required to seek higher paid work until they are ‘self-sufficient’. There is a provision for the application of sanctions for those who are considered not to be meeting this condition. At this time it is not clear if these low income workers will be provided with support to help them move on or how their actions will be monitored (McKnight, 2015). This approach has the potential to tackle lack of progression out of low paid work and churning between low pay and periods out of work but it is hard to see how it will be achieved.

Access to resources that help low paid workers, who churn between low paid jobs and periods out of work, progress in work into higher-quality, higher-paid more secure employment could reap long-term dividends. Allowing workers to access this help while they are in-work rather than waiting until they enter a long spell of unemployment could be very effective and help to reduce poverty as well as low pay.

1.5. Preventative Measures and Preventative Approaches to Low Pay

In this section we review evidence on the effectiveness of different preventative measures and preventative approaches to tackling low pay. These policies may act to reduce the chance that a worker is low paid or to increase the probability of a low paid worker progressing to a higher paid job. At an aggregate level they can reduce the size of the low wage labour market.

The areas covered by this review are the following:

- Education and Training.
- Active Labour Market Programmes.
- Statutory Minimum Wages.
- Design of Tax and Benefit systems.
- Reducing labour supply constraints.

Education and Training

The OECD finds that higher inequality in skills is related to higher earnings inequality (OECD, 2015). At a macro-level, greater wage dispersion (particularly in the lower half of the wage distribution) is likely to mean that a greater share of workers is low paid (see earlier evidence). Skills policy and the distribution of skills among workers are critical determinants of low wage employment. As shown in Section 1.3 and 1.4, in general higher skilled workers are less likely to be low paid and less likely to become trapped in low wage jobs. The evidence is very clear that one of the most effective supply-side policies for preventing low wage employment is through education and training. As technology advances and demands change, skills can become redundant over time and education and training policy needs to ensure that not only are labour market entrants appropriately skilled but older adults facing labour market disadvantage need access to retraining programmes.

It is beyond the scope of this evidence review to conduct a comprehensive review of education and training policy so we focus on those policies which have been designed to limit the incidence of low wage employment, tackle low skill levels and interventions designed specifically to aid the upward mobility of low wage workers into higher paid jobs. Some of these training programmes are part of active labour market programmes accessed by unemployed workers and some are targeted more broadly at low-skilled workers.

Economists typically distinguish between two main types of skill: general and specific skills. General skills are usually attained through formal education and general training programmes and are highly transferable between jobs and employers. Specific skills are less transferable and can be industry specific, occupation specific or firm specific.

Becker (1964) outlined a theory of human capital accumulation demonstrating why firms are reluctant to invest in general skills training due to their high transferability. The issue here is that non-training firms can poach trained workers from firms investing in training thereby increasing their profitability at the expense of the firm bearing the costs of training. The threat of poaching leads firms to provide sub-optimal levels of general training. This results in the need for general skills training to be subsidized either through the employee being prepared to be paid at a rate less than their productivity or through government transfers/subsidies.

Few firms produce such niche products and services that the skills their employees acquire are not transferable and this is particularly true of the types of jobs that low paid workers occupy. For example, food establishments may have unique ways in which they prepare their food (for example, large brand fast food establishments) and

serve it, but in learning to perform these tasks employees will pick up general skills in relation to food preparation and service that are transferable. In reality training tends to embody a mix of general and specific skills.

Low wage work in many countries requires very low levels of skill and is made up of routine, often repetitive, tasks that require very little training to perform. Career structures are flat and employers don't tend to promote low wage workers into higher paid positions. Employers have to invest in very little training and workers are easy to replace. This is backed by research showing that low paid workers are typically less likely to receive employer provided training (see, for example, Cuesta, 2005; for Spain). The characterisation of low wage work as routine, low skilled with limited skill development and little opportunity to progress is particularly likely to be applicable in countries lacking statutory wage floors or where wage floors are porous or rates are set at very low levels. Where wage floors are present and higher, employers and employees need to find ways to improve the productivity of jobs (bundling of tasks; technology, etc) and workers' productivity.

A more positive role that low paying jobs can play is where young workers enter the labour market lacking work experience and work skills, and upon entry they receive training and 'contribute' to the cost of this training through receiving wages below their productivity value. This ensures that if the worker leaves the firm either part way through training or after training is completed, the employer limits any financial loss.

In any economy there is likely to be both forms of low wage employment. In many countries, as we have seen, low wage employment is not concentrated among young people while they are receiving high quality training and more likely to be accumulating human capital. Where older workers are low paid this low wage work is more likely to signify precarious employment, not linked to the development of human capital and in many cases exists with limited opportunities for progression.

Cuesta and Salverda (2009) analyse the effects of formal education (general skills) and on-the-job training (specific skills) on the probability of being low paid (two-thirds of the median definition). They estimate the impact of both types of human capital accumulation on the probability of moving from a low paid job to a better paid job using a model that accounts for endogeneity of initial conditions, selection into employment and sample attrition. They analyse data from the European Community Household panel (1995-2001) for Denmark, the Netherlands, Spain and Italy. The choice of countries provides a number of interesting contrasts between the provision of education and training, and low wage labour markets.

Examining two types of human capital accumulation together allows the analysts to distinguish between a general form of human capital (education) and one which can be specific or general in nature (on-the-job training). They find variation across the four

countries in the distribution of education levels and the incidence of on-the-job training. Employees were most likely to receive employer provided on-the-job training in Denmark and least likely in Italy. Higher educated workers were more likely to receive on-the-job training than lower educated workers in all four countries. Results from the statistical analysis shows that in Italy and Spain, receiving on-the-job training is associated with a lower likelihood of being low paid relative to Denmark or the Netherlands. In all countries, apart from Italy, tertiary level education had a larger impact on reducing the risk of low pay relative to on-the-job training. Higher transition rates from low pay to higher pay are found for individuals with higher levels of education and for those who receive on-the-job training. Transitions from low pay to non-employment are also lower for low paid workers who receive on-the-job training and those with higher levels of education. In Denmark and Italy formal education is found to be more important than on-the-job training in terms of a higher likelihood of moving from low pay to higher pay. To varying degrees, education and training were found to reduce the risk of low pay and increase the chances of escaping low pay. These differences are likely to reflect the nature of the low wage labour markets in the different countries and the types of education and training supplied. For example, in Denmark and the Netherlands low wage employment is more highly concentrated among young workers and these workers are more likely to be in receipt of on-the-job training that increases human capital.

Asplund *et al.* (1998) also found low wage earners in Denmark and Finland who acquired occupation-specific skills and other forms of human capital, improved their chances of upward mobility out of low pay. Cuesta (2008) analyses the European Community Household Panel study 1995-2001 and finds that low paid workers in Spain are less likely to exit to non-employment if they receive on-the-job training. Pavlopoulos *et al.*, (2009) investigate the effects of training on mobility out of low paid work in the Netherlands and the UK using longitudinal data. They find that although training practices vary between these two countries, training increases the likelihood of moving from low to higher pay (as well as reducing the likelihood of moving from higher pay to low pay). However, in the UK, no effect of training is found for low-educated workers. The lower-skilled seemed to gain less than the high-skilled from employer provided training in the UK. This may be due to the nature of training that is offered to lower-skilled workers in the UK (which are often of short duration) and the fact the authors included induction training in their measure (i.e. initial training which can include simply teaching new employees how to perform set tasks, familiarization with company practices and rules, health and safety, etc.). Turnover among low paid workers is higher in the UK than in the Netherlands and this is likely to lead to a greater share of low paid workers receiving induction training. There is no reason why this type of training (for example, cash till training for retail staff) should lead to an increase in earnings unless employees are paid a lower pay rate during a probationary period.

Cappellari (2007) also considers the role of human capital (measured by schooling attainment and actual labour market experience) on the probability of Italian workers entering low pay or exiting low pay. He finds that education and experience had a sizeable negative effect on the probability of entering low pay but a limited impact on the probability of leaving low pay. Viera (2005) examines low-wage mobility in the Portuguese labour market and finds that a higher level of education is one of the factors that increases the chance of upward mobility.

Rather than focusing training on low paid or low skilled people, an alternative approach is to tackle low pay through targeting particular areas of work with training programmes aimed at increasing job quality, productivity and pay by increasing the scope and quality of the tasks performed. Lerman *et al.* (2014) investigate how registered apprenticeship training can raise productivity in the long-term care industry in the US. Their hypothesis is that appropriate training can prepare workers to use equipment and technology more effectively and thereby increases their productivity, reduces injuries (and time off sick), reduces staff turnover and increases the quality of the care given. They found that apprenticeship training improved productivity, pay and career advancement opportunities.

Pocock and Skinner (2012) point out that there are many barriers and challenges confronting low-paid workers preventing them from participation in vocational education and training. Their study utilises data from a large national survey of Australian workers, and includes qualitative material. Money and time pressures were found to constrain the participation of low-paid workers in vocational education, particularly low-paid women.

Unfortunately the supply of skills does not guarantee that skills will be utilised to their full potential in the labour market. Under-utilisation of skills is wasteful and the OECD finds that countries that make better use of the skills of their workforce tend to have lower wage inequality (OECD, 2015). They find that some countries (for example, Finland and the United States) are better at utilising workers' skills than others (such as, Italy, Spain, Belgium and the Netherlands). Finding ways that can increase the utilisation of skills can help to reduce inequality and low wage employment. Mavromaras *et al.*, (2015) extend the work on scarring effects of unemployment and low pay to include underutilisation of skills among Australian workers. They find that skill underutilisation scars future employment prospects similar to the scarring effects resulting from the experience of low pay.

In general higher levels of skill acquired through education or training reduce the risk of low pay. However, evidence on mobility suggests that education and training doesn't guarantee upward mobility from a low paid job to a higher paid job. This is most likely to be due to the types and quality of education and training and the relevance of the skills acquired. In addition, there is evidence that skills are underutilised and that

experience of low-pay, unemployment or the underutilisation of skills has a negative impact on individuals' longer-term employment prospects.

Active Labour Market Programmes

The design of active labour market programmes (ALMPs) can make an important contribution to tackling low pay. As shown above, research has highlighted the existence of a low-pay/no-pay cycle characterised by individuals cycling between unemployment and low paid precarious work and that workers can become trapped in low paying jobs or scarred by the experience of unemployment, low pay or the under-utilisation of skills (Stewart and Swaffield, 1999; McKnight, 1998; Arulampalam, 2001; Mavromaras *et al.*, 2015). As low paid workers are more likely to become unemployed than higher paid workers and unemployed people have a high likelihood to enter low paid work, active labour market programmes can be targeted at precisely the population at risk of low pay and therefore ALMPs are an important preventative policy. However, for active labour market programmes to be effective in this regard they need to be designed to help prevent low wage employment in conjunction with assisting the unemployed find work; often ALMPs simply assist job seekers to find any job and many of the entry level jobs available to unemployed workers are low paid.

The first Evidence Review in this series - *The Strength of the Link between Income Support and Activation* (McKnight and Vaganay, 2016) - showed that active labour market programmes can be effective at shortening the duration of unemployment (such as job search assistance). Greater conditionality, monitoring of claims and benefit sanctions have also been shown to increase exit rates from unemployment. However, there is evidence that other forms of active labour market programmes (such as training) are more effective at improving longer run outcomes (future employment rates and earnings) but in the short-term can increase the length of time it takes for job-seekers to return to work (see, for example, the meta-level analysis conducted by Card *et al.*, (2010)). In the third Evidence Review in this series - *Creating More Equal Societies – What Works?* (McKnight, Duque and Rucci, 2016) - we highlight the role of active labour market programmes in creating fairer societies through their impact on earnings inequality. ALMPs can reduce unemployment, the incidence of low wage employment, under-utilisation of skills and can limit the extent to which these experiences scar future careers. Appropriately designed ALMPs can also improve individuals' prospects of upward mobility.

Although the majority of unemployed people experience short spells of unemployment and require very little assistance to find work, there is a significant group who experience multiple spells of unemployment or remain unemployed for long periods of time. For the group most at risk of spending significant proportions of their working lives unemployed, ALMPs can have the greatest impact if they improve long-run

employability rather than simply pushing job seekers back out into the labour market into low paid short-term jobs. Identifying the target group (beyond the long term unemployed) and designing the optimal interventions is challenging. Access to ALMPs is often restricted to the long-term unemployed and at one level this can make economic sense as the majority of unemployed people can find work with very little assistance but the downside is this selection policy is likely to exclude those cycling between low-pay and unemployment.

The OECD Employment Outlook 2015 makes a strong case for the design of ALMPs to not simply move people back into work quickly but for the judicious use of programmes involving full time activity (e.g. training and work experience) to increase the productivity and employability of the least advantaged. They outline a new framework for guiding the development of activation strategies:

“Effective activation policies can help harness the productive potential of each country’s population and contribute to economic growth, social cohesion and the sustainability of its social protection system. To do this, they need to maintain the motivation of jobseekers to actively pursue employment while also improving their employability and expanding their opportunities to be placed and retained in appropriate jobs.” (OECD, 2015; p16)

Bosch (2009) contrast five European countries (Denmark, Germany, France, the Netherlands, the United Kingdom) with the United States and identifies two distinct models of activation: one which helps the unemployed avoid accepting low wage work (helps the unemployed improve their skills and bargaining power) and another which “helps” the unemployed accept low wage work (puts pressure on the unemployed to accept low-wage work). He identifies Denmark as a country with a relatively generous unemployment benefit system alongside greater levels of investment in active labour market programmes with training playing a key role. The United States, the United Kingdom, and increasingly also Germany, have adopted a model with less generous unemployment benefits and where job search assistance and monitoring puts pressure on the unemployed to return to work as quickly as possible. He classifies France and the Netherlands somewhere between these two models. Denmark is a country characterized by a low incidence of low wage employment, while the US, UK and Germany have relatively high shares of low paid workers.

An analysis of employment assistance programmes in Australia and job-outcomes of low-skilled jobseekers concludes that activation programmes need to be expanded and developed to include a range of retention and advancement strategies so that jobseekers have a better chance of not simply returning to work but retaining work and advancing in the labour market (Perkins and Scutella, 2008).

The use of private providers to supply labour market services and deliver active labour market programmes allows governments to reward providers according to longer term outcomes (such as employment sustainability and wage progression). In the UK, the Work Programme² providers are paid according to job outcomes (participants must be in work for 3 or 6 months depending on claimant status), and for additional months that they remain in work, up to a maximum duration. This provides a financial incentive for providers to find sustainable job matches. However, the payments are not sufficiently high to make it viable for the provider to arrange high quality training for the job seeker even if it would result in better long term outcomes. Also post-employment support that could help participants find ways to advance in their jobs (progress out of low paying jobs) or move to better jobs, is sorely lacking in active labour market programmes (although there have been some trials, such as the Employment Advancement and Retention pilots in the UK and elsewhere – for the UK, see Hendra *et al.*, (2011)). Perkins and Scutella (2008) highlight this problem in the case of Australia and examine the extent to which low-skilled jobseekers manage to retain employment and then advance. They conclude that to improve employment retention and advancement of the low-skilled, current employment assistance programs should be expanded to include a range of retention and advancement strategies.

Summary

Active labour market programmes have the potential to play an important role in helping to prevent experience of low wage employment and target the group of individuals most at risk of low pay. However, the objective of many activation programmes is to return job seekers to the labour market as quickly as possible and the result is that they are simply pushed into low wage jobs. This does little to improve long term outcomes and it is highly likely that a significant proportion of these individuals will cycle back to unemployment. One problem is that the types of ALMPs that could be most beneficial to those at greatest risk of low pay (for example, education and training programmes) are restricted to long-term unemployed jobseekers and therefore excludes workers who are cycling between low paid jobs and unemployment. Activation that extends support to workers in low paid jobs could prove beneficial and a number of countries are experimenting with incentivising private providers of ALMPs to improve long term outcomes (retention and progression). The new means-tested cash transfer system being introduced in the UK (Universal Credit) includes work conditionality which, in theory, means that receipt will be conditional on claimants (and other family members) taking active steps to improve their labour market position and earnings after they have found work. However, there seems to be little support on offer to help low paid Universal Credit recipients progress to higher paid jobs but it is certainly an area that could benefit from further policy development.

² The Work Programme is the UK ALMP for the long-term unemployed and for unemployed people identified as requiring early intervention. It is delivered by private providers, and participants can remain on the programme for up to two years.

ALMP budgets are small relative to need and potential impact. The presentation and reporting of expenditure on training programmes for job seekers often grouped with general ‘welfare’ spending rather than education and training investment can limit budgets. More research is required to inform the design of interventions most effective at reducing the experience of low pay and breaking the low-pay, no-pay cycle. Extending access to high quality ALMPs (eg training) beyond the long-term unemployed to groups cycling between low pay and unemployment could be a successful strategy for improving upward mobility and reducing the experience of unemployment in the longer term. More research is required to understand how such a policy could work in practice and which activation strategies are the most effective at achieving this goal.

Statutory Minimum Wages and Wage Floors

Minimum wages create a wage floor and prevent employers from being able to pay very low ‘exploitative’ wages; at least legally in the formal labour market. They have proved to be a very effective way of eliminating extreme low pay in a number of countries.

The majority of OECD countries now have some form of statutory minimum wage (OECD, 2015), with Germany becoming one of the latest countries to introduce a minimum wage in January 2015. Minimum wages can take a number of different forms. They can be set at a national level (such as the UK and Australia) or lower geographical areas (e.g. Canada) or at an industry level (e.g. the Netherlands) and can have a number of tiers (e.g. France which has industry level agreements which set minimum rates as long as they are above the legislated national minimum). They can be a single rate or delineated by age, skill group or seniority. Minimum wages have been successfully introduced within many countries and there is a general consensus that they have on the whole improved the wages of the lowest paid with only very small, if any, measureable effects on employment (Doucouliagos and Stanley, 2009; OECD, 1998; Card and Krueger, 1995). There is limited evidence of minimum wages having a negative impact on employment, particularly on the low-skilled (Neumark, 2014). Their success in this regard is no doubt affected by the fact that minimum wages have typically been introduced at cautious levels, increases tend to be in relatively small incremental steps and employers are generally given plenty of advanced warning.

Although minimum wages improve the pay of the lowest paid they don’t necessarily reduce the incidence of low pay as the low pay threshold (two-thirds median pay) is typically above minimum wage rates. Evidence for the UK has shown that while the National Minimum Wage (NMW), introduced in 1999, had a positive effect in terms of increasing the wages of a large number of employees and eradicating extreme low pay, the share of employees with earnings below the low pay thresholds has not diminished (Bain *et al.*, 2014). In fact, despite the success of the NMW, the UK has one of the highest

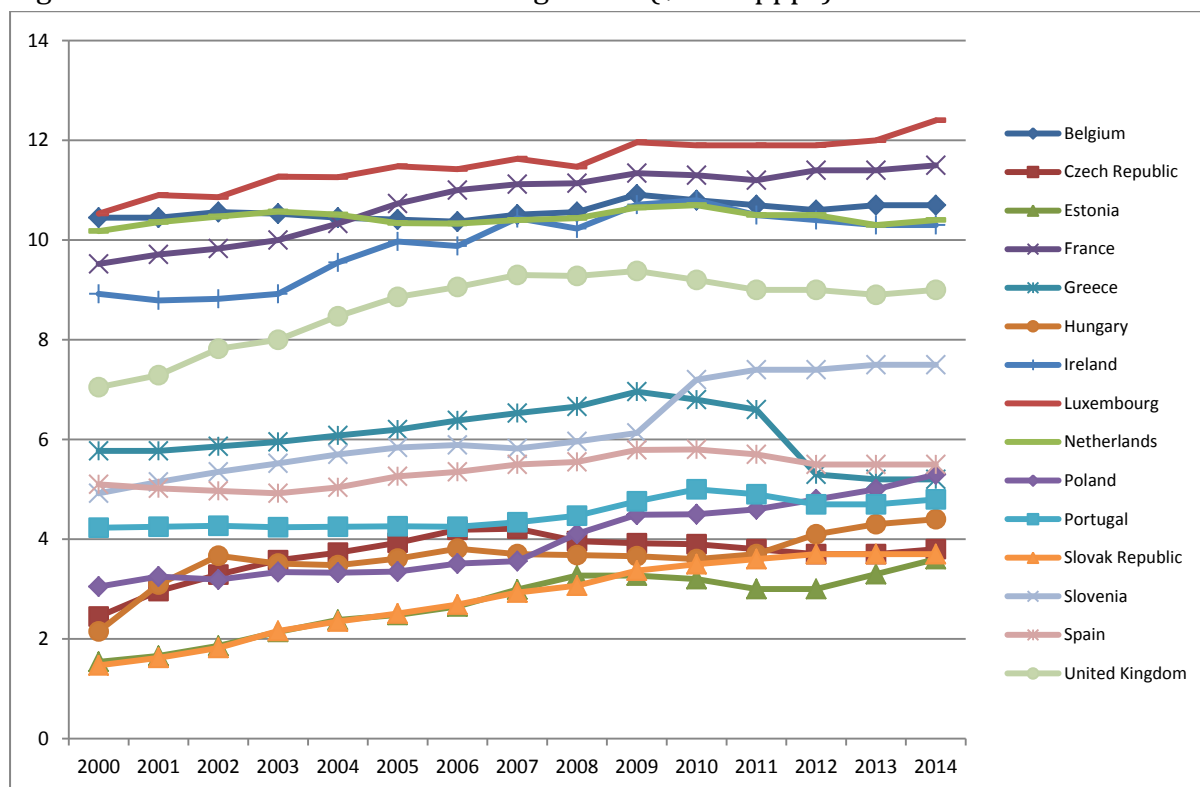
shares of employees with earnings below the low pay threshold across OECD countries (Plunkett *et al.*, 2014).

Figure 1.5 shows that there is considerable dispersion in the real value of minimum wage rates across European countries. Although the trend in these rates is upwards, minimum wage rates have not increased in real terms in all countries. Most notable is Greece, where not only has there been a fall in the real value of the minimum wage but nominal rates were also cut following the recent economic crisis (we saw in section 1.2 that the incidence of low pay in Greece also fell over this period, highlighting the large falls in the real wages of Greek workers across the wage distribution). Real minimum wage rates in the Netherlands and Belgium were roughly at the same level in 2014 as there were in 2000.

Figure 1.6 shows the incidence of low pay within countries in 2003 and 2013 and the real value of minimum wage rates in these two years. There is considerable variation across countries in the relationship between the real value of minimum wages and low pay incidence. Some countries, such as Estonia, have low minimum wage rates and a high incidence of low pay, while other countries, such as Belgium, have a high minimum wage and a low incidence of low paid work. However, there are also examples of countries that have relatively high minimum wage rates and a high incidence of low pay (eg Ireland) but no countries that have a low value minimum wage and a low incidence of low pay.

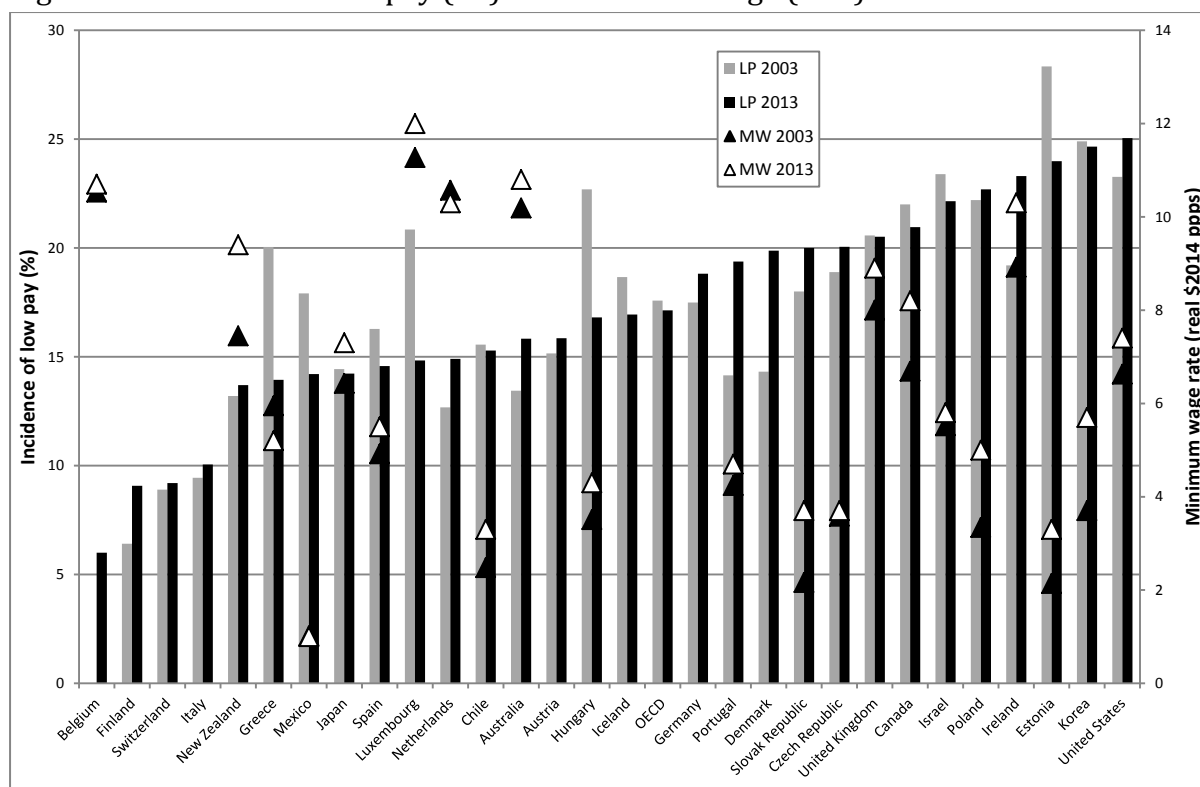
Differences in the real value of the minimum wage, and wages more generally, between countries are affected by prices and a whole range of other factors while low pay thresholds are determined according to median rates of pay.

Figure 1.5 Trends in real minimum wage rates (\$2014 ppps)



Source: OECD.Stat

Figure 1.6 Incidence of low pay (LP) and minimum wage (MW) rates 2003 and 2013

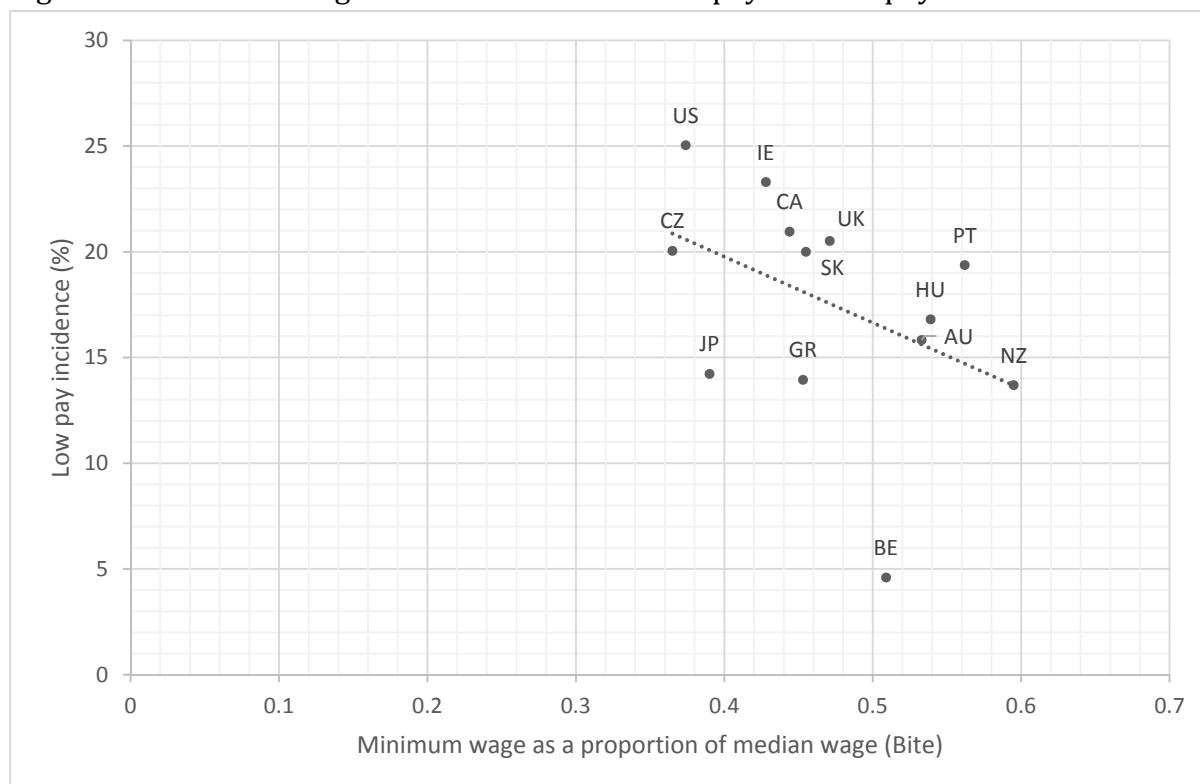


Source: OECD.Stat

In minimum wage research it is common to consider the ‘bite’ of the minimum wage – its value relative to median pay – and how this varies across countries. Minimum wages with a higher ‘bite’ are more likely to be associated with compression in the lower tail of the wage distribution.

Higher minimum wage rates don’t guarantee low rates of low wage employment as minimum wages can still be set considerably below the low pay threshold and large concentrations of workers can be found around the minimum wage point in the wage distribution. However, if we look at the relationship between minimum wage ‘bite’ and the incidence of low pay across countries we do find that stronger minimum wages (with a higher bite) are correlated with a lower incidence of low wage employment. Figure 1.7 shows this relationship for 13 OECD countries in 2013. On average, across these countries, we find that a one percentage point increase in the minimum wage bite is associated with one percentage point decrease in the incidence of low pay. Of course, other factors influence the incidence of low pay and countries do not line up precisely along the best-fit line. Belgium is found to have one of the highest minimum wage bites (52% of median pay) and by far the lowest incidence of low pay (less than 5%).

Figure 1.7 Minimum wage rates as share of median pay and low pay incidence – 2013



Source: OECD.Stat

Notes: (1) The minimum wage ‘bite’ is the ratio of minimum wages to median earnings of full-time employees. (2) The incidence of low-pay is defined as the share of full-time workers earning less than two-thirds of gross median earnings of all full-time workers. (3) Countries covered: Australia (AU), Belgium (BE), Canada (CA), Czech Republic (CZ), Greece (GR), Hungary (HU), Ireland (IE), Japan (JP), New Zealand (NZ), Portugal (PT), Slovak Republic (SK), United Kingdom (UK) and United States (US).

Minimum wages and other forms of wage floors, such as those resulting from collective bargaining and wage-setting agreements, can lead to productivity increases through creating incentives for employers to take what Bosch (2009) refers to as the “high road”. In this case, employers improve the productivity of their workers through innovative forms of work organisation and investment in training and new technologies. Where labour market institutions are weak, firms have an incentive to take the “low road” – low skilled, low productivity, low wage employment.

The growing concentration of employees paid at the minimum wage rate in the UK (Bain *et al.*, 2014) suggests that the NMW is being used at a “going-rate” by many employers and could be indicative of limitations on wage progression. This is symptomatic of low bargaining power of low paid workers who have been unable to maintain pay differentials. Research evidence suggests that a successful combination of a minimum wage with collective bargaining increases the effectiveness of these policies in terms of reducing wage inequality in the lower half of the wage distribution (Grimshaw and Bosch, 2013). Although Grimshaw and Bosch (2013) didn’t explicitly measure the impact on low pay it is fair to assume that this combination of minimum wages plus collective bargaining over wages is more effective than minimum wages on their own but more research is required.

Although we have focused on the impact of wage floors resulting from statutory minimum wages, trade unions and more generally collective wage bargaining systems can give rise to effective wage floors. For example, Ioakimoglou and Soumeli’s (2002) cross-country study finds that where unions are found to have strong bargaining power there is a lower incidence of low pay.

Summary

The evidence suggests that a well-managed minimum wage policy through statutory minimum rate(s) or collectively bargained wage floor(s) can be effective at improving the wages of low paid workers without having negative effects on employment. However, to reduce the incidence of low pay, minimum wages need to be set high enough up the wage distribution. Where single rates are set through statutory minimums rather than collective wage bargaining there is a risk that minimum wages can become the ‘going rate’ for many low paying jobs. This can create a low pay trap and limit wage progression. More research is required to understand how minimum wages can be successfully combined with other policies to ensure that career ladders are maintained to provide opportunities for workers to progress out of minimum wage jobs.

Design of Tax and In-Work Benefit Systems

Tax and in-work benefit systems affect the amount of earnings that low paid workers take home and the extent to which low wages are topped up to boost low household income. In Part II of this evidence review we examine the effect of cash transfer systems on the household incomes of low paid workers (at least in terms of protecting them from in-work poverty). Here we examine aspects of the system that impact directly on low paid workers, in particular features that impact on the risk of being low paid and progression to higher paid jobs.

Greater liberalisation of markets since the 1960s/70s, saw the privatisation of many state owned enterprises and utilities. This happened on a large scale in the former Communist countries during the 1990s as they made their transition to market-based democracies. As a result, greater freedom has been given to the market in the setting of commodity prices and wages in many European countries. Following large scale privatisation a greater share of workers' wages are now set in the private sector. Wage setting and associated labour market institutions such as trade unions went into decline as economies underwent structural change, moving away from manufacturing and heavy industry to services.

The decline in labour market institutions is considered to be one of the main drivers behind increases in earnings inequality and a deterioration in the relative (and in some cases absolute) wages of the lowest paid workers in the labour market. For many low paid workers, earnings were not sufficient to support themselves or their families and a number of policies have been introduced to fill the void left by declining labour market institutions. Minimum wages were introduced in most countries to create a wage floor and a system of in-work benefits or tax credits has been developed to top-up low wages and reduce low paid workers' tax liabilities.

In-work benefits

In-work benefits are cash-transfers or tax-credits paid to low paid workers. In general, entitlement depends on individual workers receiving low earnings (weekly, monthly or even annual) but can also be means-tested on the basis of family income, family size and composition. There are a number of different forms of in-work benefits such as assistance with housing costs, help with medical expenses, food vouchers or assistance with the cost of school meals but here we focus on cash transfers or tax-credits designed to simply top-up the earnings of low paid workers. In-work benefits are typically designed to both increase the incentive for unemployed or inactive workers (receiving out of work income support) to take-up available job opportunities (reducing the 'unemployment trap' through 'making work pay') as well as to increase the incomes of households depending on low levels of earnings. Such an approach was promoted in the OECD Jobs Strategy.

Kenworthy (2015) describes a number of different in-work benefit systems and outlines the US Earned Income Tax Credit (EITC) in some detail. He shows how the average value of EITC payments increased sharply between 1987 and 1996 partly due to increases in eligibility but also as a result of stagnant wage levels among the low paid. Recent figures show that nearly one-quarter of Americans now receive EITC.

Although in-work benefits are becoming an increasingly popular policy, Kenworthy cites research by Marx, Vanhille and Verbist (2012) which shows that in-work benefits or tax credits in the style of the UK's Working Tax Credit (WTC) are ill-suited to countries with relatively compressed wage distributions at the lower end (such as Belgium). This is because to achieve withdrawal rates that don't have a strong employment disincentive effect, eligibility would have to extend fairly high up the earnings distribution. The consequence is that the high cost of such a scheme is likely to be unattractive to many countries (Kenworthy, 2015, p.9).

Kenworthy also describes Sweden's recently introduced EITC which, unlike the UK and US schemes, is universal. This makes Sweden's EITC expensive (2.4% GDP) relative to the UK WTC (1% GDP) and the US EITC (0.3% GDP) (Kenworthy, 2015, p.10).

In part 2 of this review we examine the evidence on the impact of in-work benefits on in-work poverty, in this section we examine the evidence on their impact on the incidence of low pay, the wages of low paid workers, their wage growth and progression.

In-work benefits can increase the incidence of low pay by making it viable for workers to accept low paying jobs offering wage rates below reservation wages with the in-work benefit making up the difference. They can also increase the incentive for employers to create employment opportunities offering low rates of pay because in-work benefits increase the supply of workers willing and able to take up these opportunities. These positions are to some extent subsidised by tax payers and this feature may be unwelcome if the result is that they crowd-out more productive, higher paying work.

In-work benefits can also have an impact on the incidence of low wage employment through increasing employment retention rates through making it possible for workers to continue working in jobs where pay fluctuates (eg where working hours are uncertain) or for employers to keep job opportunities open over periods of fluctuating demand.

It is difficult to estimate the causal impact of in-work benefits on employment. In reviewing the evaluation evidence, Kenworthy concludes that both the US EITC and the UK WFTC/WTC have had positive impacts on employment and most of this seems to have been achieved through increasing employment retention rates (Kenworthy, 2015, p.13). For example, Dickens and McKnight (2008b) find that the introduction of the

Working Families Tax Credit in 1999 led to an increase in employment retention rates among male employees. Other evidence for the UK has also found a positive effect of tax credits on employment, particularly for single mothers (Brewer et al., 2006; Francesconi and van der Klaauw, 2007; Gregg, Harkness and Smith, 2009). However, Kenworthy argues, there is little evidence that they have increased overall employment rates to any great degree. The OECD concludes that in-work benefits have to be set high enough to have a sufficiently large impact on financial incentives to increase transitions from unemployment to work (OECD, 2005).

In conducting this evidence review we didn't find any evidence directly evaluating the impact of in-work benefits on the incidence of low-wage employment. However, it is noteworthy that the UK, with one of the most extensive systems of in-work benefits (dating back to the 1970s), also has one of the highest rates of low wage employment in the OECD. The US also has an extensive system of in-work benefits for low paid workers and a high incidence of low pay. Of course this does not prove a causal link, and in-work benefits are typically introduced precisely because of the existence of low pay and its association with in-work poverty. However, an unintended consequence could be that their existence increases the viability of low paid jobs (as described above). Indeed one of the motivations behind the introduction of a more generous minimum wage in the UK from 2016 (the National Living Wage) was to address the fact that low paid jobs were effectively being subsidised by tax payers through in-work benefits, creating distortions in the labour market. The use of high(er) wage floors is one way that less attractive consequences of in-work benefits systems could be limited.

Low pay and in-work benefits in the UK

In the UK in-work cash transfers have a long history, dating back to the introduction of Family Income Supplement in 1970. Initially these means-tested in-work benefits were restricted to low-income families with dependent children. Family Credit replaced Family Income Supplement in 1986 with a more generous and more secure in-work benefit. Further increases in generosity and eligibility were introduced when Family Credit was replaced by the Working Families Tax Credit (WFTC) in 1999, and when Working Tax Credit (WTC) was introduced in 2003 eligibility was extended to single people and couples without children. A number of other important features have changed including the alignment with tax administration and the period over which income is assessed to calculate entitlement; now initially based on qualifying income in the previous tax year while previously income was assessed over a shorter period just prior to a claim being made. There have also been changes to the number of qualifying hours different types of claimants need to work each week. The whole system is once again on the verge of major restructuring when Universal Credit replaces the majority of in- and out-of-work means-tested cash transfers.

Although the intention is that in-work benefits should help jobseekers back into the labour market into entry jobs supported by in-work benefits, thus providing a stepping stone to higher paid jobs, high withdrawal rates can create 'low wage traps' (or 'poverty traps'). As in-work benefits are withdrawn as earnings rise employees only receive a fraction of any additional earnings and this creates a disincentive to increase hours or pursue higher paid work opportunities. For the UK, Dickens and McKnight (2008b) didn't find any evidence that the Working Families Tax Credit either limited or enhanced wage growth over a twelve month period for those who remained in employment. In a recent assessment on the effect of tax credits, Gregg, Hurrell and Whittaker (2012) find no evidence of a general wage effect, nor any evidence that tax credit recipients (low wage parents) have fared any less well than non-recipients in the same part of the earnings distribution. However, they do cite evidence from Rothstein (2008) and Leigh (2010) that the EITC in the US has spill-over effects leading to depressed earnings for non-recipients. Azmat (2015) found that in the UK during a period when employers were directly aware of the payment of tax credits in the UK (for a limited period they were paid through the payroll), the wages of male WFTC-eligible workers declined relative to similarly-skilled non-eligible workers. This finding highlights the importance of the design of in-work benefit systems for avoiding unintended consequences. In contrast to Gregg, Hurrell and Whittaker, Azmat found evidence of negative spill-over effects on wages affecting both claimants and non-claimants (in the order of 1.7 per cent); this conflicting evidence could be due to the differences in the design features during the periods in which the evaluations took place.

Income tax and social insurance contributions

Tax policies designed to 'make work pay' are generally designed to increase the share of gross pay that workers are able to take home. These include lower income tax rates for low paid workers, or even tax exemptions with a zero tax band below a fixed thresholds; workers earning below this threshold are not liable to pay any income tax. Some tax policies are designed to help 'make work pay' for jobseekers considering taking up entry-level low paying jobs and some to reduce the extent to which income is taken away from low paid workers in one hand, in the form of taxation, and given back in the other hand, in the form of cash transfers. In addition, preferential tax treatment of low paid workers can be used to reduce employers' tax liabilities and therefore increase the incentive to create low paying work opportunities. Lowering employers' tax liabilities can also be used to lower the costs of employing low paid workers in the presence of minimum wages. Social insurance contributions can also be reduced for low paid workers and their employers and therefore further reduce the cost of employing low paid workers and increasing take-home pay. However, there can be negative consequences where contribution records are linked to entitlement to a range of contributory-based cash transfers such as unemployment benefit, maternity pay, sickness benefit, retirement pension, etc. Although these policies can have a positive

impact on employment rates, they can also increase the share of low wage employment. Not all income tax systems have such preferential treatment for low paid workers. Less progressive tax systems result in low paid workers paying more taxation on their earnings. This means that minimum wages can be less 'valuable' than they appear; for example, in Hungary minimum wage workers pay a higher share of wage tax than in many other countries (OECD, 2015).

Marchal and Max (2015) analyse a selection of 16 EU countries, for the period 2001-2012, using three US states as reference cases. They find evidence that relative minimum wages have been eroded in various EU countries, but with catch-up growth in the new Member States. Their evidence shows that governments counteracted eroding minimum wages through direct income support measures, especially for lone parents. Most prevalent among these were substantial declines in income tax liabilities. They identify an emerging trend towards fiscalization of income support policies.

In Germany, the tax system provides an incentive to work short hours in low paid jobs – so-called “mini-jobs” – as the additional income earned from such jobs is not taxed. Mini-jobs are a form of marginal employment introduced in 2003 that allow workers to earn up to €450 a month tax-free. Increased flexibilisation of the German labour market (aided by the Hartz reforms) has accompanied increasing rates of low wage employment. The reforms and the preferential tax treatment were made with the objective of boosting employment, legalising forms of informal work and improving incomes of low paid workers. However, there is concern that they have resulted in a large number of employees working in low paid, precarious forms of work with few prospects of improving pay. The introduction of a minimum wage in January 2015 may have led to some improvements but it is still too early to tell. It certainly will limit the number of hours that people can work in tax-exempt mini-jobs and will reduce the incentive for employers to create this type of work opportunity.

In the past, the design of the National Insurance schedule in the UK, which included a Lower Earnings Limit (LEL)³, created an incentive for both employers and employees to keep the pay of some low paid employees below this threshold. Employees and employers were not required to pay National Insurance contributions if pay was below the LEL but when earnings exceeded the LEL they were required to pay contributions on all of their pay. This created very high effective marginal tax rates just above the LEL. In the short term employees were marginally better off being paid below the LEL than if earnings were above the LEL, but in the longer term they could miss out on a number of contributory-based benefits and even pension entitlement. Statistical

³ Employees with earnings below this threshold were not required to pay any National Insurance contributions (NICs) (nor were their employers) but if earnings were above the threshold they were required to pay NICs on all of their earnings not just earnings above the threshold. This resulted in very high marginal tax rates for those earning just above the threshold.

evidence revealed a 'spike' in the wage distribution just below the LEL and eventually the National Insurance schedule was redesigned to remove this anomaly (McKnight *et al.*, 1998). It was no accident that reforms to the National Insurance schedule, lowering liabilities for employers and employees, were introduced in 1999 at the same time as the NMW and this, no doubt, helped reduce the impact of the NMW on employment rates.

While the main objectives of in-work cash transfers may be to boost the incomes of low-paid workers living in low income households, increase the financial incentive for unemployed workers to accept available job opportunities and improve employment sustainability, in-work benefits can also create an incentive for employers to create low paid jobs. Employers may not be in a position to observe whether or not employees can top-up wages from low paying jobs through in-work benefits, but the fact that workers are willing to supply labour for low hourly rates of pay makes it feasible for employers to adopt a business model taking advantage of this supply.

Co-ordinated policy needs to take into account the inter-relationship between minimum wage rates and the tax and benefit systems. This includes ensuring that minimum wage rates are set at a level that creates a financial incentive for unemployed workers to find work. Careful design of income tax schedules needs to reflect minimum wage rates (tiers, exemptions, etc) and help increase financial incentives for the unemployed to find work and to help maximize the net pay of minimum wage workers.

Thoughtful design can mean that the two policies can work in harmony with the minimum wage acting as a wage floor and preventing employers from dropping wages to very low levels in the presence of in-work cash transfers (where effectively employers of low paid workers are subsidised by the State (tax-payers)). Tax schedules can reduce the labour cost of minimum wage workers to employers and can reduce the impact of minimum wages on employment.

A second way that the tax and benefit systems can impact directly on low wage employment is through the financial incentives they create for employers to build businesses based on low paid work. These can be due to tax-breaks, exemptions and tax credits for employers of low wage workers (either for income tax or social contributions). This may seem attractive if the result is that a larger share of workers can find employment, but such distortions can increase the size of the low wage labour market at the expense of higher quality more productive work opportunities; impacting not only on individuals but also on productivity, economic growth and inequality.

Reducing labour supply constraints

One of the reasons for the higher rates of low wage employment among women is that they typically face greater labour supply constraints than men. Despite the fact that there have been some improvements in the gender balance of care-giving, it remains the case that women still take on the responsibility for providing the majority of child-care and elderly-care within families. Even where this allows women to work there is a greater tendency for women to work part-time and within more local labour markets, working closer to their homes or their children's schools. This limits the types of opportunities available to women and increases their risk of working in low paid jobs.

Access to good quality affordable childcare can have a positive impact on the risk of low pay. Where public expenditure on childcare is sufficient to provide high quality childcare for lower paid workers⁴ for whom such childcare would otherwise be unaffordable this can increase incentives to work and have beneficial effects on children (Bosch, 2009). In most countries part-time work is associated with a pay-penalty and a higher risk of low wage employment and therefore access to childcare, allowing mothers to work for longer hours, can reduce this risk and also improve their chances of progression.

For workers who wish to work longer hours addressing labour supply constraints will have a positive impact on their lives. However, while some workers are undoubtedly constrained in a way that prevents them from pursuing full-time, full-year work opportunities, they have no desire to work longer hours. Individuals spending time caring for others are making a very valuable contribution to their families and to society through caring for children, people with disabilities or those who are ill, and the elderly. For them, a more positive policy, which would also benefit other low paid workers, is to improve the quality of low paying jobs and the types of work opportunities available for those requiring flexibility and/or shorter hours. Greater flexibility in higher paying jobs and more security in employment are two aspects which low paid workers have identified as initiatives that they believe would improve the situation of low paid workers (Hay, 2015). More needs to be done to remove the part-time working pay-penalty and increase the quality of part-time jobs and we cover these issues in more detail in Part 2 of this review.

Access to affordable, reliable public transport is also a key to expanding the set of job opportunities available to individuals with caring responsibilities as without this they are limited a narrower set of opportunities within close proximity to where they live.

Summary

⁴ This is particularly the case for low paid workers living in low income households but it also applies to women in higher income households as it can be difficult for families to 'justify' mothers working (where fathers are working in higher paid jobs) if the cost of childcare is greater than their potential earnings.

Labour supply constraints are one of the key factors that increase the risk of some workers working in low paying jobs. There is a clear gap in the literature on how reducing these constraints can reduce the risk of low pay and what policies are the most effective in achieving this goal. However, there needs to be a balance between removing so-called constraints that are seen to limit the ability of workers to take-up higher quality jobs in the full-time/full-year segment of the labour market and adapting the construction of these jobs that would allow equal access for workers with constraints. We cover these topics in more detail in Part 2 of this review in relation to prevention of in-work poverty.

1.6. Concluding Remarks on low pay review

The incidence of low pay varies widely across countries and in recent years low wage employment has increased in some countries but fallen in others. Some groups of workers are more likely to be low paid than others: women; young workers; low-skilled workers; disabled people; ethnic minorities. A number of preventative policies and approaches are effective at reducing the incidence of low pay and preventing individuals from becoming low paid, as well as increasing the chances of low paid workers progressing to higher paid jobs. These include training/skills policies designed to tackle low skills, active labour market programmes, statutory minimum wages, the design of tax and benefits systems and policies that reduce labour supply constraints.

It has been shown that a number of policies which aim to improve the pay of low paid workers can have unintended consequences, potentially leading to increases in the size of the low wage labour market and trapping individuals in low paid jobs with limited prospects of improvement.

The evidence reviewed suggests that coordinated policy action across minimum wage policy, active labour market policies, income taxation and in-work cash transfer systems, alongside concerted efforts to improve the productive skills of those at risk of low pay and reduction in the under-utilisation of skills through addressing labour supply constraints is necessary to prevent low pay blighting the lives of workers in the 21st Century.

Part II: In-work Poverty

2.1 Introduction to in-work poverty

In this second part of the evidence review we turn to look at the issue of in-work poverty. Low pay, our focus so far, is one factor contributing to the incidence of in-work poverty in European households, and studies often conflate the two issues as one and the same, as Peña-Casas and Latta (2004) point out. But in practice the relationship between one and the other is not straightforward.

Crucial to the complexity of the relationship is the fact that low pay is measured at individual level, and usually in hourly terms, while when we consider poverty we look at the household as a whole and its overall income through the year. Thus while low hourly pay may result in poverty for an individual worker, four other key factors are relevant: (i) whether work is part-time or full-time and how stable it is throughout the year; (ii) the presence of other earners in the household, their work intensity and their earnings; (iii) the expenditure needs of the household, driven in particular by the number of dependents, usually children⁵; and (iv) the impact of state taxes and transfers. Marx and Nolan (2012) argue that in-work poverty is strongly associated not so much with low hourly pay per se but rather with single earner status and low work intensity at the household level, as well as working part-time or part-year at the individual level. The relative importance of individual and household factors will vary across countries, due to differences in employment patterns, wage structure and household composition.

This part of the review begins by briefly examining the extent of in-work poverty in EU Member States, and recent changes in its prevalence. It goes on to look at the risks of in-work poverty for different household types, highlighting both common factors and differences across countries. This discussion highlights a number of possible directions for policy. The review then turns to consider what evidence tells us about the effectiveness of alternative policy responses, grouped under five main headings:

- tackling low pay (with reference back to the earlier part of the review);
- improving the quality and stability of jobs;
- policies to boost labour market participation, particularly among second earners, and to increase hours for lone parents working part-time;
- reductions in taxes and social insurance contributions; and
- social security benefits, including child or family allowances and targeted in-work benefits.

⁵ Other types of need, such as the additional costs arising from meeting the needs of disabled household members, are also relevant in driving poverty as captured through material deprivation indicators, but these needs are not adjusted for by standard measures of equivalised income, and are therefore not adequately reflected in income poverty rates.

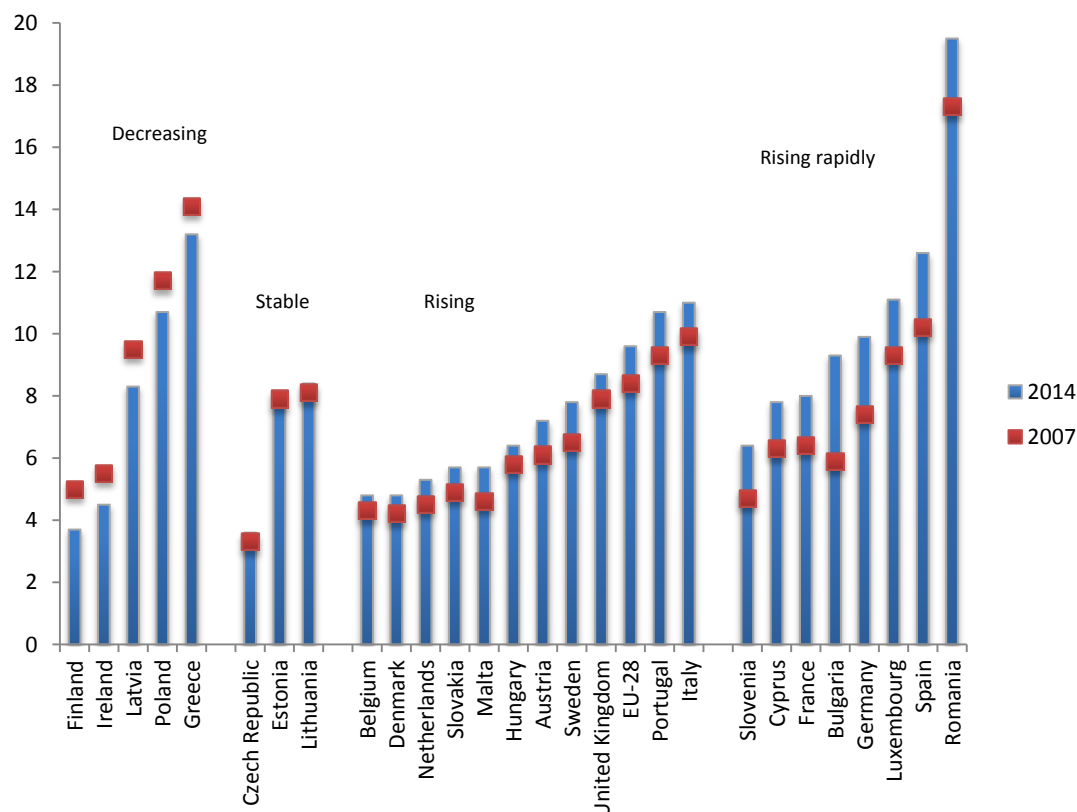
There is no uniform definition of ‘in-work poverty’, and different studies take different approaches. Unless otherwise stated, poverty in this review is understood using the standard European definition, which classifies individuals as poor (or ‘at risk of poverty’) if they live in households with equivalised income below 60 per cent of the national household median. Many of the studies cited also appear to use the Eurostat definition of ‘in work’, which considers individuals as employed if they were working for at least seven months during the income reference period of one year. As Horemans and Marx (2013) point out, the cut-off is arbitrary (as any would be), and discards individuals with very weak labour market attachment. But it seems to represent a reasonable compromise between (a) the definition used by the US Bureau of Labor and Statistics, which includes all those looking for work during 27 weeks in a year (therefore classifying some people as working poor because they did not in fact succeed in doing any work); and (b) the definition proposed by Halleröd and Larsson (2008), which only includes people who indicate that their main activity was employment during all 12 months of the reference period (excluding those whose difficulties arise from insecure employment). All Eurostat statistics presented use the Eurostat definition; where studies have used alternative definitions we highlight this only where it seems to affect the point being made.

2.2 The extent of in-work poverty across Europe – and recent changes over time

In 2014, nearly one in ten (9.6 per cent) of working people in the EU lived below the poverty line, measured as 60 per cent of equivalised median income.⁶ This is up from 8.4 per cent in 2007. Across Europe, the risk of poverty in 2014 varied widely, from 3.6 per cent of working people in the Czech Republic and 3.7 percent in Finland to 13.2 per cent in Greece and 19.5 per cent in Romania.

As Figure 2.1 shows, an increasing risk of poverty in working households has been a common experience across the majority of Member States in recent years. In-work poverty has had a tendency to grow rather than fall back as a phenomenon as economies have started to move out of recession.

⁶ All unreferenced statistics are from tables downloaded from the Eurostat database at <http://ec.europa.eu/eurostat/web/main/home>.

Figure 2.1 At-risk-of-poverty rate for employed persons in the EU, 2007 and 2014 (18-64 year olds)

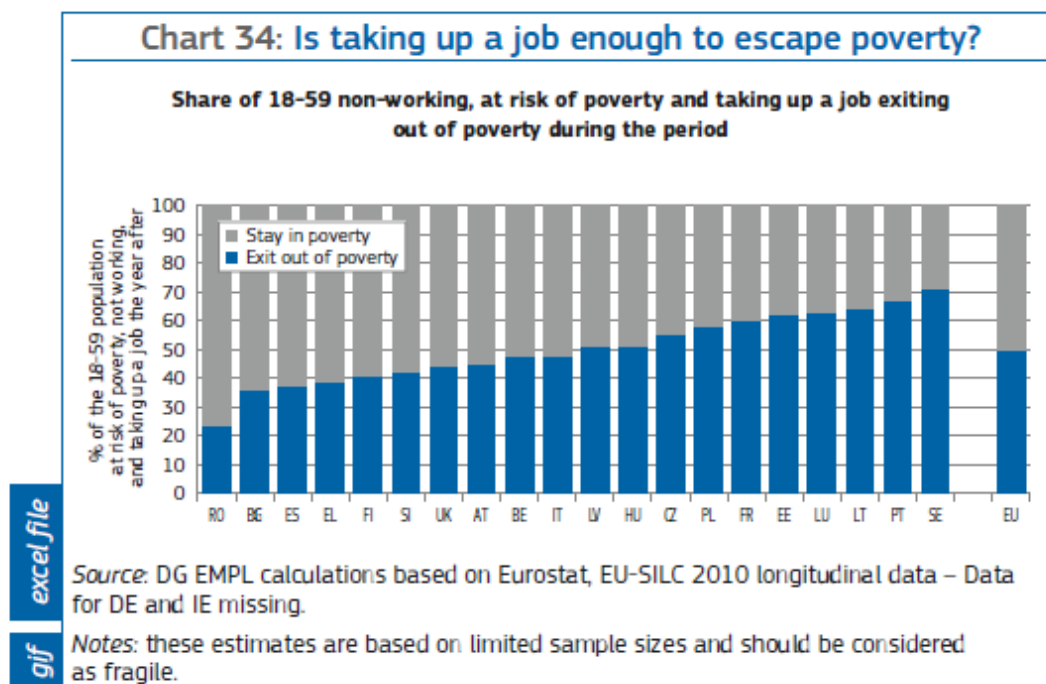
Source: Eurostat Database, from EU-SILC (ilc_iw01). Note: EU-28 is EU-27 for 2007.

The experience of previous recessions indicates that improvement in labour market conditions does not necessarily lead to poverty reduction (see e.g. European Commission 2009). A descriptive analysis drawing on EU-SILC data for the years 2004-08 demonstrates that while employment rates across the European Union grew by around 3 percentage points over this period, rates of relative poverty did not decline (Cantillon, 2011). One reason for this was the continuing polarisation between ‘work-rich’ and ‘work-poor’ households over this period, with the number and proportion of dual-earner households increasing while the number of workless households remained largely unchanged (Cantillon, 2011).

In analysis of the aftermath of this past recession, Grzegorzewska and Thevenot (2014) find that getting a job did lift people over the poverty line – but only in half of cases. Examining EU-SILC data they find that, across the EU as a whole, 50 per cent of those who were poor in 2008 and took up a job were no longer poor in 2009, while 50 per cent stayed below the poverty line. As Figure 2.2 shows, the average figure masks wide variation between countries. In Sweden and Portugal more than two-thirds of those taking up a job moved out of poverty during this period, while in Romania the share was only just over 20 per cent. In half of countries those taking up a job were more likely to

remain poor than to exit from poverty. Among the key reasons that a job did *not* provide a route out of poverty were the quality of the job and the composition of the worker's household, both issues we return to in later sections. As Goulden (2010) argues, entering work cannot provide a sustainable route out of poverty if job security, low pay and lack of progression are not also addressed.

Figure 2.2 Is taking up a job enough to escape poverty?



Source: Grzegorzewska and Thevenot (2014)

Across the EU, the risk of poverty for those not working remains four times greater than that for those in work in 2014, and in all Member States the risk is at least twice as high. However, households which are in work and poor make up a significant – and, in some countries, growing – proportion of all those in poverty. Grzegorzewska and Thevenot (2014) find that one third of adults aged 18-64 who are at risk of poverty in the EU are employed. In the UK, workless families have become a smaller proportion of all working-age people in poverty over time, down from 56 per cent of the total in 1996/7 to 47 per cent in 2011/12 (Ray *et al.*, 2014).

2.3 The risks of in-work poverty for different household types

At household level, both work intensity and household structure are key factors driving the likelihood of in-work poverty (see also Ponthieux 2010, summarised in Box 2.1, for more on individual characteristics).

Work intensity

Table 2.1 shows Eurostat data on the risk of poverty in households with different levels of work intensity, calculated as the ratio between the number of months that household members of working age (18-59 years, excluding dependent children aged 18-24) worked during the year and the total number of months that could theoretically have been worked. For part-time workers, the number of months is the full-time equivalent. Thus a lone parent working half-time would have a work intensity of 0.5, as would a couple household where one member worked full-time and one not at all. A couple using a 'one and a half breadwinner model' (one full-time and one part-time) would have a work intensity of around 0.75.

It is clear that where work intensity is high – at least 0.85 – the risk of poverty is relatively low across most of Europe – though not non-existent. In all countries the risk falls at or below 6 per cent except in Germany (7 per cent) and Romania (18 per cent), with rates particularly low in Malta, Croatia and the Netherlands. While these figures are low, the fact that one in twenty such households across the EU live below the poverty line should not be easily dismissed, given there is limited scope for these households to work longer hours.

For households with medium work intensity, 0.45-0.55, the risk of poverty is significantly higher. In Finland and Denmark, these households are fairly well protected, with poverty rates below 10 per cent. But in a number of countries at least one in five such households fall below the poverty line. Many of these countries are in Eastern Europe or the Baltics (Romania, Bulgaria, Poland, Lithuania, Latvia) or Southern Europe (Portugal, Italy, Spain), with the UK and Luxembourg also falling into this group.

As expected, poverty rates are highest in households where work intensity is lowest, although again there is variation across the EU in the extent to which low work intensity (0.2-0.45) is likely to result in poverty. The top half of the table shows that in many parts of central and northern Europe the risk of poverty in such households falls below one-third. In parts of Southern and Eastern Europe, and in the UK, the risk of poverty in such households is around four in ten or higher.

Table 2.1: At risk of poverty rate by work intensity of the household 2014 (per cent)

	Very high 0.85-1.0	High 0.55-0.85	Medium 0.45-0.55	Low 0.2-0.45
Cyprus	5.6	5.2	13.4	19.8
Finland	2.5	3.4	9.5	20.2
Czech Rep	2.1	4.7	11.1	22.8
Belgium	2.1	5.1	14.3	27.8
Netherlands	1.8	4.6	14.0	29.1
Germany	7.3	9.9	15.2	29.1
Malta	0.5	3.8	20.1	29.3
Croatia	1.1	2.7	14.1	30.1
Denmark	3.3	7.7	9.7	30.3
Sweden	5.5	14.6	19.2	30.8
France	4.1	12.8	19.1	31.6
Slovenia	3.0	6.8	21.1	33.4
Austria	4.3	7.9	11.5	33.4
Luxembourg	6.0	14.6	25.2	33.7
Spain	5.9	12.4	21.2	36.2
Slovakia	3.0	5.6	18.5	37.0
Latvia	4.6	7.8	22.8	37.5
Italy	5.3	9.0	22.5	38.1
UK	3.8	11.0	23.9	39.5
Greece	4.1	11.3	17.9	41.9
Poland	5.9	9.1	25.5	42.3
Hungary	2.6	6.7	15.1	43.3
Lithuania	5.0	10.5	27.7	43.4
Portugal	4.8	10.9	25.1	46.4
Bulgaria	2.7	11.5	26.6	47.3
Romania	12.7	27.0	34.4	56.2
EU-28	5.2	10.2	20.6	36.7

Source: Eurostat Database, from EU-SILC (ilc_iw03). Note: Dark shade shows performance in the worst third of EU Member States (i.e. highest poverty rates); light shade shows the middle third of EU Member States; white shade the best performances.

The data in the table are ordered by the level of poverty in low work intensity households (the final column), and in each column shading reveals the third of countries with the highest poverty rates (dark grey shading), the middle third (light grey) and the third with the lowest rates (white). This helps to reveal a rough but imperfect correlation between the risks for households working at different levels of intensity. Germany, where we observed a high poverty risk for high work intensity households, performs relatively well for those with low intensity. In Hungary and Bulgaria, in contrast, households with high work intensity are unlikely to fall below the poverty line, but the risk in low work intensity households is very high.

The higher risk of poverty for part-time workers also emerges from OECD studies. OECD (2010a) finds that, in all countries for which data are available, the proportion of part-time workers living in a poor household (understood here as half the median disposable income) is larger than it is for their full-time counterparts, and the gap is substantial: on

average, part-timers face a poverty rate that is more than twice as high as that observed among full-timers. Unsurprisingly, the poverty rate among part-time workers is much higher in countries where part-time workers are more likely to be primary earners (OECD, 2010a). The picture as regards the *severity* of poverty is mixed, however. The depth of poverty, as measured by the distance between the median disposable income among the poor and the poverty threshold (half the median household disposable income), is much more severe for part-time workers than for their full-time counterparts in a small number of countries – mostly Mediterranean and eastern European countries – but on average, there is no significant difference between the two groups.

Research on work and poverty transitions for parents in the UK reinforces the association between part-time work and poverty. Analysis of poverty transitions in the first three years after entering work shows that those in full-time work were more likely to exit poverty over this period than those in part-time work, while those in part-time work were more likely to enter poverty than those working full-time (Browne and Paull, 2010). Ray *et al.* (2014) note that part-time work has also risen during the economic downturn in the UK, and the numbers of involuntary part-time workers has grown substantially (reaching 18.5 per cent of part-time workers in 2013).

Low work intensity can be driven by insecure work during the course of the year, as well as by part-time hours. Eurostat figures show that workers on temporary contracts have a much higher risk of poverty (15.7 per cent in the EU28 in 2014) than those on permanent contracts (5.9 per cent). Similarly, Van Lancker (2012) finds that the odds of being in poverty for temporary workers was 2.3 times that for permanent workers, a disparity largely explained by the difference in wages between temporary and permanent workers, rather than by the individual and household characteristics of those in temporary work. The characteristics predisposing temporary workers to poverty were the same as those for workers in general, namely being young, having low skills, and living in a single-earner household or a household with greater needs (e.g. with dependent children or with a non-working spouse).

Frazer and Marlier (2010) point to the association between part-time work, low pay and insecurity: part-time jobs can raise the risk of poverty because of these associated factors, as well as because of the lower number of paid hours per week. (Frazier and Marlier also note, however, that part-time working should not be overplayed as the explanation for in-work poverty: while the risk of poverty is lower for full-time workers, in many countries the majority of working poor are nevertheless in full-time employment.)

People who are self-employed also tend to have a higher poverty risk than those working for an employer (Ray *et al.*, 2014). Using 2007 EU-SILC data across the EU, Eurofound (2010, cited in Ray *et al.*, 2014) find the risk of poverty among self-employed

people to be three times higher than among the employed: 18 per cent compared to 6 per cent. Ponthieux (2010) adds that living with others who work lowers the poverty risk, except when both the worker him/herself and the other workers in the household are self-employed.

Household structure

Table 2.2 turns to examine how in-work poverty risk changes with household structure. It is clear, first, that having children in the household increases the risk of a working household falling below the poverty line in almost every country. The final two columns of Table 2.2 show the ratio between poverty rates with and without children, for single adult and dual (or more) adult households. This ratio is greater than one for all countries except Slovenia and Romania (single adults) and Cyprus (couples). In several countries the presence of children increases the risk by three-fold or more: Croatia, Malta, Belgium, Lithuania and Bulgaria (single adults); Malta, Lithuania and Luxembourg (couples).

In all countries except Slovenia and Romania, the highest in-work poverty risk faces single parent households. In more than one-third of countries, for more than one in five single parents, paid work does not carry their household over the poverty line. This group of countries includes Sweden, Germany and Belgium as well as countries in Southern Europe, Eastern Europe and the Baltics.

There are two main forces leading to higher poverty rates in households with children than households without. One is simply the additional demands on resources in these households. The difference between households with and without children is less stark for two-adult households, because what matters is not the absolute number of children in a household, but rather the ratio of children to adults (OECD, 2009). In particular, having a third or a fourth child sharply raises the risk of poverty, and especially for single parent households (Crettaz and Bonoli, 2010). Jenkins and Rigg (2001) find that the two most common forms of household change that trigger an entry into poverty in the UK are an increase in the number of children in the household and a transition from a two- to a one parent household.

Table 2.2: At risk of poverty rate for working households by family structure 2014 (per cent)

	Single	Single with children	Couple no children	Couple with children	Heightened odds associated with children (singles)	Heightened odds associated with children (couples)
Netherlands	7.6	9.9	3.7	5.5	1.3	1.5
Denmark	8.2	10.5	2.7	4.5	1.3	1.7
Slovenia	12.4	10.8	4.3	6.3	0.9	1.5
Croatia	3.1	11.8	4.1	7.0	3.8	1.7
Hungary	9.6	12.4	3.7	8.2	1.3	2.2
Finland	5.8	12.8	2.4	3.4	2.2	1.4
Greece	11.0	12.9	10.8	15.9	1.2	1.5
Poland	9.5	14.8	7.6	12.5	1.6	1.6
Czech Rep	6.0	16.2	1.5	4.3	2.7	2.9
Slovakia	6.3	16.6	2.8	7.9	2.6	2.8
Malta	4.6	16.9	1.8	8.8	3.7	4.9
Austria	11.8	17.7	4.3	7.5	1.5	1.7
Cyprus	10.0	18.0	10.1	5.4	1.8	0.5
France	10.6	18.4	4.8	7.9	1.7	1.6
UK	14.8	18.8	5.1	10.6	1.3	2.1
Romania	20.5	19.6	14.0	23.4	1.0	1.7
Belgium	5.4	20.4	2.8	4.8	3.8	1.7
Sweden	15.6	21.2	4.8	5.6	1.4	1.2
Italy	14.0	22.9	6.4	12.2	1.6	1.9
Germany	17.4	23.4	6.5	8.2	1.3	1.3
Portugal	10.1	23.5	8.3	11.9	2.3	1.4
Latvia	11.9	25.6	5.2	8.4	2.2	1.6
Spain	16.4	26.8	8.1	14.7	1.6	1.8
Lithuania	9.4	27.9	3.3	10.4	3.0	3.2
Luxembourg	12.7	30.8	4.1	13.6	2.4	3.3
Bulgaria	7.6	31.7	5.3	12.1	4.2	2.3
EU 28	13.6	20.0	6.1	10.6	1.5	1.7

Source: Eurostat Database, from EU-SILC (ilc_iw02). Note: Dark shade shows performance in the worst third of EU Member States (i.e. highest poverty rates); light shade shows the middle third of EU Member States; white shade the best performances.

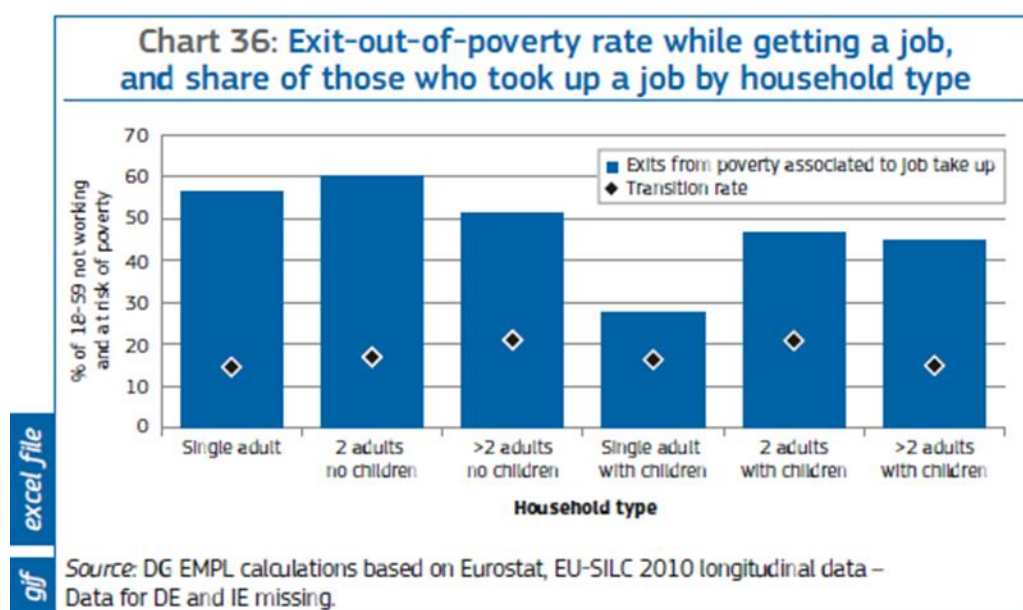
A second factor is the lower paid work intensity in households with children, against a backdrop in which dual earnership has become increasingly common in OECD countries. This has put families with a non-working spouse (and single parent households) in a relatively more difficult situation than during the post-war years, when single-earnership was the norm (Crettaz and Bonoli, 2010). The rise of the two-earner household makes a second wage among European households a necessity in order to have a decent level of living (Peña-Casas and Latta, 2004). In Scandinavian countries in particular the two-earner model has become standard, while Southern European countries continue to have higher proportions of one-earner couples.

Differences in household composition across Europe are clearly relevant in determining the importance of different factors in shaping poverty across Europe, though there are common themes. Using EU-SILC data to explore the relationship between household composition and income sufficiency, Iacovou (2013) find that in practice the same household types are at the highest risk of poverty and hardship in virtually all countries: lone parents, single elderly people, and other single-adult households. However, while these at-risk groups account for a majority of the poor population across Northern and Western Europe, they account for only a minority of the poor population across Eastern and Southern Europe, because of the lower prevalence of these groups; household size is relatively small in Western and particularly Northern Europe, and larger in Southern Europe and large parts of Eastern Europe. Instead, in Southern and Eastern countries, couples with adult children make a considerable contribution to the pool of poor people, accounting in the Southern countries for 12 per cent and 17 per cent of those in poverty and hardship, respectively. In the Eastern countries, people living in extended-family households form a large contribution to the numbers of poor, accounting for 17 per cent and 20 per cent of those in poverty and hardship.

Interactions between work intensity and household structure

Research by Grzegorzewska and Thevenot (2014) examining transitions into work also highlights the very different position facing households with different structures. Figure 2.3 shows the substantially lower likelihood that a household with children will move out of poverty when an adult takes up work, compared to a household without children. The exit rate is particularly low for single parents: taking up a job means a move out of poverty in little more than one in four cases.

Figure 2.3: Exit-out-of-poverty rate while getting a job

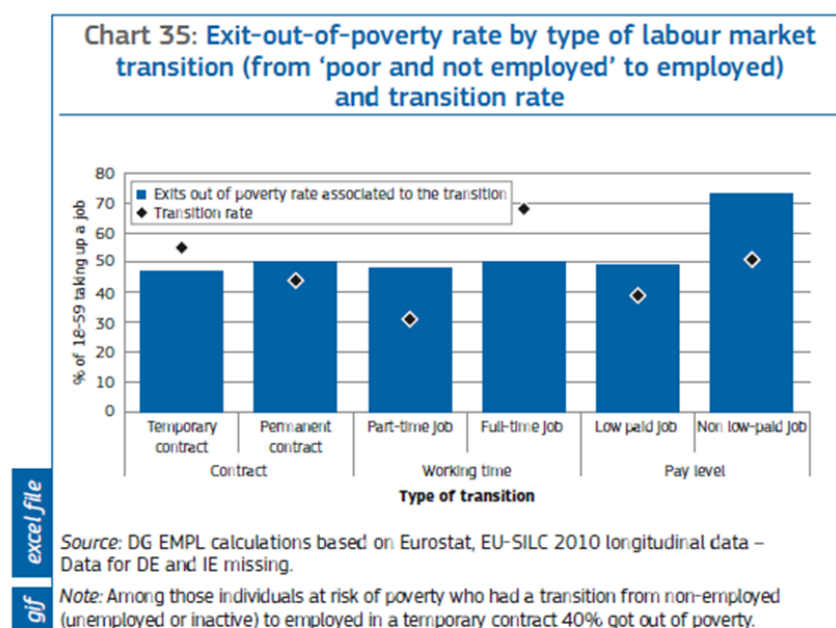


Source: Grzegorzewska and Thevenot (2014)

Interestingly, in similar analysis focused on the nature of employment, the same authors find very similar exit rates by type of contract and by part-time/full-time job; only entering a job that was not low paid predicted a substantially higher likelihood of poverty exit (see Figure 2.4). They do find that transitions once in work make a difference (from temporary to permanent contract, from part-time to full-time work, and – most importantly – from low pay to non-low pay), though not all upward labour market transitions are associated with exits out of poverty.

Low pay appears, then, to be one of the drivers of in-work poverty, but the Eurostat figures indicate that work intensity and household structure are also crucial. Of course, low hourly pay, low work intensity and the presence of children are likely to be associated with each other, and it is the interaction between them that will leave households most vulnerable: a single parent working part-time in a low wage job is likely to be most at risk from poverty.

Figure 2.4: Exit-out-of-poverty rate by type of labour market transition, EU 27



Source: Grzegorzewska and Thevenot (2014)

Box 2.1 Characteristics of in-work poverty

Using EU-SILC cross-sectional data for 2007, Ponthieux (2010) summarises the characteristics of in-work poverty as follows:

By employment characteristics:

- in all countries but one, individuals who are **self-employed** (at the time of interview) appear more likely to be at risk of poverty than wage workers.
- in all countries but one, individuals who are working **part-time** (at the time of interview) appear more likely to be at risk of poverty than full-time workers.
- those who have experienced **employment instability** during the reference period are more at risk of poverty than those who have always been in employment.

By personal characteristics:

- in most countries, the rate of poverty risk tends to be **lower for women** than for men (but see Box 2.2).
- no generalized pattern emerges by age group.
- rates of poverty risk by education level rank as expected: **lower levels of education** are associated with a higher poverty risk in all countries but one, where the same rate appears at any level of education.

By household type:

- in all countries but one, poverty rates are higher among individuals living in **single-parent households** than in any other type of household.

Differences in the characteristics of in-work poverty across countries

As both the shading system in Tables 2.1 and 2.2 and discussion of the evidence has highlighted, the main sources of in-work poverty differ somewhat across countries. In Table 2.2, we saw that while the Netherlands, Denmark, Finland and the Czech Republic perform comparatively well across all household types, Austria and France middling on all, and Spain and Italy consistently badly, many countries rank very differently depending on which type of household we are looking at.

Crettaz and Bonoli (2010) use data from the Luxembourg Income Study to explore differences in the characteristics of in-work poverty across welfare regime types. Examining a single country from each type, they argue that in Sweden (representing the social democratic regime) a relatively low wage is a precondition to working poverty (see also Hallerod and Larsson, 2008), and that working poverty is concentrated on young, single and childless adults, with relatively high maternal employment and generous family policy protecting families. This is consistent with the picture in Table 2.2 except in relation to the relatively high rate of in-work poverty in single parent

households shown in the table, which may reflect more-up-to-date data in the table (or may reflect Crettaz and Bonoli's choice of countries; Sweden does best of these even in our table).⁷ In Germany (a conservative or corporatist state), they point to very low poverty among full-time workers benefitting from standard employment conditions, and low child poverty, with low work attachment among younger workers the problem. Once again, however, Table 2.2 suggests that single parent families are not faring so well in 2014, while Table 2.1 tells us that Germany now has the second highest rate of poverty among high intensity workers in the EU, perhaps indicating a rising share of workers falling outside standard employment conditions. In Spain (for Southern Europe), Crettaz and Bonoli (2010) point to both low labour market attachment and the presence of children as drivers; and in the US (representing the liberal regime) to low wages and the presence of children.

Crettaz and Bonoli's argument is that working poverty in Sweden and Germany is less detrimental as a social problem than in Spain and the US, not only because there is less of it overall but because it is concentrated on the young and childless. They highlight the crucial role in protecting children in working families played by effective family policy (including childcare and maternity leave, as well as family allowances). While Sweden and Germany's record in relation to single parent households in particular looks weaker than this study suggests, the argument that in-work poverty is of heightened concern where there are children in the household is powerful. The existence of the relevant institutional frameworks – including childcare provision as well as state financial support for children – is crucial, even though in some southern European countries, such as Italy, unofficial support networks, mostly other family members, attempt to compensate for the lack of sufficient public childcare (e.g. Ruspini, 1998). Family policies that facilitate maternal employment, and those that provide direct state support for children, are both discussed in later sections of the review.

Summary

Low pay, low work intensity at household level, and household structure – in particular the presence of children and the ratio of children to adults – are all associated with in-work poverty in European countries. Families are most vulnerable where more than one of these characteristics apply. In the following sections we turn to examine policy designed to address low pay, increase work intensity, and provide additional support to households with children. We start by exploring the link between low pay and in-work poverty in more detail, and the effectiveness of increases in minimum wages in reducing poverty.

⁷ Eurostat data suggests in-work poverty among single parents has been broadly rising in Sweden since at least 2004 (although there is considerable fluctuation from year to year), while Sweden's comparative performance for in-work poverty among single parents starts to deteriorate from 2009.

2.4 Reducing low pay as a solution to in-work poverty

The relationship between low pay and in-work poverty

While low rates of pay seem the first and most obvious place to look for a solution to in-work poverty, many researchers have pointed out that low wages alone are seldom the cause (Nolan and Marx, 2000; Peña-Casas and Latta, 2004; Andresz and Lohmann, 2008; Marx and Verbist, 2008; Crettaz and Bonoli, 2010). Indeed, Marx and Nolan (2012) argue that low-paid work and in-work poverty should be thought of as largely separate phenomena, and that tackling the former should not be relied on as the solution to the latter. Nevertheless, low pay undeniably increases the risk of in-work poverty, especially where it intersects with other characteristics.

Across the EU, Grzegorzewska and Thevenot (2014) find that low wage earners have a 15.2 per cent risk of poverty (EU SILC 2011), compared to 2.6 per cent for non-low wage earners. Maitre *et al.* (2012) point to Austria, Denmark, Estonia, Finland, Iceland and Sweden as the countries with the greatest disparities in poverty rates between low wage and non low wage employees, but even in other countries a low-paid employee is at least four or five times more likely to be in a poor household than an employee above the two-thirds of median low pay threshold.

Yet while low-wage employees are considerably more likely than the total population of employees to be poor, the vast majority of low wage earners live in households that are not in poverty. The European Industrial Relations Observatory points to two main sets of protective factors (EIRO, 2002).

One is social transfers, such as housing benefits or child-related allowances, plus minimum income schemes in some countries. Particularly in northern Europe, state institutions and the redistribution of income through state intervention (e.g. social transfers, notably housing benefits or child-related allowances) reduce poverty among low-wage workers (Ioakimoglou and Soumeli, 2002). State transfers are discussed further in Section 2.8 below.

The other key protective factor is a second (or further) wage (or other income) earned by a partner or other household member. In southern Europe, multi-generation households frequently offer additional protection, with strong ties of solidarity between members, and in some cases sources of income other than wages, including additional property income (as in Greece) or income from farming and similar additional activity in rural areas (as in Portugal) (EIRO, 2002). In all countries, sole-earner low-paid employees have very much higher poverty rates than those in multiple-earner households (Maitre *et al.*, 2012). Especially if there are children in the household, there is a very high risk of poverty where a low paid worker is single or the sole or primary earner in a couple, as Table 2.3 shows.

Box 2.2: Is poverty really a household concept?

This review takes a household approach to the definition and measurement of poverty: individuals are defined as poor if they live in households with combined income below 60 per cent of the equivalised median household income for that country in that year. This definition is rooted in an assumption that all household resources are pooled, and that household members share in them equally. In the absence of strong justification for an alternative assumption, this is the standard way in which poverty rates are measured in the European Union and more widely, although in reality it is widely accepted that the assumption of a fully egalitarian division of income within the household is implausible, and that different sources of income are likely to be shared differently (Meulders and O'Dorchai, 2014).

As Meulders and O'Dorchai (2014) point out, the income pooling and sharing assumptions are likely to mean a significant underestimation of poverty among women. Women with limited earnings of their own often live with men whose income lifts them up above the poverty threshold, while men often live with women who are less economically active (Ponthieux, 2009). If men are not in practice sharing their earnings evenly, there are likely to be many poor women living in households that are not considered poor.

Defining poverty based on individual income would clarify the situation – and has been attempted for some countries in recent studies (NEP, 2010; Karagiannaki and Platt, 2015). Meulders and O'Dorchai (2014) find that, using individual income, employment characteristics rather than household structure become the key determinants of in-work poverty; in particular working part-time but also holding a temporary rather than a permanent contract. But this approach results in the opposite problem of overestimating poverty for non-workers or part-time workers in households where both the division of labour and financial rewards are indeed shared. This review therefore sticks to the definition of poverty as a household concept, but keeps in mind throughout that policy should be aiming to increase women's labour market participation and earnings, not only to reduce poverty at household level. This is important both because of the consequences for women's command over resources within couple households, and because of the long-term consequences for poverty for women (and their children) in couples which eventually split.

In practice, evidence suggests households in receipt of a low wage typically contain multiple earners (Bryan and Taylor, 2004, using the British Household Panel Survey). As noted in the first part of this review, young people and women are among those most at risk of low pay, and for both groups earnings most often constitute a secondary source of income for the household (Gardiner and Millar, 2006; Bryan and Taylor, 2004). Thus many low paid workers are found reasonably high up the income distribution: Nolan and Marx (2001) found that in the mid to late 1990s about 80 per cent or more of low paid workers in the EU15 countries were in the third to fifth disposable income quintile. Table 2.3 shows that in 2007 low paid workers who were second earners had a poverty risk well below the average for working age people – 3 per cent or below in more than two-thirds of countries (see also Maitre *et al.*, 2012). As Marx and Nolan point out, this highlights the role that low paid work can play in *preventing* poverty.

Table 2.3 Income Poverty risk for Low Paid Earners by household position, EU 2007

Table 3: Income Poverty Risk for Low Paid Earners, by household position, EU 2007.

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

Source: Analysis of EU-SILC microdata

Source: Marx and Nolan (2012)

This is not to suggest that low rates of pay are unproblematic for second earners, especially as household income may not be evenly distributed within the household (see Box 2.2). Meulders and O'Dorchai (2013) in their analysis of the working poor

population in eight EU countries (Austria, Belgium, Spain, France, Ireland, Luxembourg, Poland, the United Kingdom) using the 2007 wave of the EU-SILC, find that the move from a household-based definition of poverty to an individual definition reduces the prevalence of working poverty for men, but substantially increases that for women, reflecting men's status as the primary earner in most households. If household income is not in fact shared evenly, standard calculations based on household income overestimate men's in-work poverty rates, while severely understating female workers' at-risk-of-poverty rate and the impact of low pay on women. An analysis focused on poverty using individual income would give much greater emphasis to the role of low pay.

Two further factors are important in considering the extent to which tackling low pay is likely to provide a solution to in-work poverty. First, the dynamics of low paid work are relevant. A low-paid job may provide a stepping stone to better-paid jobs and serve as a useful entry point to employment for less skilled and less experienced workers, or it may mean long-term segmentation into a different part of the labour market, where low pay is persistent, and where it may also be associated with multiple transitions in and out of work (see also discussion in Section 1.4 above). Clearly the implications for in-work poverty are more severe in the case of segmentation. Grzegorzewska and Thevenot (2014) find that the rate of transition from low paid jobs to better paid jobs was high in Austria, Bulgaria, Slovakia, Latvia and the Czech Republic and much rarer in the Netherlands, Romania, and the UK. Additionally, transitions to a higher wage decile – the most frequent transition – occurred more often among the in-work poor in Austria, Bulgaria, Slovenia, Latvia and the Czech Republic.

An older review from Ioakimoglou and Soumeli (2002) found high transitions for Denmark but less evidence of this for other countries, including France, the UK, Austria, Portugal and Italy. In Denmark between 1980 and 1990 people in low wage jobs moved relatively quickly from the lowest to the upper deciles of the wage distribution, with less than 20 per cent remaining in the lowest deciles for more than four years. However, in France, an increase in the number of low-wage workers was found to have been accompanied by an increase in the risk of remaining a low-wage worker, at least in the short term. Ioakimoglou and Soumeli (2002) also point to more frequent movement between unemployment and low-paid employment in France, suggesting a rise in segmentation. The percentage of people who had always been either in low-wage work or unemployed almost doubled in the 1983-2000 period, rising from 7.3 per cent over 1983-85, to 14.1 per cent in 1998-2000.

There is considerable evidence for the UK in particular of the existence of a 'low pay, no pay' cycle, and of the impact this has on rates of poverty. Research shows that the chances of becoming low-paid are higher for unemployed people, and vice versa. This places substantial groups of people 'churning' between unemployment and low-paid work, with little chance of climbing up the pay ladder (Cappellari and Jenkins, 2008).

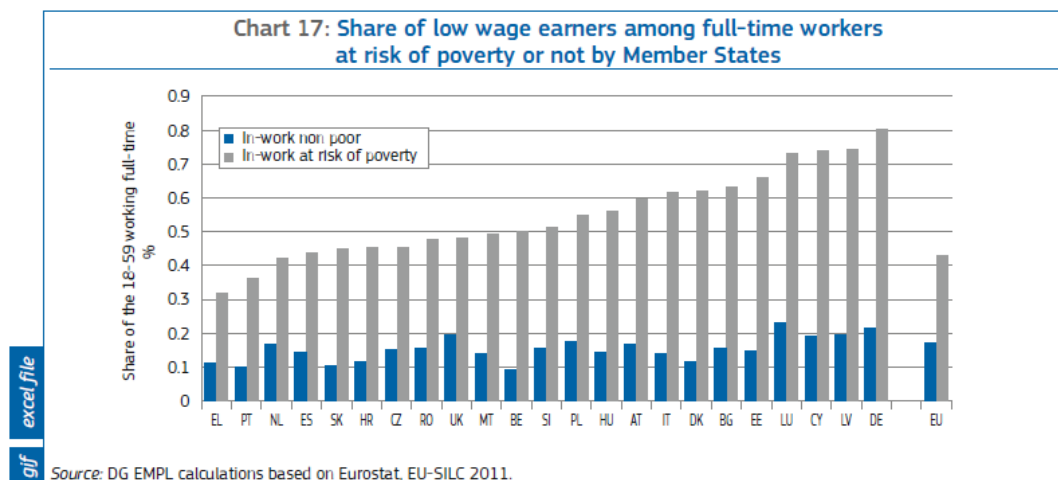
Evans *et al.* (2004) report a similar finding for lone parents, albeit noting that there is a greater (though still small) probability of progression from non-employment through low pay to higher paid employment for lone parents than other workers.

Ray *et al.* (2010), using both interview and survey data, analyse the work experiences of two groups of low-skilled and disadvantaged workers – lone parents and long-term unemployed people – exploring their employment experiences in detail for up to five years. Their findings reinforce the growing understanding that entry into paid work, while the most common route out of poverty for households in Britain, is not a sufficient condition to achieve this desired outcome. For the people interviewed for the study, work was typically low paid and in some cases did not lift people above the poverty line. In a number of cases, accumulated debt meant their disposable income did not increase significantly after finding work. Others remained in poorly paid work and would have been in poverty if they were not living with other earners. Although difficulties making ends meet applied to both groups in the study, experiences were also gendered: it was more likely that the women (mostly lone parents) were struggling because they were in low-paid, part-time work, while the men (mostly formerly long-term unemployed) struggled financially because of low pay and insecure work that could be compounded by debt.

Also for the UK, Adelman *et al.* (2003) found a strong association between persistent poverty and experiencing multiple transitions in and out of work. The implication is that employment of the ‘wrong’ sort – low paid and insecure – could in some cases be worse than no employment at all because of the instability it brings to a family’s finances (Goulden, 2010).

The second question concerns the share of working poor households that are affected by low pay. We have seen that not all low-paid workers live in poverty, but do all working poor households have a low paid worker? Figure 2.5, from Grzegorzewska and Thevenot (2014), shows the proportion of full-time workers who are low paid, separating workers who fall below the poverty line and for those above. As already discussed, we see that not all low wage earners are poor: across the EU, between 10 per cent and 20 per cent of non-poor workers are low waged. But low wage workers make up between 30 per cent (in Greece) and 80 per cent (in Germany) of full-time workers below the poverty line. These differences are striking, suggesting that in some countries, tackling low wages is the key to reducing in-work poverty among full-time workers, while in others this is only part of the story or will have only a limited effect.

The discussion so far suggests that increasing minimum wages may deliver some improvements in in-work poverty, but will at best be a partial solution, and has more scope for impact in some countries than others. We turn now to look at evidence that has specifically investigated the impact a rise in minimum wages might be expected to have on poverty.

Figure 2.5 Share of low wage earners among full-time workers at risk of poverty or not

Source: Grzegorzewska and Thevenot (2014)

Minimum wages as a solution to in-work poverty

Marx *et al.* (2012) 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 will have a relatively limited impact on poverty or income inequality and a substantial spill-over to the non-poor (see also Formby *et al.*, 2005; 2010). The limited impact reflects several factors, including that: i) many poor families have no one working; ii) many minimum wage workers live in households with above average incomes; and iii) in-work poverty is often the result of low working hours, rather than low wages (OECD, 2009). In addition, minimum wage levels may simply be too low to have a significant impact on poverty headcounts (for instance, family incomes of full-time minimum-wage workers can fall short of commonly used poverty thresholds). Finally, minimum-wage levels may be too high so that disemployment effects may reduce incomes of a number of poor households (OECD, 2015).

Whiteford and Adema (2007) argue that some countries appear to have relatively high numbers of working poor given their relatively high net minimum wages for families (Ireland and the United Kingdom), while others appear to have relatively low levels of working-poor families despite lower net incomes at the minimum wage (the Czech Republic, Hungary and Poland). Other countries, as expected, either have high minimum wages and low in-work poverty (Belgium, France and the Netherlands) or low minimum wages and higher in-work poverty for families (Greece, Portugal, and Spain). Again it is important to emphasise that the impact of minimum wage is likely to vary according to the nature of in-work poverty in a given country and the overall interactions between wage, social transfer and tax policies.

Several studies explore the impact of the introduction of the UK's national minimum wage (NMW) in 1999. In their extensive review of employment, work and poverty, Ray *et al.* (2014) conclude that the evidence base on the direct link between minimum wages and poverty in the UK is relatively sparse, but that the evidence available suggests that the NMW has had a small effect on poverty reduction. They identify only one study looking directly at the impact of the NMW in the UK on poverty: using microsimulation, Sutherland (2001) estimated the effect of both a package of tax-benefit changes and the introduction of the NMW. She finds a reduction in poverty from 18.7 per cent to 14.4 per cent as a result of the change, but suggests only 1.2 percentage points can be attributed to the introduction of the NMW. Sutherland also concludes that even quite substantial increases to the minimum wage would only have a weak impact.

The reason for the limited poverty-reducing impact emerges clearly in analysis by Brewer *et al.* (2009), which does not look directly at poverty but at the effect of the NMW on different income levels. Simulating an increase in the 2007 wage rate, the authors find that the largest proportional gains accrue to households in the bottom income decile, but the largest aggregate gains go to those in the third and fourth deciles (who are already above the poverty line), because this is where the largest proportion of NMW workers are concentrated.

More recently, Brewer and d'Agostini (2013) update this analysis for the UK's proposed Universal Credit (UC), with similar results. This study investigates the effect of a 10 per cent increase in the national minimum wage by family type. In general, NMW families which see incomes change by only small amounts after a rise in the NMW are either those in which NMW workers are facing high marginal effective tax rates (METRs), or those in which other sources of income make earnings from NMW a relatively unimportant income source. Similarly, NMW families which see incomes change by large amounts after a rise in the NMW are either those in which NMW workers are facing low METRs, or those in which the NMW is a relatively important income source. Across the bulk of the income distribution, a 10 per cent rise in the NMW leads to an increase in net family income amongst NMW families of around 3 per cent; this is around 4 per cent for families where the NMW is the main source of earnings, and around 2 per cent for families where the NMW is the secondary source of earnings. Families without children gain the most from a rise in the NMW, reflecting the fact that they tend to face lower METRs than families with children because they are less likely to be in receipt of UC.

Using microsimulation (EU-SILC for 2006) for Belgium, Marx *et al.* (2012) come to a similar conclusion: even quite large increases in the minimum wage would have a limited impact on in-work poverty, and at the cost of rises in labour costs and significant spill-overs to households in the middle and upper regions of the income distribution. The authors conclude that given that in the recent past median living standards (and hence relative poverty thresholds) have been pushed up, not only by rising wages but

also by the proliferation of dual earnership, the increases in minimum wages required to keep workers for whom this is the main source of income above the poverty threshold are now so substantial that they are hardly conceivable.

Looking at Germany, both Müller and Steiner (2008) and Knabe and Schöb (2011) estimate that introducing a minimum wage in Germany would have a very limited effect on either the incidence or depth of poverty. Müller and Steiner (2008) analyze the distributional effects of the introduction of a nationwide legal minimum wage of €7.5 per hour, using a microsimulation model which accounts for the complex interactions between individual wages, the tax-benefit system and net household incomes. Results suggest that the minimum wage would be fairly ineffective in reducing poverty, even if it led to a substantial increase in hourly wages at the bottom of the wage distribution. The ineffectiveness of a minimum wage in Germany is mainly due to the existing system of means-tested income support. The minimum wage would also not be particularly well targeted at the poor: for Germany overall, the share of persons in the bottom decile of the distribution of net equivalent household income who are affected by the minimum wage is just 10 per cent, below the respective share in the middle of the distribution.

Using data from the German Socio-Economic Panel (GSOEP) Knabe and Schöb (2011) also find negligible effects of a statutory minimum wage of €7.50. A full-time employee who works for EUR 5.00 per hour and receives supplementary Unemployment Benefits (UB II) already earns a net income equal to 72 per cent of the median income. The minimum wage would lift her net income to 75 per cent of the median income. (If the same employee lost her job, however, she would fall below the poverty threshold, receiving just 53 per cent of the median income.)

All the microsimulations discussed here are static, taking no account of dynamic feedback effects. These could be negative, with a rise in the NMW leading to reductions in employment. There is almost no evidence pointing to this happening in practice to date, but very large increases in minimum wages might be expected to have some negative employment effects (LPC, 2013). Research generally shows that the minimum wage floors as they actually exist tend to have limited demonstrable effects on employment, although particular groups like young people or women may be more substantially affected (Dolado *et al.*, 1996; OECD, 2004; Kenworthy, 2004; Marx *et al.*, 2012). There could also be positive feedback effects, with the NMW providing employers with better incentives to invest in employee training and retention, increasing productivity and ultimately leading to higher pay (see discussion in Section 1.5 above). Ray *et al.* (2014) conclude that the evidence on productivity gains from the introduction of the NMW is mixed for the UK, with evidence that there may have been a small positive effect on the productivity of businesses, but an unclear effect on training provision, and limited 'ripple' effect in raising wages higher up the earnings distribution. On the last point, the Resolution Foundation (2014) points to a rising share

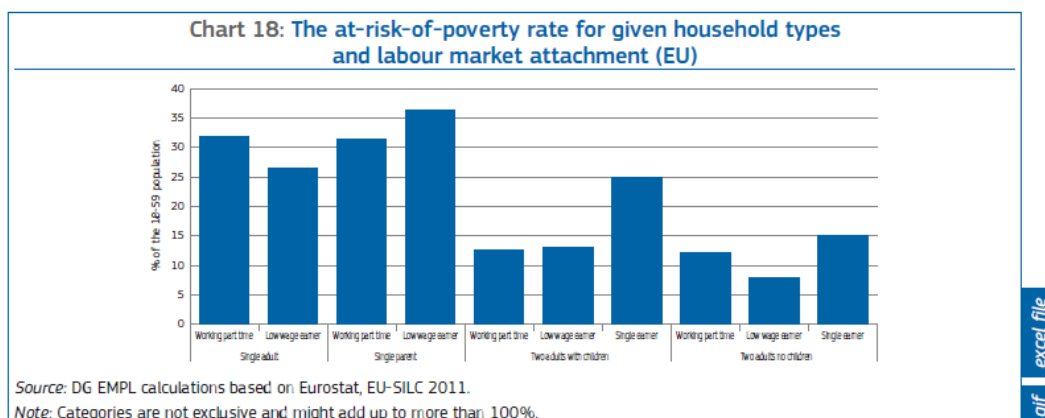
of workers paid at the NMW or near to it over time, and suggests that ripple effects have been lower than anticipated: “The minimum wage has become in effect the going rate in some sectors and occupations of the UK economy, something the Low Pay Commission was clear it never intended” (p.32).

This is not say that minimum wages have no role to play in poverty reduction. First, as noted above, the effects will be larger where minimum wages are currently low, and low paid work is prevalent. In her study on working poverty in the EU during the recent economic crisis and recovery (2007–2012), Herman (2014) argues that higher minimum wage policies have a key role in preventing working poverty and decreasing income inequalities in the EU countries with the lowest minimum wages (Bulgaria, Romania, Lithuania and Latvia). Second, higher minimum wages are likely to bring a substantial boost in income to lower earning families, even if many of those families are sitting above the poverty line; this should increase household resilience to shocks, and therefore help insulate against poverty in the future. The majority of gains have been predicted to accrue to those above the poverty line but still in the bottom half of the income distribution (Nolan and Marx 2001; Brewer *et al.*, 2009).

Third, by setting a pay floor, minimum wages help make it possible for wage top-ups to be introduced without these simply subsidising employer profits. Thus they can be an essential part of a package of anti-poverty policies, even if their individual effect is small. Wage top-ups are discussed further in Section 2.8.

Fourth, minimum wages have a beneficial effect on public finances, because of higher tax receipts and lower benefits, thereby increasing resources available for other policy options. Brewer *et al.* (2009) estimate (in a static model, so not taking account of any reductions in employment) that a 10 per cent increase in the NMW would benefit the UK government by around £600 million.

However, relying on minimum wages as the central plank of an anti-poverty strategy would be a mistake, because they are a blunt tool that takes no account of household needs. Marx *et al.* (2012) find that net disposable incomes for full time single persons working for the minimum wage are at least as high as the 60 per cent of median income poverty threshold in about 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 also fall short everywhere, generally by a very substantial margin. The core of the working poor consists in fact of workers who are sole earners – generally with a low earned income (though not necessarily below conventional low-pay thresholds) – and have a family to support (Marx *et al.* 2012). It is the interaction between low pay, low work intensity and family responsibility that is crucial, as Figure 2.6 illustrates.

Figure 2.6 At-risk-of-poverty rate for given household types and labour market attachment

Source: Grzegorzewska and Thevenot (2014)

Analysis by the OECD also underlines the inadequacy of a single full-time minimum-wage job to lift a two-parent household out of poverty (OECD, 2015). In most countries, the employment of both parents is needed to ensure that children do not grow up in poverty. In the Czech Republic, Estonia, Greece and Spain, the working hours required to escape poverty on a minimum wage are unrealistic for lone parents in particular; they would need more generous income support, or wages significantly above the minimum wage to work their way out of poverty.

Several authors underline the importance of in-work benefits and/or gradual benefit phase-out rates for families with children, often pointing out the role these can play alongside minimum wage policy. In a UK context in which in-work support is being cut back, and the national minimum wage increased, Corlett and Gardiner (2015) note that a rising wage floor must be a complement to, not a substitute for, in-work support. Their report highlights the fact that, for many low to middle income families, extra earnings from the proposed 'national living wage' (which represents a significant increase in the minimum wage) will be greatly outweighed by proposed cuts to in-work support, with families with children worst affected. Figari (2011) agrees that statutory minimum wages should be complementary to in-work benefits in order to increase the financial gain from employment for those in low-paid jobs. Figari's calculations using EUROMOD (the EU-wide tax-benefit microsimulation model) show the potential redistributive impact for southern Europe of family-based in-work benefits (see Section 2.8 for further discussion).

Summary

Tackling low pay must be considered a key plank in an anti-poverty strategy. In parts of the European Union in which minimum wages are low or not rigorously enforced, improvements in minimum wages can be expected to have a significant impact on in-work poverty. More broadly, while the majority of gains from a rise in minimum wages

will accrue to households who are already above the poverty line, they are still an important tool in increasing household security and resilience over the long-term. *However*, policymakers should be very clear that there are limits to what a reduction in low pay can achieve in reducing in-work poverty: even generous minimum wages will not be sufficient to meet the needs of households with children, while the interaction between wages and other benefits received by low income households can leave households gaining little in practice from a minimum wage rise. Minimum wage policy should therefore be formulated alongside policy to support additional household needs through universal child allowances or in-work top-ups. Policy to improve household earnings also needs to go well beyond a focus on minimum wages, addressing continued wage progression as well as low work intensity within the household, including unstable employment and involuntary part-time work. In the next section we turn to consider policies to increase the stability and quality of employment.

Box 2.3 Minimum wages and poverty reduction

According to the OECD (2015) reducing poverty is a key objective of minimum wages, but it is not the only one. Minimum wages have also been introduced to serve other policy objectives, including their role as: i) a key labour standard for ensuring fair pay and preventing exploitation; ii) an instrument for making work pay; iii) a tool to boost tax revenue and/or tax enforcement by limiting the scope of wage under-reporting; and iv) an anchor for wage bargaining. In some countries, where workers' bargaining position is weak, minimum wages provide the only institutional framework available to increase the wage bargaining power of the most vulnerable workers; conversely, intensive use of the minimum wage by governments may reduce the role of collective wage bargaining (Eyraud and Saget, 2005).

Proponents of the minimum wage typically argue that it helps prevent the worst excesses of exploitation in the labour market and brings the living standards of the lowest paid up to some minimum acceptable standard. Opponents argue that it may price low-skill workers out of jobs, and that many of those typically affected by the minimum wage do not live in poor households (Dolado *et al.* 1996).

The eventual effects of the minimum wage on poverty depends on several country-specific economic and social factors, including the level of the minimum wage with respect to the poverty line, the elasticity of demand for labour and the degree of intra-family income sharing between the employed and unemployed. It is increasingly widely accepted that a careful combination of minimum wages and in-work benefits and tax credits (IWB) can be more effective in tackling poverty than either instrument on its own (OECD, 2015). Pisu (2012) argues that minimum wages are most effective in reducing poverty if set at a judicious level and when complemented by IWB schemes. Setting a wage floor precludes employers from appropriating the value of IWBs by reducing salaries, thereby playing a crucial role in dampening the possible wage erosion effects of in-work benefits and tax credits (Marx *et al.*, 2012). Furthermore, with minimum wages in place, the burden of supporting low-wage workers falls to a larger extent on employers, and on their customers, and to a lesser extent on taxpayers through government transfers. Minimum wages do increase the consumer cost of certain products or services, but Freeman (1996) points out that this often entails a redistribution between relatively highly paid consumers of services to relatively lower-paid providers.

2.5 Increasing the quality and stability of jobs

This section looks at temporary, precarious and involuntary part-time employment. The following section turns to look specifically at policies to increase work among second earners and lone parents.

The growth of in-work poverty in most EU countries during the recent economic crisis and recovery period (see Figure 2.1) shows that employment growth is not always enough to avoid poverty. Fraser *et al.* (2011) suggest that employment growth in Europe over the last fifteen years has not been accompanied by a significant reduction in poverty because of a relative expansion of low quality jobs. Heyes and Lewis (2014) point to an increase in the extent of involuntary part-time and temporary employment since the start of the crisis in 2007, and to an associated rise in the incidence of in-work poverty across EU member states.

Ray *et al.* (2014) highlight the contrast in the poverty rate for those working less than a full year (17.5 percent), compared to those working for the full year (8.4 per cent, EU-SILC 2012). The disparity is similar to that for the EU28 in 2014 for part-time workers (15.7 per cent in 2014) and full-time workers (7.7 per cent). Comparing changes in the poverty risks associated with full- and part-time employment since 2007, Heyes and Lewis (2014) find a growing risk associated with part-time work in one group of countries, which includes Portugal, Spain and Greece and also Germany and Denmark. In Austria, Finland and Ireland the relative risk linked to part-time work has been falling, with little change in other countries, suggesting part-time workers are likely to remain at a significantly higher risk of in-work poverty than full-time workers across most of the EU.

The risk of poverty is also much higher for workers on temporary as opposed to permanent contracts (13.2 per cent compared to 5.4 per cent) (Grzegorzewska and Thevenot 2014, EU-SILC 2011). According to OECD (2012a), on average across countries, workers on temporary contracts earn 25 per cent less than workers on permanent contracts, even if the workers have similar working hours, education, age and gender. The income penalty is particularly high at the bottom of the income distribution, while the incomes of high-income employees are less dependent on the type of work contract. Consequently, a general rise in the share of workers with a temporary contract (distributed evenly across the population) is likely to be associated with a rise in income inequality.

Temporary work is associated with lower long-term earnings in most countries, but not all. It is strongly linked with low long-term earnings in Greece, Italy, Slovak Republic but not at all in Belgium, Germany, and the United Kingdom. The concentration of temporary work in the bottom of the distribution of long-term earnings is likely to

reflect a dual labour market where employment protection provisions diverge strongly across contract types (OECD 2015).

Additionally, as Peña-Casas and Latta (2004) highlight, the uncertainty of continued employment and sufficient income can cast a shadow on overall life planning, and contribute to a continued marginalised position within the labour market (Goudswaard *et al.*, 2000; Goudswaard *et al.*, 2002; Storrie, 2002; Gustafsson, 2000; Peña-Casas and Latta 2004). Contrary to the hypothesis that temporary jobs can be seen as stepping stones to better jobs, it can be hard for people to break the pattern of non-permanent employment, with evidence for some countries that the longer one works in some form of non-typical employment, the less likely one is to attain a permanent full-time job (see Holmlund and Storrie, 2002; Peña-Casas and Latta 2004).

Qualitative work in the UK with individuals experiencing intermittent work identifies persistent hardship among those moving in and out of work, with build-up of debts in periods out of work undermining potential gains from working, and delays in benefit payments on leaving work exacerbating hardship (Ray *et al.*, 2010; Shildrick *et al.*, 2012). Barnes *et al.* (2008) find a lag between exits from income poverty and exit from hardship, indicating the importance of stable work in lifting a family onto more secure ground. Other studies show that problem debt is more apparent amongst those intermittently in work (Carpenter 2006; Dorsett and Kasparova 2004; Ray *et al.*, 2014).

Ray *et al.* (2014) argue that a key factor driving what has been termed the 'low pay, no pay' cycle is the intrinsic insecurity of much low paid work, including both formal contractual status and the quality of work. According to Shildrick *et al.* (2010), this pattern of 'churning' is particularly associated with 'poor work': low-quality, insecure employment that fails to provide labour market security or progress. Poor work and economic marginality – rather than either regular employment or permanent unemployment – is said to have become more common in recent decades for larger numbers of workers at the bottom of the labour market (Byrne, 1999; McKnight, 2002). Tomlinson and Walker (2014) find that 'good quality employment' protects from intermittent poverty. Jobs in the 'core labour market' (those with permanent contracts, incremental pay rises and prospects for promotion) significantly protected from recurrent poverty compared to jobs without these qualities (though the latter still reduced poverty compared to being out of work). However, in their qualitative study, Ray *et al.* (2010) find that progressing into better work might require a move into self-employment or into temporary work as a first step in a completely new field. This constitutes a risky step for low-paid, low-skilled workers, only possible when sufficient support is in place, either through the workplace or outside of it (Ray *et al.* 2010).

Shildrick *et al.* (2010), studying the lives of people living in some of the most deprived wards in England, find that the sorts of work available to their interviewees kept them in poverty rather than lifting them out of it. Individuals and households would

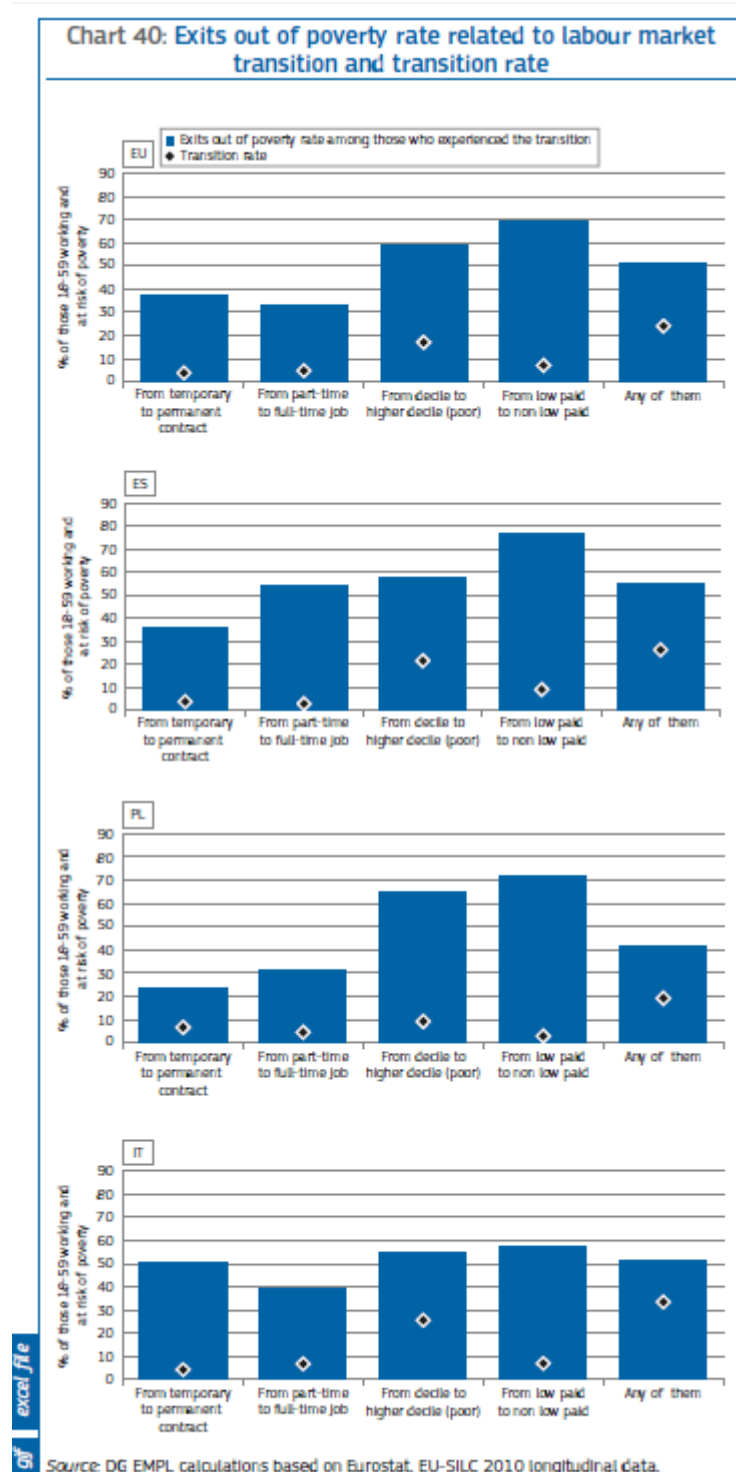
repeatedly experience poverty both when in work and when out of it. The poorly supported transition period between work and benefits, and vice versa, would often bring additional hardship. The predominant experience of the participants was of recurrent poverty – of moving in and out of low paying jobs but never moving far from poverty. Even occasional ‘escapes’ from poverty were temporary. Their experiences paint a picture of frustration and a lack of opportunities to escape the low-pay/no-pay cycle. (See also Metcalf and Dhudwar, 2010 and Goulden, 2010.)

We should remember that, like tackling low pay, addressing precarious employment will only be a partial solution to the problem of in-work poverty. Desmarez (2000) analyses the relationship between new employment forms and social exclusion in six countries (Belgium, France, Italy, Portugal, Sweden, UK), and argues that it is not possible to establish a systematic link between forms of employment and income levels in any of these countries. Part-time work, fixed-term contracts or ‘para-subordination’ (a hybrid self-employed waged position encountered in Italy) do not systematically lead to lower or higher risks of social exclusion. Simultaneously, a full-time open-ended job that is subject to normal conditions of pay is not necessarily without risk. If it is in a vulnerable sector, it can be high-risk (Desmarez, 2000; see also Peña-Casas and Latta 2004).

In a similar vein, Grzegorzewska and Thevenot (2014) point out that the majority of in-work poor in Europe (three out of four) are in fact on permanent contracts, while nearly two-thirds are in full-time employment. They also highlight differences in the significance of different working arrangements across countries, with variations in the extent to which temporary or part-time jobs serve as stepping-stones rather than implying entry to the wrong part of a very segmented labour market. Figure 2.7 shows that, across the EU as a whole, while a move to a permanent contract is helpful, it does not guarantee a move out of poverty. In about one third of cases a move from a temporary to a permanent contract brought a movement out of poverty, better than the move from a part-time to a full-time job, though only around half the effect of a move from low pay to non-low pay. Only in Italy (of the countries shown) is the effect of getting a permanent contract larger – about 50 per cent, and similar to the effect of a move out of low pay. (Only these larger countries had sample sizes sufficient to allow this analysis.) It is also clear from the black points in Figure 2.7 that such transitions from one year to the next are fairly rare.

Nevertheless, a focus on reducing precarious and temporary employment has a role to play as part of a broader strategy to reduce poverty. We turn now to explore the evidence on the effectiveness of employment protection legislation in creating higher quality and more stable work; and on the role of unions and collective bargaining. In both cases, however, there is limited evidence linking directly to in-work poverty.

Figure 2.7 Exits out of poverty related to labour market transitions: EU, Spain, Poland and Italy



Employment Protection Legislation

Ray *et al.* (2014) note that there is an absence of evidence directly linking labour market regulation and poverty, and that the evidence on the effect of higher Employment Protection Legislation (EPL) on employment is also ambiguous. Their reading of the literature is that stricter EPL protects labour market insiders, but at the expense of younger workers, women and lower-skilled workers, because the higher costs associated with dismissing workers makes employers more reluctant to hire those seen as a risk (OECD, 2004; Siebert, 2005; European Commission, 2007). Nevertheless, once younger workers are 'in', they become beneficiaries of EPL: O'Higgins (2012) finds that the stronger the level of employment protection in the recent recession, the better protected younger people were from the adverse effects of the downturn, though the effects was relatively weak. Heyes and Lewis (2014) point to studies that suggest that the extent of EPL influences a country's mix of standard and non-standard forms of employment, and can actually increase reliance on temporary contracts (Bassanini and Duval, 2006; Layard *et al.*, 2005; OECD, 2004). Strong EPL might encourage employers to make use of time-limited contracts, as has arguably been the case in Spain, whereas in countries with weak EPL the incentive to employ workers on fixed-term contracts might be correspondingly weak.

Heyes and Lewis (2014) suggest that employment protection played an important part in cushioning the impact of the 2008 financial crisis on employment in certain EU member states, at least in the initial phase of the crisis: countries with strong employment protection experienced relatively fewer job losses than countries with weaker employment protection. However, high levels of EPL did not prevent subsequent substantial job losses, particularly in those countries that were most affected by debt crises and pressures from international financial interests and the European Commission. They argue that rates of non-standard employment have in practice changed relatively little since the start of the crisis. A number of countries do appear to have experienced substantial increases in involuntary participation in non-standard employment, but this seems to be unrelated to the strength of EPL, and in some cases illustrates state intervention to protect jobs by spreading the burden of adjustment among workers. In Germany and Austria, for example, proactive measures to adjust working time downwards cushioned the impact of the crisis on the labour market and helped to prevent a substantial increase in unemployment, at the cost of an increase in involuntary part-time working.

In the UK a specific debate has taken place in recent years over the role of 'zero hours contracts' (or 'no guaranteed hours contracts'), which do not guarantee a given number of hours per week, while requiring the worker to be available when needed. Evidence suggests that these cover a relatively small number of employees (a maximum of 3 per cent of the workforce), though the number may be growing. Many of the contracts are in lower skilled jobs such as cleaning, social care and call centre work, though with some in higher paid jobs in universities and the health service (Brinkley, 2013; CIPD, 2013;

Ray *et al.*, 2014). A study by the Welsh Government into the use of such contracts in Welsh public services concluded that they offered advantages as well as disadvantages, with some workers choosing such contracts in order to fit with family or other commitments (Burrowes, 2015). The study cautioned against a wholesale ban on the use of these contracts in public service delivery, but also highlighted the need to tackle their inappropriate use, particularly to employ home care workers. Ray *et al.* (2014) conclude that the evidence on zero-hours contracts is relatively new and not very comprehensive. It may be an issue to watch for the future.

The role of unions and bargaining between social partners

Ray *et al.* (2014) argue that there is limited direct evidence of the impact of wage setting institutions on poverty, but suggest that the comparative weakness of wage setting institutions in the UK is likely to be a contributing factor to in-work poverty. Research has found a positive association between various elements of wage setting institutions (such as union density, union coverage and the centralisation of collective bargaining) and a reduced proportion of workers in low-wage employment (see Lucifora *et al.*, 2005; Grimshaw, 2011; Schmitt, 2012 cited in Ray *et al.*, 2014). Studies have also linked the growth of low-pay in the UK since the late 1970s to the decline of unionisation and collective bargaining (see Lloyd *et al.*, 2008).

Paull and Patel (2012) find that within European and North American countries, higher union density rates were associated with lower earnings inequality, lower income inequality and lower poverty, after allowing for background factors. An increase in the unionisation rate of 10 percentage points was associated with a reduction in poverty of just under 1 percentage point, which they attribute to the effect unionisation has in compressing the earnings distribution. Metcalf *et al.* (2001) find that union membership suppresses earnings inequality between union members by limiting pay dispersion relative to the dispersion among non-unionised employees, something they call the 'sword of justice' effect. OECD (2012a) also indicates that the income of union members is generally higher and less dispersed than that of other workers of similar age, education and gender. They point out that lower dispersion of income among union members may reflect unions pushing for greater income equality among their members, but may also be a sign that incentives to join a union vary across the income distribution.

Ioakimoglou and Soumeli (2002) examine eight countries with available information (Belgium, Denmark, Germany, Ireland, the Netherlands, Norway, Spain and the UK), and point to an association between the level of union strength and the incidence of low pay. In Denmark and Norway the relatively high minimum wage rates and relatively low numbers of working poor are partly seen as a result of a strong bargaining position for unions, and in Belgium and Ireland the bargaining power of unions is considered to be a barrier to low pay. By contrast, in Germany, the Netherlands, Spain and the UK, economic and political changes, particularly during and since the 1990s, have

intensified pressure on trade unions, reducing their capacity to act and promote their demands. Research in the mid-1990s into the impact of falling union membership on the changing wage structure in the UK found that about 20 per cent of the increase in wage inequality was attributable to union decline.

Giesselmann (2014) suggests that higher in-work poverty risks of outsiders in Germany are a result of closed employment relationships produced by a system of generous employment protection paired with centralised bargaining, which make entrants and re-entrants specifically vulnerable to processes of deregulation and activation. The closed employment system channels the effects of deregulation policies to the periphery of the labour market: the poverty risk among entry-level workers is more than one-third above the average rate, and for re-entrants is more than twice that for all employed persons. In the UK, by contrast, similar activating policies in the more open employment system are associated with increased poverty risks for older employees.

Research highlights some evidence that suggests there may be other union effects on poverty, not operating (immediately) through higher pay, but through alternative channels, such as better access to training. According to Stuart and Robinson (2007), there is a consistent association between unionised environments and higher reported levels of training provision. Drawing from the Workplace Employment Relations Survey (WERS 2004), their work presents a statistical analysis of the relationship between trade union activity and training in the British workplace, pointing out workplaces are more likely to offer higher levels of employee training (defined as 10 or more days of training per year) when they recognise trade unions, have some form of representative structure and where unions directly negotiate with management over training. Green *et al.* (2006) reach the same conclusions. Using establishment-level data from the 1991 Employers Manpower and Skills Practices Survey (EMSPS) and individual-level data from the Autumn 1993 Quarterly Labour Force Survey (QLFS), they find that working in a unionised establishment substantially raises the probability of receiving training and the amount of training received by British workers.

Plasman and Rycx (2002), in their analysis of the relationship between collective bargaining systems and relative poverty rates in OECD countries, suggest that industrial relations systems have a significant impact upon poverty, not through any direct effect on wage dispersion, but from their relative impact on government spending on social security. However, this contrasts with the findings of Lohmann (2009), who analyses how social transfers influence the incidence of in-work poverty in 20 European countries, taking into account the influence of centralised bargaining as well as the degree of decommodification and defamilialisation. Lohmann's findings indicate that bargaining centralisation was relevant for the distribution of pre-transfer incomes only, and did not affect the extent of poverty reduction through the transfer system.

Summary

Measures to tackle low pay need to be just the start of a strategy promoting individuals' ability to protect themselves and their families from poverty. The stability and security of employment, and the opportunity to progress in work, are also key. Permanent contracts, and jobs that offer incremental pay increases and prospects for progression are important in securing this stability. There is evidence that stronger unions help to promote these goals – and that, conversely, the weakening of unions in many European countries in recent decades has been damaging to the situation of lower paid workers. On the other hand, there is also evidence that both union power and the enforcement of employment protection legislation can have the effect of protecting labour market insiders at the expense of outsiders, including younger workers, lower-skilled workers and women. In designing and implementing employment protection legislation, Member States should consider how best to avoid such negative consequences.

BOX 2.4: The part-time pay penalty

Research on in work-poverty and part-time jobs highlights the ‘part-time pay penalty’. Part-time workers have lower hourly wages, on average, than full-time workers in almost all OECD countries. Part-time workers are also less optimistic about promotion prospects and less likely to participate in training than full-time workers (OECD, 2010a). They tend to have less job security than full-time workers, whether measured objectively (whether they have a permanent contract) or subjectively (whether they feel that their job is secure). The job security gap is generally larger for men than for women and smallest in countries where average levels of job security are highest (OECD, 2010a). Only a small proportion of part-timers move to full-time employment each year, notably fewer in countries where part-time work is widespread.

In all countries for which data are available, there are even fewer transitions towards full-time employment among the working poor, who move out of work more frequently than other part-time workers (OECD, 2010a). Only a very small proportion of workers use part-time work as a stepping stone into full-time employment: 3 per cent of European women and 1.5 per cent of European men who have worked part-time for up to six years move into full-time employment (OECD, 2012b).

In many OECD countries part-time working is most frequently a personal choice, a way for parents in particular (and usually mothers) to balance work and family responsibility (OECD, 2015). But in a number of countries, including Greece, Italy and Spain, involuntary part-time work is widespread: in Southern Europe more than a third of all part-time workers are “looking for but unable to find a part-time job” (Horemans and Marx, 2013). Reasons for part-time work are highly gendered: women work part-time mainly for caring reasons, while men are more often involuntarily unemployed (Fouarge and Muffels, 2008).

Horemans and Marx (2013) find that, among both men and women, all part-time workers are at greater risk of poverty than full-timers, though the risk is highest for those who work part-time involuntarily. Overall, only in Denmark is the poverty risk for female part-timers not significantly different from that for full-timers, though it is also relatively low in the Netherlands, Germany and Sweden. In contrast, in France, Austria and Belgium the poverty risk for part-time women is more than four-times higher than for women working full-time.

Part-time work is more prevalent in countries where part-time jobs are of better quality (OECD, 2015). Clearly, mothers (and fathers) are more likely to partially withdraw from the labour market where this is practically and financially feasible (Horemans and Marx, 2013). In addition to measures to address involuntary part-time work, policy must also focus on improving the quality of part-time options, making sure that ‘good jobs’ can be done part-time, and that workers do not get sidelined for the long term as a result of the decision to work fewer hours. This is discussed further in Section 2.6.

2.6 Increasing work intensity for lone parents and second earners

We turn now to look at the issue of low work intensity linked specifically to family responsibilities, and at measures that might be effective in increasing work intensity: longer hours for part-time lone parents, and work for second earners, usually mothers. Figures presented earlier in this review highlight the role increasing hours may play in reducing in-work poverty. For the UK, Browne and Paull (2010) underline the association between increasing or decreasing work hours and poverty transitions: they find (as common sense would predict) that the likelihood of poverty exit rose where weekly hours in paid work increased and fell where weekly hours decreased.

A focus on lone parents and second earners is in essence a focus on promoting maternal employment. Women are much more likely to take on the burden of caring responsibilities, and to work part-time hours as a result. Even where employed full-time, women average fewer weekly work hours than men (Gornick and Jäntti, 2010). This is partly what explains why women's market income lags men's everywhere, with the most dramatic cases in Southern Europe, where, among the near-poor, women's market income averages a mere 17 per cent of men's (Gornick and Jäntti, 2010). As a result, single mothers are extremely economically vulnerable in many countries. In all of the countries in Gornick and Jäntti's study, single parenthood is more prevalent among women. Further, in the 16 countries in which comparison is possible, single mothers are more likely to be poor than are single fathers, sometimes dramatically so.

For partnered women, especially those with weak labour market attachment, families operate as crucial venues for income support. Among partnered adults with children, women are nearly everywhere *less* likely than their male counterparts to be poor – often by a substantial magnitude (Gornick and Jäntti, 2010; and see also Ponthieux, 2010). The explanation for this (perhaps momentarily surprising) finding is that women are typically partnered with employed men, even if they are not in the labour force or are marginally employed themselves. The same is not true of their male counterparts, whose female partners are much less likely to be in a position to protect them from poverty. Nevertheless, as discussed in Box 2.2, women's lower earnings in two-adult households are still of concern, both because women may have less command over household resources as a result, and because a more precarious relationship with the labour market would leave them vulnerable in the case of relationship split.

At the same time, a focus on increasing maternal employment as a strategy for reducing in-work poverty needs to keep two important caveats in mind. First, while many lone parents and second earners would like to increase their hours, many others would not (Lewis *et al.*, 2008; Butler *et al.*, 2014). Women part-timers are much less likely than men to say that they would prefer a full-time job (Bradshaw *et al.*, 2010; Frazer and Marlier, 2010). The OECD (2010a) found that “on average over the 20 European countries for which data are available, more than one-third of poor part-time workers

remain voluntarily in part-time work” (pp. 245-6). For the OECD this raises concerns about the financial incentives in national tax and benefit systems, but it also highlights normative questions about what is considered reasonable in terms of balancing work and family responsibility. For instance, Gardiner and Millar (2006) find that low paid workers who work long hours (over 41 hours a week) or have a second job are more likely to escape poverty than those who do not – yet encouraging such long hours might not be considered a palatable policy solution to in-work poverty. Similarly, it is not obvious that full work intensity should be expected of those with caring responsibilities, and that those who choose to work part-time can reasonably be expected to live in poverty as a result. In interviews with working-class mothers in low-paid jobs in the UK, Vincent *et al.* (2008) found that combining being a ‘good mother’ and a ‘good worker’ was the source of enormous tension. Bennett and Daly (2014) also point out that low-paid work may not be an attractive ‘choice’ for women in comparison to caring for children, an activity that is valued by themselves and others.

Thus while work-family policies that enable and encourage women to extend their hours should undoubtedly be strengthened (and have the potential to make a significant difference) there is a powerful case for placing equal emphasis on policy aimed at tackling the quality and pay of part-time work opportunities – ensuring that women are paid more for the work they already do. Policies to tackle the gender pay gap more broadly are also crucial. Women’s market income is lower than men’s not only because they work fewer hours but because they are paid less. Even after fully accounting for differences in working hours and education between men and women, a significant income gap remains, reaching over 25 per cent for the median worker in many OECD countries, due in part to concentration in lower-paying occupations, in part to lost experience around childbirth, and in part to pay discrimination based on gender (OECD, 2012c; Gornick and Jäntti, 2010). Even among full-time employees only, women earned on average 16 per cent less than men in 2010 (OECD, 2012c). The wage gap at the top of the earnings distribution tends to be wider than at the median point, but in some countries – notably Germany, Austria, and to a lesser extent Spain and Italy – the gap is wider among low earners. In Germany, gender wage gaps have narrowed substantially among the top earners, but not among the lowest.

The second caveat is a reminder that measures aimed at second earners may end up increasing income in households that were already above the poverty line, and that this can have an unexpected consequence on in-work poverty: a rise in the number of households with two full-time earners may lead to an increase in median income, and hence in the relative poverty line (Marx and Nolan, 2012). The increasing numbers of two-earner households has shifted the norm for living standards, and made it more difficult for households with a single earner, even working full-time, to reach the poverty line without help from the state. For example, Marx (2007), looking at the case of the Netherlands, points to strong employment growth alongside a growth in poverty over three decades, with a particularly sharp increase in poverty risk for both workless

households and those with a single earner. One way to help resolve this tension is for couples to share paid and unpaid work more evenly, rather than doubling their paid work overall. Strategies that encourage men to take a greater share of caring responsibilities, and to take advantage of opportunities to work part-time, may be the answer – though there is limited evidence of success in this area so far.

We turn now to consider the evidence on the role of the following policies in addressing in-work poverty: maternity and parental leave; childcare provision and subsidies; flexible working and other family friendly policies including part-time work opportunities; and finally in-work conditionality and post-employment support. It is worth noting that for most of these areas there is a large literature looking at the effects of family policies on mothers' labour supply, but very little following through to examine effects on household poverty.

Maternity leave and poverty

Examining the body of literature on maternity leave, Ray *et al.* (2014) conclude that leave entitlement (even if unpaid) leads to increased labour market attachment after birth, but that longer leave periods may have more negative effects on women's future labour supply and longer-term career prospects, in particular as a result of lost skills and experience (see reviews in OECD, 2011; Letablier *et al.*, 2009; Hegewisch and Gornick, 2011; Smeaton *et al.*, 2014; Stock *et al.*, 2014). There is no clear consensus on the optimal length of parental leave (Brandth *et al.*, 2012), but existing evidence seems to indicate a point somewhere between six months and one year. The design and effects of parental leave are fundamentally linked to individual countries' institutional and cultural contexts, as well as the design of childcare policies (Boeckmann, Misra and Budig, 2014).

Keck and Saraceno (2013), in a study of EU countries, found evidence that "too short" leave, which they define as less than nine months, can negatively impact women's labour supply, while Stock *et al.* (2014) note that if leave is too short, it can result in women leaving the labour market entirely. On the other hand, evidence from France and Germany shows longer leave periods are associated with more precarious employment and reduced wage growth. The reform of the parental leave system in Germany in 2007 allowed researchers to make the most of a natural experiment. Under the reforms, a low-level flat-rate leave was replaced by a more generous entitlement based on previous salary. For those with no previous labour market experience, the previous flat-rate still applied. Additionally the overall length of paid leave was cut from 24 months to 12 (with the option of an additional two months for a second parent). Using different data sets, both Bergemann and Riphahn (2010a) and Kluve and Tamm (2009) find positive overall employment responses after the first 12 months after birth. Bergemann and Riphahn additionally find that it is particularly those from low income families (i.e. those who lose out in the reforms in terms of generosity) who intend to

move back into the labour market more quickly (within a year of birth) than before the reforms (2010b).

In the UK, the extension of paid maternity leave from 18 weeks to 26 and then 39 weeks appeared to take place with little impact on the proportion of mothers who were back at work 18 months after birth (which fluctuated between 76 and 80 per cent) (Chanfreau *et al.*, 2011). But BIS (2010) reported a “dramatic decline” (from 41 percent to 18 percent) in the proportion of mothers not returning to the same job with the same employer when leave increased from 18 to 26 weeks; a positive change in light of past research suggesting that loss of pay and responsibility were more likely for women changing employers (e.g. Hegewisch, 2009).

In terms of generosity, Misra *et al.* (2012) have found that the higher the compensation in parental leave for mothers, the more likely they are to maintain labour force attachment and that by supporting mothers’ employment, parental leave works to reduce poverty. Stock *et al.* (2014) highlight the fact that legal protections that ensure parents have the same job to go back to after their leave are also important in helping parents stay attached to the labour market in the long-term.

In two parent families, the risk of poverty is considerably reduced when both parents work. Additionally, policies that involve relying on individuals to become economically dependent upon one another do not tackle the origin of the problem which leave policies attempt to alleviate: “the lack of access to sufficient labour income when care responsibilities are assumed” (Stock *et al.*, 2014, p.49). Because of this, a number of reviews call for parental leave policies to focus more on encouraging men, as well as women, to balance work and care responsibilities (Bennett and Daly, 2014; Stock *et al.*, 2014). In order to do so, it has been argued, parental leave needs to be better remunerated, and a portion reserved in a ‘use it or lose it’ arrangement specifically for the father, as evidence shows that fathers are most likely to take up non-transferable leave and are more responsive than women to the coverage of earnings (see Stock *et al.*, 2014). The model for such schemes are the ‘daddy months’ which exist in some northern European countries. As these have been recently introduced there are a number of studies investigating their effectiveness. Although none look at in-work poverty in great detail, evaluations of reforms in both Sweden and Germany (in 1995 and 2007 respectively) find that fathers do take more leave under such arrangements, although the evidence is mixed about whether this translates into fathers taking on further caring responsibilities and about the effect it has on female labour market outcomes (Bünning, 2015; Ekberg *et al.*, 2013).

Childcare and poverty

Beyond the period covered by parental leave, care responsibilities can be a barrier to labour market engagement and prevent households from avoiding poverty. Gash (2008) argues that working part-time (or not at all) can be a highly constrained choice when

childcare is not available that facilitates full-time working. There is huge variation across Europe in terms of the availability and coverage of childcare both for the under-threes and between three and school age (Saraceno, 2011). The high costs associated with childcare can also be a significant drain on limited household resources, and one which pushes women to work shorter hours (OECD, 2012d).

Bennett and Daly (2014) point out that measures of in-work poverty often do not include childcare costs and therefore lone parents and two-earner couples may be worse off than they appear from official statistics. Further, the interaction between childcare costs and other policies are important. In an examination of child benefit packages across 27 countries in 2009, Van Mechelen and Bradshaw (2012) find that in some countries the cost of childcare undermines the value of the package. The OECD points out that it is important to look at availability and quality as well as cost (OECD, 2010b). This report cites studies from Italy (Del Boca and Vuri, 2007) and Germany (Wrohlich, 2009) which find that reforms which focused on increasing availability at the present cost levels would potentially have a greater labour supply effect than reducing costs; although clearly this is related to particular cost levels in those countries at the time of the research.

There is remarkably little literature available on the direct interaction between childcare provision and in-work poverty. Most studies tend to focus on the maternal labour market effects of public provision of childcare, yet there is rarely a strong focus in analysis on families particularly at risk of poverty. This is a large gap given some evidence suggests that low-income families are less likely to take up universal childcare provision than other families (Van Lancker and Ghysels, 2011). An exception is a comparative study of 25 European countries by Ugreninov *et al.* (2013), which finds that childcare reduced poverty risks overall but not enough to close the poverty gap between lone parent and two-parent households. Furthermore, there are very few studies which examine the impact of childcare on the likelihood of part-time relative to full-time work (OECD, 2010a). The two studies that do this both seem to find that changes in childcare costs have bigger effects on working hours than on the participation decision. Andrén (2003) uses Swedish microsimulations and a structural labour supply model to estimate that reductions in childcare costs would lead to those already working increasing their hours, rather than those not working joining the labour market, while Choné *et al.* (2003)'s study of French data estimates that an increase in childcare costs would only have a very small effect on total female participation but would negatively affect the number of hours worked by women.

In general the literature is also problematic as studies are often unclear about the different forms and generosity of existing provision (Lloyd and Potter, 2014). Nevertheless, one general lesson is that pre-existing institutional and cultural contexts make a difference to the impact of policies. Budig *et al.* (2012) model how cultural attitudes moderate the impact of parental leaves and childcare across 22 countries.

They find that such policies are associated with higher earnings for mothers in countries in which maternal employment enjoys substantial cultural support, but find a less positive and sometimes even negative effect in countries where attitudes support the male breadwinner/female caregiver model. In a summary of the literature of the effects of the introduction of free or subsidised childcare on the maternal labour supply, Bauernschuster and Schlotter (2015) conclude that large effects can be expected when existing employment rates and childcare attendance are low, but not if they are both already relatively high. An example of this is the Swedish reform of 2002, when a price cap was introduced that reduced costs of the average family from roughly 10 per cent of net household income to about 4 per cent (Lundin, Mörk and Öckert, 2008). Given Sweden's already high levels of childcare attendance and maternal employment rates, the study found no effect on the maternal labour supply. On the other hand, a natural experiment of the large-scale provision of publicly subsidised childcare in Spain (where childcare use and maternal employment were both relatively low) in the early 1990s found rises of 8 per cent in employment of mothers with eligible children, and also an increase of 9 per cent in hours worked (Nollenberger and Rodriguez Planas, 2011).

A recent quasi-experimental study of effects in Germany of the childcare reform of 1996, another country with traditionally low female and especially maternal employment rates, found that kindergarten eligibility increased the labour supply of mothers of three to four year old children by 6 percentage points (Bauernschuster and Schlotter, 2015). In accordance with the literature, which suggests that effects are strongest on mothers whose youngest child is affected by reforms, a follow-up regression analysis estimated that if a mother's youngest child attends public childcare her probability of being employed increases by about 35 percentage points (Bauernschuster and Schlotter, 2015, p. 2). Another recent study examined the impact of free, universal pre-school education in England between 2000 and 2008. The authors estimate that mothers who use childcare provision because it is free were 25 percentage points more likely to be in employment thanks to the free entitlement, with this effect split evenly between full- and part-time work; though results are not significant due to large standard errors (Brewer *et al.*, 2014). In general, the nature of the UK's mixed ECEC market, and combination of free provision and demand-side subsidies through tax credits, has been cited as inefficient and not sufficient to promote significant labour market effects given the high costs of childcare outside the entitlement and the prevalence of low wage employment and weak wage increases (Brewer *et al.*, 2014; Lloyd and Potter, 2014).

The evidence about the impact of childcare on different types of families is even more limited. In general, evidence suggests that publicly supported childcare for very young children (under three) increases the likelihood of mothers' labour market engagement and also increases the hours they are likely to work (Boeckmann *et al.*, 2014; Stock *et al.*, 2014). In particular, a cross-national study using the Luxembourg Income Study found that for single mothers' prospects of escaping poverty, provision of childcare for

infants and toddlers is important, while for partnered mothers' prospects of escaping poverty it is childcare between the ages of three and starting school that matters; the paper does not have an explanation for the difference (Misra *et al.*, 2012). Another comparative study of mothers of two-year-old children across 13 European countries in 2005 found that about a third of the difference in employment rates can be accounted for by the provision of public childcare (Uunk, Kalmijn and Muffels, 2005).

Individual countries' childcare policies need to be viewed alongside other family policies, especially parental leave policies. This is particularly the case for children under three (Saraceno, 2011). In a simulation of the German parental leave reforms of 2007 combined with an increased provision of universal childcare, Geyer *et al.* (2015) find that the combined effect is to increase employment for mothers with children aged 13-24 months by approximately 7 percentage points. These results also stress that the effect is similar across all socio-economic groups and in terms of both full- and part-time employment. As this shows, more research is needed to examine both childcare policies' effects on in-work poverty, but also how childcare and other policies interact to counter (or not) in-work poverty and associated risks.

Flexible working, part-time work and other family-friendly policies

While there is very little literature examining the direct link between family-friendly employment policies and in-work poverty, there is evidence that an inability to combine work and care can result in withdrawal from the labour market. Ray *et al.* (2014) cite surveys showing that significant non-employment and under-employment is related to caring responsibilities, especially for women. What this means for in-work poverty is not entirely clear. While reducing hours is clearly not a strategy for improving household incomes in the short-term, flexible or part-time working can help maintain labour market attachment among individuals who would otherwise drop out of the labour market.

Part-time work is the most common form of flexible working arrangement across the EU (Plantenga and Remery, 2010). As discussed in Box 2.4, working fewer hours increases the risk of in-work poverty, not only because of the lower number of paid hours, but because part-time work is often associated with lower hourly pay and fewer training and promotion opportunities, though this is truer in some countries than in others (see OECD 2011; Lyonette and Baldauf, 2010). Downscaling working hours to balance caring responsibilities can also lead to disruption in a career: Smeaton and Marsh (2006) looked at UK data between 2002 and 2005 and found that only 10 per cent of mothers who reduced their hours from full-time to part-time after childbirth remained with the same employer.

Yet it is also clear that in many countries having at least one part-time worker is a crucial and valued part of households' strategy to reconcile work and family

responsibilities (Ray *et al.*, 2014; Letablier *et al.*, 2009; OECD, 2007). Del Boca *et al.* (2009) found the availability of part-time work to be positively associated with mothers' workforce participation in a cross-national study, especially for lower educated mothers – although only where part-time work was well paid (at least at the hourly rate of full-time pay).

Ensuring that part-time work can be done in high level occupations, and for good pay and conditions, may therefore play an important role in reducing in-work poverty, particularly in lone parent households, where this is the only income. Warren (2008) points to considerable differences in the relative economic position of the female part-time workforce across Europe. In the UK and Austria, women working part-time are concentrated in lower level manual/elementary and clerical/service occupations, while in France, Germany, Ireland, Luxemburg and the Netherlands they are spread across the occupational structure. In Greece and Portugal, women are much less likely to work part-time (the model is full-time or exit after motherhood), but those who do are more likely to be at senior levels. The relative earnings disadvantage for women working part time was largest in the UK and Ireland, and the smallest in Denmark and the Netherlands, which Ray *et al.* (2014) suggest may be linked to better regulation of wage rates and working hours, and better protection for short-time workers. Policies that allow workers to step up from part-time to full-time in due course may also be effective, so that part-time work does not entail stepping onto a different track. Hegewisch (2009) compares family friendly practices across countries, and notes that in some EU countries (Germany and the Netherlands) workers have an entitlement to increase as well as reduce their hours.

Stewart *et al.* (2012) conducted a mixed methods study with employers in London to explore the conditions under which employers would offer vacancies part-time. Their aim was to move the debate in the UK away from legislation enforcing obligations around flexible working and on to the business benefits of part-time job creation. This approach fits with other studies that have argued that the prevalence and quality of part-time work depends on the views of employers and organisations (see Fagan and Walthery, 2011; Ibáñez, 2011).

Stewart *et al.* found that while around one quarter (23 per cent) of current vacancies being advertised by respondents were part-time, only 3 per cent were for jobs paying more than £20,000 Full Time Equivalent, with the remaining 20 percent for jobs with lower salaries. This suggests an acute shortage of quality part-time opportunities for intermediate and higher-skilled candidates, with just one part-time vacancy available for every 18 full-time vacancies. The authors point out that this likely to mean higher skilled workers looking for part-time work are pushed into taking up jobs below their skill level, in turn perhaps crowding out lower skilled candidates.

In exploring the reasons for low availability of part-time job openings, Stewart *et al.* found that part-time work was mostly used as a retention tool for existing job holders, implying that while employees may be able to negotiate a return to an existing employer on a part-time basis, they face considerable challenges if they wish to switch jobs, or are looking for part-time work after a career break. Resistance to advertising vacancies as part-time seemed to come from two sources. The operational needs of the business were one factor: for some businesses, professional client-facing roles were seen as unsuited to part-time employment because of the need for a particular individual to be available when needed, and there were also concerns about whether part-time working was compatible with senior management responsibility. But the second factor was the culture in the workplace, with businesses much more likely to be resistant if they had never recruited a part-time worker, and some employers giving examples of senior part-time roles that had worked successfully. One conclusion of the study is that concerns about part-time working reduce with actual experience of it, and that therefore the major hurdle for growing the part-time recruitment market is persuading more employers to try it for the first time. Discussing the example of the Netherlands, where part-time work is very widespread at all skill levels, Horemans and Marx (2013) argue that what is required for other countries to follow suit is not only the right government policies, but “a process of institutional and cultural innovation that requires the cooperation of many actors in the field of industrial relations and welfare” (p.22).

A second strand of policy to ensure that flexible working does not reinforce existing gender inequalities is to encourage men as well as women to take up family-friendly work options. It is very clear from the data that most flexible working arrangements, including part-time working, are taken up by women (OECD, 2012c), although there is a good deal of variation across the EU (Plantenga and Remery, 2010). Plantenga and Remery (2010), in a survey of EU policies, find that Austria, Belgium, Germany, the Netherlands and the UK have high levels of flexibility but low levels of gender equality. On the other hand Denmark, Finland, France and Sweden score highly on both accounts. Bulgaria, Estonia, Hungary, Lithuania and Romania score particularly badly in terms of flexibility (Plantenga and Remery, 2010).

The way that policies are designed may affect the extent of gender disparity in working patterns. Currently, fewer than half of EU countries provide legal entitlements to flexible working and in almost all cases these are limited to ‘rights to request’. In an argument that echoes those regarding paternity leave, Hegewisch (2009) argues that the UK’s ‘soft’ right to request flexible working means that men are less likely than women to take it up, and that a more concrete right is necessary to challenge gender norms. However, as Horemans and Marx have suggested, stronger legislation is likely to be only the beginning of a process of changing norms. One cross-European survey notes that as long as flexible working is seen as ‘female’ and part-time work is in general associated with low pay, then flexible working is more likely to reinforce gender

differences than alter them (Plantenga and Remery, 2010). Successful efforts to ensure that senior roles can be done part-time may therefore be crucial to ensuring greater gender equality in part-time working, as well as to opening out the opportunities available to women. The importance of men as well as women taking up such rights is underlined by evidence from Spain: Fernández-Kranz and Rodríguez-Planas (2011) find that the introduction of the right to request part-time working for parents of children under seven resulted in more women being hired on a temporary basis, leading to an unanticipated increase in employment insecurity. Such discrimination against all young parents seems less plausible.

In-work conditionality and post-employment programmes

This review does not examine the wide sweep of activation policies aimed at increasing employment, as the scope is already broad, and these policies are focused more on increasing employment than on decreasing in-work poverty (even where poverty reduction is part of their motivation) (see Ray *et al.*, 2014 for a discussion of this literature, and also the first evidence review in this series, McKnight and Vaganay, 2016). However, two aspects of activation seem particularly relevant in relation to reducing in-work poverty.

The first is the issue of ‘in-work conditionality’. This can be seen as a direct attempt to reduce in-work poverty, as it aims to increase working hours for households already classified as working. The concept of in-work conditionality appears to be new, with the UK leading the way as part of its Universal Credit (which, in principle, will replace the existing system of in-work tax credits, discussed further in Section 2.8 below). Claimants earning less than the equivalent of a 35 hour week at the national minimum wage (with a lower threshold for those with caring responsibilities or health problems) will be expected to take steps to increase either their hours or their rate of pay. This requirement would apply to both partners in a single earner couple, if the worker earned below the threshold amount (Ray *et al.*, 2014). Ray *et al.* (2014) point out that the UK Government has acknowledged that there is limited evidence about the best way for low-income working families to increase their earnings, and is therefore trialling a range of ideas (DWP, 2013b).

It is worth highlighting here concerns raised about the lack of financial incentive to move from part-time to full-time work under Universal Credit (Bennett and Daly, 2014). Working single parents are calculated to be the group worst affected, with little gain from increasing hours; UK charity Gingerbread has argued that the reforms will increase the likelihood of single parents becoming trapped in low-paid jobs as a result (Brewer and Agostini, 2013). In the UK, women in general, and especially lone parents, have been found to be particularly responsive to employment (dis)incentives (Blundell *et al.*, 2013; Brewer *et al.*, 2012). In this context, the introduction of in-work conditionality can be seen as an alternative way to push workers to increase hours,

replacing the ‘carrot’ of higher disposable income with the ‘stick’ of the threat of sanctions.

The second relevant aspect of activation programmes is that aimed at providing post-employment support. There is some evidence that getting workers into the right job to start with is important: for example, Millar and Ridge (2009) found that if lone parents were pushed into unsuitable employment before they were ready, they were unlikely to stay in their job. But there have also been a number of experimental programmes aimed at testing the ability of post-employment support to increase retention and progression and avoid workers cycling between jobs and benefits, in turn increasing work intensity as measured across the year. However, most available evidence on the impact of work retention and progression support comes from the US (much of it targeting lone parents), with the exception of the UK Employment Retention and Advancement (ERA) project, which targeted long-term unemployed (primarily single men) and lone parents (Ray *et al.*, 2014). Further, few if any of the studies focus directly on poverty effects, instead examining impacts on employment and/or earnings.

The ERA-type programmes provide a mixture of financial incentives for staying in work and increasing hours, in-work training, childcare assistance and one-to-one advice and support. Ray *et al.* (2014)’s summary of the literature on their effectiveness is that results are largely positive for employment and earnings *while programmes are running*, but that longer-term impacts are less promising, with effects fading once extra financial support ends. In the UK ERA, positive effects endured longer-term for the long term unemployed group, driven by increased work retention (Dorsett, 2013). But for lone parents, while earnings increased in the short term as working hours rose in response to incentives, this did not last over the five-year follow-up period (Hendra *et al.*, 2010).

Separating out the more effective elements of these type of programmes is complex, but Ray *et al.* argue that evidence from both the UK and US programmes indicates that in-work support may be a necessary but not sufficient element, and that financial supplements play an important role. In the UK ERA, there was an increase in training participation, but this did not seem to result in an increase in qualifications or a rise in earnings.

Summary

Increasing maternal employment has an important role to play in reducing in-work poverty – especially for single parents but also in dual adult households. There is strong evidence that paid maternity leave in the first year after birth, and publicly subsidised childcare, both help maintain women’s labour market attachment after childbirth. Not much of this research looks directly at the effects on poverty, but there are likely to be two poverty-reducing mechanisms: by increasing household work intensity these policies reduce the risk of poverty in the short-term, and by limiting the loss of labour

market experience as a result of childbearing they increase mothers' earnings in the longer-term.

Making it possible for good jobs to be done flexibly and part-time is also crucial. Evidence suggests that some mothers opt to stay home in the absence of a part-time employment option. But in many countries where part-time opportunities are available, they are concentrated in jobs that are lower skilled and lower paid per hour than full-time work. Increasing the availability of high quality part-time jobs will help reduce the gender pay gap and should reduce in-work poverty without requiring full work intensity in households with children. To achieve this, legislation has an important role, but changing social norms is also key and not easy to accomplish. As Horemans and Marx (2013) put it in relation to the experience of the Netherlands in normalising part-time work at all skill levels: "The spirit of cooperation between government, social partners and other actors which has been so essential to the success of the Dutch model certainly does not prevail everywhere in Europe. While the institutional and policy factors conducive to part-time being attractive work may be identifiable, there remain formidable barriers to actually implementing these in many countries" (p.23).

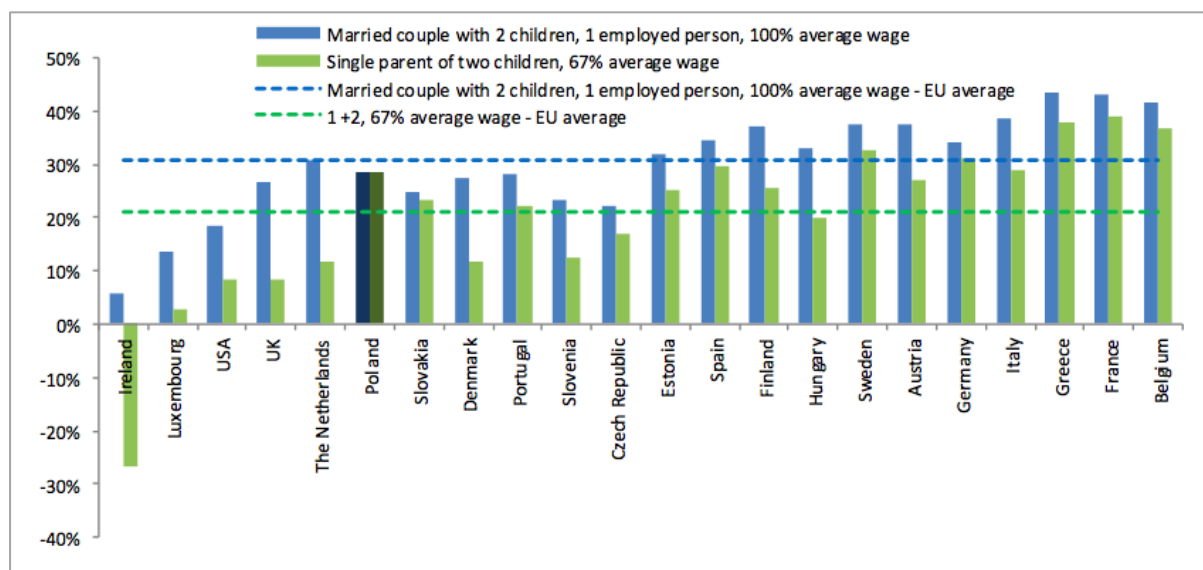
At the same time, policy needs to focus explicitly on how to involve more men in taking up flexible and part-time working – though again changing norms is not straightforward. There is some evidence in favour of dedicated 'daddy months' in the year after birth, and these should be explored further. Certainly it is clear that parental leave needs to be properly remunerated and flexible working available in well-paid and high-quality jobs if men are to be persuaded to take these opportunities up. More gender balance in sharing work and care is important both to facilitate maternal employment in dual adult households and to normalise flexible options and reduce discrimination against those requesting them. It also matters for a third reason: the rise of the two-earner household is part of the explanation for increased in-work poverty in Europe, as this growing standard has pushed up the average standard of living and with it the poverty line. This is something governments need to address head-on, given the need for families to balance work with caring responsibilities, for elderly relatives as well as children. Sharing paid work more evenly within couples, rather than pushing further towards a model of two full-time earners, may be one way to resolve this tension.

2.7 The role of taxes and social insurance contributions

One possible strategy that could help to reduce in-work poverty is for the state to reduce the amount withdrawn from pay packets through taxes and social contributions. Marx and Nolan (2012) argue that in some cases levels of taxation are high enough “to effectively tax households into poverty.” Immervoll and Pearson (2009a) highlight that “the effective tax rate imposed by personal taxes and social security contributions tends to be substantial in many countries” (see also Marx, Vanhille and Verbist, 2012). In a simulation of the tax and benefit system in Poland in 2010, for example, one study found that the net result of all taxes and social benefits actually worked to increase in-work poverty by about four percentage points, due to the relatively high burden of tax and social security contributions and the fact that workers’ households receive social benefits relatively rarely (Lewandowski and Kaminska, 2014).

Figure 2.8 shows the total tax and social security contribution ‘wedge’ in a number of EU countries in 2011, meaning the burden of tax and social security contributions as a share of gross pay. It shows that for a single parent with two children and 67% of the average wage (i.e. a family near the relative poverty line) a number of countries had tax wedges considerably higher than the EU average; these include Austria, Belgium, Estonia, France, Finland, Germany, Greece, Italy, Portugal, Spain, Slovakia and Sweden, while the Czech Republic, Denmark, Hungary, Ireland, Luxembourg, Slovenia and the UK have tax wedges lower than the EU average. Interestingly, Ireland is the only country where the tax wedge is negative for this group. The IMF (2012) cite lowering the tax wedge on low-skilled employees as “essential” to boost employment rates. They list the following countries as ones that should attempt to reduce the tax wedge: Belgium, Finland, Estonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Portugal, Romania, Spain and Sweden.

Figure 2.8 Total tax wedge (total burden of income tax and social security contributions in relation to gross remuneration) in selected European countries and the United States, 2011



Source: Lewandowski and Kaminska, 2014 (p. 41)

Marx and Nolan (2012) argue that the most substantial room for manoeuvre is at the level of social security contributions, since these tend to be more substantial than taxes. There have been attempts to reduce contributions for the low paid in some countries (aimed primarily at increasing work incentives rather than reducing poverty). Many countries including Belgium, France, Hungary, Ireland and the Netherlands eased the contribution burdens on minimum wage workers in the years between 2000 and 2005, the effect of which has been to make their systems more progressive (Immervoll, 2007). However, the effects on those taken out of contributions can be counter-productive, given that making contributions usually serves to open the rights to benefits in the future (Immervoll and Pearson, 2009a; Marx *et al.*, 2012).

Looking specifically at Continental European countries with a traditionally strong emphasis on contributions-based social security, Marx *et al.* (2012) raise other questions about the efficiency of using tax measures to combat in-work poverty. Using Belgium as an example, they show such measures need to be targeted on household incomes, rather than individuals, in order to be effective in reducing poverty. Yet, the authors note concerns about mobility traps where measures are strongly targeted, while also questioning whether targeted reductions contradict the emphasis in Bismarckian welfare states on proportional contributions, potentially undermining public support (Marx *et al.*, 2012). The approach is also likely to be very costly, as in these countries the lower end of the household earnings distribution tends to be very densely populated.

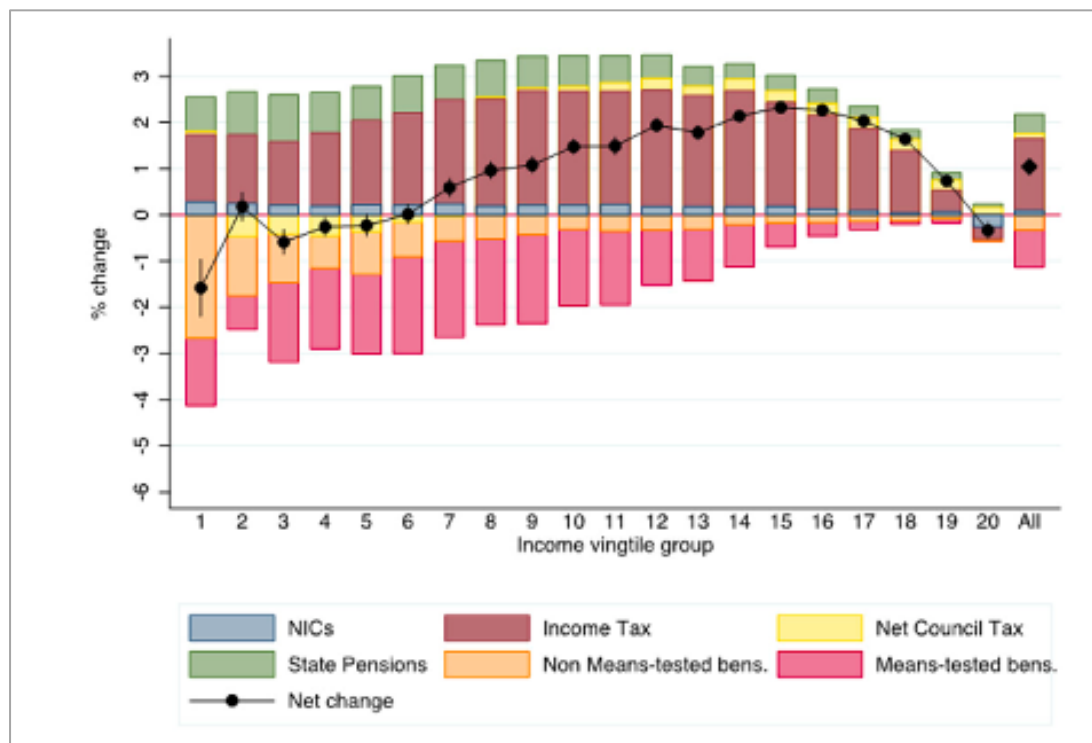
Some of the difficulties with targeting reductions in contributions can be seen clearly in Germany's 2003 'mini-jobs' reform, which aimed to boost employment in the low-wage sector through a rebate of social security contributions paid by qualifying employees. Due to the design of the policy it did not interact well with other benefits and led to some perverse incentives, such as disincentives for short-term unemployed people to work, and incentives for those working part time to reduce their hours. The result was that the reform did not work as planned and in fact nearly a quarter of mini-job holders were pensioners or students (Immervoll and Pearson, 2009a). All in all the strategy did little to increase employment, with a small increase in participation more than outweighed by a reduction in working time by those already employed. This effect was predicted in a micro-simulation by Steiner and Wrohlich (2005).

Similar targeting issues affect attempts to reduce income tax burdens as well. Recent reforms in the UK have highlighted two key issues in terms of reducing taxation. First, as Marx and Nolan (2012) point out, low income households often have a low tax burden to begin with, leaving little available to take away. Indeed, analysis by Marx *et al.* (2012) suggests that in many countries even a hypothetical zero tax of minimum wage workers would not be sufficient to ensure that the families of such workers were free from poverty, especially lone parents with dependent children. Second, there is only limited overlap between low paid work and household poverty, familiar from earlier discussion. While some poor households would see their income improve, most of the benefits would flow to non-poor households (Marx and Nolan, 2012).

This effect was seen very clearly in the impact of substantial increases in the personal tax allowance in the UK between 2010 and 2015. Sold as a progressive policy, and championed by the Liberal Democrat partners in the Conservative-Liberal Democrat Coalition Government, in practice the policy was mildly regressive: those already earning below the original threshold were not affected, while individual taxation meant that households with two earners, both earning above the threshold, felt the full benefit twice.⁸ Figure 2.9, from analysis by De Agostini *et al.* (2015), illustrates the way the gains from the more generous tax allowances fell across the income distribution, and also shows that for the top 75 per cent of the distribution the gains outweighed simultaneous losses from cuts to social security benefits, while for those in the bottom 25 per cent the losses outweighed the gains. The effect on in-work poverty is not clear and does not appear to have been estimated, but certainly any such effect would have come at high cost to the exchequer. Given that the increase would have pushed up post-tax median income the impact may in fact have been a rise rather than fall in poverty.

⁸ This is true for those earning up to £100,000 per year, at which point the personal tax allowance starts to be withdrawn.

Figure 2.9 Percentage change in household disposable income by income vingtile group due to policy changes 2010 to 2015/16 in the UK, compared with May 2010 policies uprated to 2015/16 using CPI



Source: De Agostini *et al.*, 2015, p. 17

Similar findings can be seen in analysis of further plans in the UK to increase the personal allowance for income tax to roughly the equivalent of full-time minimum wage earnings. Hood *et al.* (2014) model the proposed changes. They point out that 17 per cent of low-paid workers will be unaffected as they already pay no income tax (due in part to the previous increases in the allowance between 2010 and 2015). The poverty rate among this group of unaffected low-paid workers is estimated at 24 per cent, while the poverty rate among workers who would be affected is only 4 per cent (Hood *et al.*, 2014, p. 153). Further, they estimate that only 15 per cent of any money spent by government on this policy would go to working families in the lowest-income half of the population (Hood *et al.*, 2014, p.155).

As seen in the previous example of German 'mini-jobs', the interaction with other benefits is also of crucial importance. Analysis by Hirsch (2013) shows that because Universal Credit (UC) tapers away according to net income (as opposed to tax credits which are means-tested on a family's pre-tax income), families on UC would typically only keep 35 per cent of the gains from raising the personal allowance (Hirsch, 2013; Hood *et al.*, 2014). There are similar, even larger, effects, for those families on benefits (such as Council Tax Support) which are being kept separate from UC (Hood *et al.*, 2014).

Indeed, looking at the UK, Hirsch and Valadez (2014) show that using tax cuts to boost low earners' incomes is much more expensive than using in-work benefits, such as tax credits, since the effects of the latter can be much better targeted. They also argue that the simplest way of allowing low-income families to gain from future tax cuts would be to increase the Work Allowance of Universal Credit by the same amount as increases in tax allowances. Hood *et al.* (2014) also come to similar conclusions in terms of distributional effects and work incentives.

Thus most analyses appear to agree that reducing tax rates is not an efficient or effective way of reducing poverty. However, marginal tax rates associated with the withdrawal of benefits as income rises are seen as an area in which countries have room to manoeuvre (see for example IMF, 2012). This subject is more relevant to the discussion in the next section about in-work benefits but it does raise an interesting question about how efforts to reduce in-work poverty sit within broader goals. Kenway (2008) argues that if we recognize that the poverty line is an "arbitrary line drawn in the sand" as opposed to a real boundary which marks a stark difference in living standards between those just above and below it, then this has implications for attempts to fight poverty. Getting households over that line is clearly still a central goal, but Kenway (2008) questions whether it is an adequate one if families then struggle to progress further due to very large marginal tax rates. From this point of view, there is value in restructuring taxation to reduce marginal tax rates for lower earners, even if many of those earners are already above the poverty line. With an eye to improving marginal tax rates for this latter group, Kenway argues in favour of the introduction of a large lower tax band (e.g. a starting rate of 10 per cent, covering half the current standard rate band in the UK), rather than a further increase in the personal allowance.

Before moving on to consider benefits and tax credits, it is worth briefly noting the relevance of wider taxation policy: if a higher tax burden brings down the post-tax median income it will also reduce the rate of in-work poverty. This means that what is relevant is overall tax policy, not only tax policy as it affects lower paid households. However, we have identified very little literature on this point, though Lewandowski and Kaminska (2014) point to an increase in the overall burden of direct taxes in Poland between 2010 and 2012 due to a freezing of nominal values of tax system parameters (which declined in real terms) and the introduction of a new farmers' health insurance contribution. Both of these worked to decrease the relative poverty rate. Combined with changes in family benefits which positively affected the incomes of the poorest households, they led to a small decrease in poverty rates (although not in the in-work poverty rate).

Summary

While reducing the total tax wedge (the burden of tax and social contributions as a share of gross pay) is seen as important to boosting employment, manipulating tax rates do not appear to be as effective at tackling poverty. This is both because many low paid

and part-time workers are already paying little tax, and because these measures are not well targeted at household level. The effects of recent significant increases in the Personal Tax Allowance in the UK provide an illustration of this. Reducing social security contributions also raises political questions, especially in Bismarckian welfare states. If a drop in contributions reduces a worker's later claims on the social security system it may prove a shortsighted policy, while a weakening of the link between contributions and later benefits undermines the very logic of contributory social insurance and may weaken political support. Tax measures targeted at household rather than individual level are more promising as anti-poverty policy, though they also lead to disincentives to work for second earners. We discuss this further in the next section.

2.8 State support for families through benefits and tax credits

As discussion so far has indicated, in an age in which dual earnings are the norm, even full-time work is likely to be insufficient to take a relatively low earner with dependents out of poverty. Measures to address low pay, increase work intensity, and reduce marginal rates of taxation for lower earning households all have a role to play in an anti-poverty strategy, but even where successful they will not be able to eliminate in-work poverty on their own because of the additional needs of households with children. State benefits and tax credits must therefore be an essential part of the package. This section considers the role of universal or targeted family allowances or child benefits; and means-tested in work benefits.

Family allowances/ child benefits

Universal child benefits have a powerful advantage in being able to address the problem of the extra needs of households with children without damaging work incentives. If child benefits are means-tested, they create a disincentive for families to increase their hours or progress in work, and can be particularly discouraging to second earners, depending on the design. In addition to labour market disincentives, targeted approaches are often associated with lower take-up, due to information gaps and stigma, and can entail high administration costs (Notten and Gassmann, 2008).

Cross-national comparisons of overall welfare state packages have tended to support a role for universal child benefits in a strategy to reduce in-work poverty. Corak *et al.* (2005) argue that the best performing countries in terms of child poverty have systems of universal child benefits, alongside tax concessions for children which are not particularly strongly targeted at low-income families (see also Bradbury and Jantti 2001; Whiteford and Adema, 2007). In fact, in some of the best performing countries, Luxembourg and Belgium, more is spent on non-poor children than on the poor (Corak *et al.*, 2005). In contrast, the UK and Ireland are above average spenders on child

contingent benefits, but target most by income, and are among the worst performing countries in terms of child poverty outcomes (Marx and Nolan 2012).⁹ This counter-intuitive finding fits with Korpi and Palme's (1998) conclusion that countries redistribute less successfully the more they target, a relationship Korpi and Palme dubbed the 'paradox of redistribution'. Looking at poverty (although not specifically in-work poverty) among single parents, Brady and Burroway's (2012) study lends further support to this idea: examining 18 countries, they find that universal benefits are more effective in reducing poverty among single mothers than targeted benefits, while also avoiding adverse incentives in terms of employment or family structure.

However, analyses that have revisited Korpi and Palme's approach using more recent data and a wider range of countries have questioned whether their conclusion still holds (Kenworthy, 2011; Marx *et al.*, 2013). Van Lancker *et al.* (2015) examine 15 countries' child benefit packages in terms of effectiveness in reducing poverty among single mothers. They find that both spending effort and targeting are important in explaining effectiveness, but also that targeting is related to higher reductions in poverty regardless of spending effort. *How* measures are targeted also makes a difference, with the best results coming in Finland and Denmark, countries which combine generous universal child benefits with those targeted at single mothers. As Van Lancker *et al.* point out, these findings are hard to translate directly into policy suggestions as their analysis does not include employment, which, along with benefits, is a crucial factor in explaining poverty levels (Misra, Moller and Budig, 2007). Any reductions in employment as a result of the availability of means-tested benefits are therefore not reflected in their study. Nevertheless, Van Lancker *et al.*'s conclusion, based on their own study and on those by Kenworthy (2011) and Marx *et al.* (2013), is that the "the paradox of redistribution might no longer hold as a robust empirical observation" (Van Lancker, Ghysels and Cantillon, 2015, p.220).

There seem to be two main reasons why Korpi and Palme's conclusion may no longer be robust. One is that the nature of targeting has changed over time. In the data that Korpi and Palme drew on, means-testing meant social assistance for those not working, whereas now it includes support for those in work, as explored further in the following sub-section (Marx *et al.*, 2013). At the same time, targeting has become more sophisticated, with gradual tapers replacing sharp benefit withdrawal, reducing the risk of benefits creating steep work disincentives or poverty traps.

These changes are linked to the second factor, which is that targeted benefits can now be more generous than was possible previously, both because tapering reduces the risk

⁹ What may be missing from this debate is that countries with a lower average tax burden will have higher post-tax median income, and therefore a higher relative poverty line; i.e. countries like the UK and Ireland may be spending more but performing badly because they are trying to reach a higher bar. But there appears to be little existing evidence on this point.

of poverty traps, and – arguably – because it is easier to garner public support for systems that are seen to support the working or ‘deserving’ poor. This latter point was illustrated by the nature of public and parliamentary debate in Autumn 2015 about the UK government’s proposed cuts to the level of child tax credits, which focused on the fact that *working* families would be affected; families “who strive to do everything that is asked [of] them” (Baroness Hollis, quoted by McDermott and Allen, 2015). The strength of concern about the effect of the reforms on the working poor, including from members of the governing Conservative Party, was such that the government eventually scrapped the proposals.

Certainly the generosity of support available to lower income families is a crucial factor in the extent to which benefits succeed in reducing in-work poverty, whether this support is universal or means-tested. Looking at packages relating to children as a whole (i.e. including universal and targeted provision), Van Mechelen and Bradshaw (2012) find that in Austria, France, Latvia, Italy, Finland, the Czech Republic, Denmark and Greece the living standard of an average wage single-earner household with two children is above the poverty line only because of the child benefit package, while in Portugal, Bulgaria, Hungary and Slovenia, the package is not enough to get such families over the line. For a single-earner on minimum wage in a couple with two children, the level of child benefits does not get any household over the poverty line, in any of the countries they examine. For lone parents of two children on a low wage, it is only in the Czech Republic, Hungary, Latvia, Sweden and the UK that the child benefit package is enough to ensure that the household is not in poverty. Overall, Van Mechelen and Bradshaw (2012) find that the countries which offer the most generous child benefit packages to lower earners are those with the most targeted approach. This may be because of the very high cost of making universal benefits sufficient to meet the needs of lower income households. As Marx and Nolan (2012) point out, if benefits are to make the difference in lifting a household out of poverty they need to be quite substantial in size, making universalism a costly approach. An effective anti-poverty strategy may therefore combine some element of universality with some means-testing, as highlighted by Van Lancker *et al.* (2015) in relation to support for single mothers in the Nordic countries.

Means-tested in-work benefits

Referring to the problems of overcoming work disincentives, Kenworthy (2011, p.44) proposes that, “An ideal transfer would be one that both boosts the incomes of low-earning households and promotes employment by able working-aged adults.” Marx and Nolan (2012) suggest that the Working Tax Credit (WTC) in the UK can be seen as this programme. They note that in-work benefit schemes have become mainstream policies in many countries, with several such schemes in European countries – Prime Pour l’Emploi (PPE) and Revenu de Solidarite Active (rSa) in France; Combination Credit in the Netherlands; ‘Low Wage Tax Credit’ in Belgium – but argue that the UK WTC

remains the most important measure of its kind in Europe, in terms of both scope and budget.

Brewer *et al.* (2010) simulate what child poverty would have looked like in the UK in 2010 without the Labour Government's tax-benefit reforms in the early 2000s (which had the introduction of in-work tax credits at their heart). They suggest that between 1.3 and 1.9 million fewer children were in poverty in 2010 as a result, with most of the reduction occurring between 1998 and 2004, when the tax credit system was introduced (though these calculations include the effects on children in non-working households). The largest impact of the tax credit system was on lone parents working part-time, with a 30 per cent reduction in the poverty rate for this group between 1996/97 and 2006/07 (Stewart, 2009). Furthermore, the policy was successful in encouraging single parents into the labour market: Brewer *et al.* (2006) show that without any form of in-work benefit in the UK, lone mothers' labour force participation would be ten percentage points lower at 45 per cent, rather than 55 per cent. Bennett and Daly (2014) summarise the literature and find that the combination of in-work tax credits and other benefits "resulted in far more lone parents escaping poverty by taking jobs of 16 or more hours per week than would otherwise have been the case" (Bennett and Daly, 2014, p. 63). There was also a positive effect on mothers' job retention (Bennett and Daly, 2014; Blundell *et al.*, 2013; Cebulla *et al.*, 2008).

It should be highlighted, however, that because they are targeted by household rather than individual income UK-style tax credits can reduce incentives for second earners to work. In a systematic review of interventions to reduce in-work poverty, Tripney *et al.* (2009) find that four out of the five studies examining tax credits in the UK show negative impacts on employment participation of second earners, though the magnitude of effects is small. For example, looking specifically at the 1999 introduction of the Working Families Tax Credit (WFTC), the predecessor to the WTC, Brewer *et al.* (2006) estimate that by 2002, compared to the programme it replaced, it increased the labour supply of lone mothers by 5.1 percentage points and slightly reduced the labour supply of mothers in couples by 0.6 percentage points, while slightly increasing the labour supply of fathers in couples by 0.8 percentage points. Dilnot and McCrae (2000) show clearly that the WFTC increased the incentives to reduce their hours for women whose partners worked 40 hours a week and did not have childcare needs. Recent analysis of the proposed Universal Credit in the UK also points to increased disincentives for second earners, because of the sharper withdrawal rate compared to the existing tax credit system (Brewer *et al.*, 2011).

Would tax credits work more generally, in other countries? In a simulation of UK style policies across different Southern European contexts, Figari (2011) finds that the potential effects of policies in different contexts vary according to factors such as family composition, income and the earnings distribution. For example, Immervoll and Pearson (2009b) note that most European countries have smaller problems with

worklessness among lone parents and therefore WTC-type policies are unlikely to see similar gains in employment among this group. Marx and Nolan (2012) note that many EU countries have both fewer lone parent and fewer dual earner households, which may heighten concern about work disincentives for second earners as tax credits are withdrawn. Furthermore, in some countries (e.g. Germany) there are already substantial work disincentives for second earners due to systems of household taxation (Immervoll and Pearson, 2009b). Disincentive effects can be exacerbated where earnings inequality is low in the bottom of the distribution, as in the simulation Marx *et al.* (2012) conduct for Belgium. A relatively flat earnings distribution means that the credit must be withdrawn fairly sharply, creating mobility traps. The alternative is to bring a large number of households into means-testing at great expense.

Bargain and Orsini (2006) use EUROMOD 2001 to estimate what the effects would be of introducing the British 1998 WFTC into Germany, France and Finland. Their conclusion is that the anti-poverty effects would be very small in these countries, especially relative to the budgetary cost. They predict that “interest in such schemes is destined to fade away.” But Marx and Nolan (2012) argue that the nature of the labour market has changed in some countries. For example, low pay is now much more prevalent in Germany and in-work poverty has increased. In this context, an in-work tax credit might make more impact.

Knabe and Schöb (2011) simulate the effects of minimum wages and/or wage subsidies on poverty rates in Germany, and conclude that wage subsidies are most effective at reducing poverty. As in the UK, the key is that the targeting takes place at the level of the household, rather than the individual, and so the subsidies are more effective at reaching poor households than changes to minimum wages. However, as mentioned, there are significant work disincentives at play for secondary earners. Other studies looking at Germany focus on the potential employment effects and find substantial positive effects among non-married people but significant reductions in labour supply among married people, and therefore a relatively small net employment gain at a high public cost (Blundell *et al.*, 2007). Bargain and Orsini’s (2006) study finds negative employment effects for second earners in their simulations for Germany, France and Finland, if the means-test is calculated at household level. An individual wage subsidy is predicted to have a positive effect on female employment in all three countries.

Figari (2011) conducts a similar simulation for southern European countries (Italy, Spain, Portugal and Greece). They find the introduction of a WTC type system yields a limited reduction in poverty at the cost of possible weakened work incentives for second earners (with female employment rates already low in some of the four). Figari finds variation across these countries due to their family compositions. In countries (such as Portugal) that have high employment rates and wages that are concentrated at the lower end of the wage distribution, in-work benefits may need to be spread over too many recipients and are therefore likely to be insufficiently generous to be effective. On

the other hand, in countries (like Italy) with more dispersed wages, fewer recipients may receive more generous amounts. In countries characterized by large families (like Spain) it is very difficult to target in-work benefits effectively (Figari, 2011).

In addition to hypothetical studies, there has been some analysis of programmes in those European countries that have introduced some form of in-work benefits. These studies tend to focus on employment effects, rather than poverty, and have tended to show only modest results, which again can be attributed to differences in family composition, income and earnings distributions as well as particular facets of the policy design (Figari, 2011). Bettendorf *et al.* (2014) examine the extension of the Dutch *Aanvullende Alleenstaande Ouderkorting* (Additional Credit for Single Parents) to single mothers of children aged between 12 and 15 as a natural experiment. Using difference-in-difference and regression discontinuity to estimate the effects of the policy on the employment rates of this group, they find no effects of the programme on employment.

For France, one summary of mainly simulation studies presents the employment effects of the French Prime Pour l'Emploi (PPE) a relatively modest in-work benefit which was introduced in 2001 and reformed in 2003 and 2006 (Sterdyniak, 2007). The paper concludes that most analyses find positive but very small employment effects of around 0.5 percentage points. Other evaluations using statistical methods have found similar modest effects, while the PPE has also been criticized for being overly complex and having long delays in qualifying for the benefit and receiving payment (Immervoll and Pearson, 2009b; Sterdyniak, 2007).

Stancanelli (2008) breaks the employment effect down further, using data from the French Labour Force Survey between 1999 and 2002 to make a number of (non-experimental) estimates of the PPE. She finds a drop in employment among married women of roughly three percentage points as a result of the PPE, a result she links in particular to the conditioning of the benefit on total household resources; employment among co-habiting but non-married women (who are not subject to household means-testing) increased by between six and seven percentage points. These competing effects meant that the overall effect of the PPE on employment was very small, amounting to the creation of about 2,000 jobs (Stancanelli, 2008).

If disincentives for second earners are a major concern with wage top-ups, would a more individualised design be an answer? The key problem here is that targeting by household is precisely what makes benefits effective in reducing poverty. The question of whether redistributive and work incentive goals can be effectively combined in a single measure is still an open question (Bargain and Orsini, 2006). Countries that emphasise income support tend to choose family-based systems while those that are seeking an employment stimulus tend to focus on individual-based systems (Elborgh-Woytek *et al.*, 2013). Some scholars have proposed potential solutions to the work incentive issues, however. As we saw in the previous section, Kenway (2008) argues

that the tax system more broadly can be used to help reduce marginal tax rates. He also suggests that the priority for the UK should be significantly lowering the taper rate of tax credits (by about twenty percentage points), although the costs involved are very large. Other studies note that Universal Credit (UC), which will eventually replace the current tax credit system in the UK, should improve the situation regarding marginal tax rates and therefore increase work incentives and the labour supply (André *et al.*, 2013; Pareliussen, 2013). Lawton and Thompson (2013) suggest that UC could counteract the negative incentives for second earners by including a second-earner disregard. Elsewhere, Kurowska *et al.* (2015) simulate the effects of an increase in generosity of the Polish tax-benefit system alongside a 'double-earner' premium and demonstrate that this could equalize the incentive effects for primary and secondary earners. It would also concentrate its effects on the lowest income quintile, thus helping combat poverty.

Aside from work disincentive issues, a further potential challenge posed by in-work subsidies is the possibility that they might encourage potential recipients to take up low wage jobs, rather than hold out for better opportunities. Indeed, Adler (2004) argues that the introduction of tax credits in the UK marks a shift to a kind of spending that is designed "to demonstrate that work pays and to persuade people to accept poorly paid employment" (Adler, 2004, p. 103). This could affect employment outcomes for the individuals concerned in the longer term, and could also depress wages in general. However, there does not seem to be much evidence of either outcome, and Ray *et al.* (2014) conclude that the evidence that does exist is inconclusive. Indeed, in terms of wage growth among low wage workers in general, or low earning parents in particular, Gregg *et al.* (2012) find no impact of the introduction of tax credits in the UK. Lydon and Walker (2005) compared wage growth for individuals both before and after the Working Families Tax Credit replaced Family Credit in 1999 and concluded that "at worst" average wage growth was similar for the two groups, but that wage growth seemed to improve for mothers with low qualification levels. Dickens and McKnight (2008b) found that WFTC increased job retention for male recipients but had no effect on wage growth a year after job entry. On the other hand, Azmat (2006)'s findings point to a drop in gross weekly wages for eligible married men after the introduction of WFTC, alongside a smaller increase for married women.

Approaching this question from a different angle, there is also no evidence that withdrawing in-work benefits would lead to a corresponding rise in wages. However, a strong system of in-work subsidies does leave families exposed to a change in government direction. Hirsch and Valadez (2014) note that in the UK, low-income working families have come to rely on tax credits, and are therefore vulnerable to cuts in spending. The paper finds that, due to high income withdrawal rates for increased earnings, for each pound lost in welfare cuts, the family would need to earn an extra £4 to compensate (Hirsch and Valadez, 2014).

Summary

The increased needs of households with several dependents make it very difficult – even impossible – for relatively low paid workers to lift themselves out of poverty without some assistance from the state. Thus universal child allowances, and/or a system of targeted transfers to working households (such as the UK tax credit system) become an essential part of an anti-poverty strategy.

Universal child allowances have many advantages, including low administration costs and high take-up, as a result of their simplicity and the lack of the stigma attached to means-tested support. Crucially, they also have no work disincentive effects. But to protect lower income families from poverty they need to be generous, and in countries with higher levels of wage inequality a universal transfer of the size required may simply not be politically or economically feasible. In such countries they may still have a useful role to play in poverty reduction (and there are other reasons to value universal benefits beyond their poverty reduction potential), but they cannot be the only form of state support for families.

The main concern about in-work targeted support is the work disincentive effect on second earners: the means-test must be based on household rather than individual income to be effective in reducing poverty, and the withdrawal of the benefit as income rises inevitably creates high marginal effective tax rates for second earners, almost always women. In-work support will also be expensive in countries where there are many relatively low paid workers. Despite this, Ray *et al.* (2014, p.10) conclude their review of employment, pay and poverty with a very strong endorsement of wage supplements: “The strongest and most positive evidence on poverty reduction, at least in the short-term, is for wage supplements. Given the strength of evidence, and the well-targeted nature of wage supplements, any future anti-poverty strategy would need to include some form of in-work income transfer.”

As the review of the evidence here has shown, however, these policies cannot be lifted directly from the UK and need to take account of specific conditions in particular countries, including family structures, the distribution of earnings and policy priorities. As noted in the previous section, there may also be limits to how far Bismarckian welfare systems can move in this direction. Marx and Nolan (2012) raise questions about the limits to strongly targeted tax measures from the perspective of horizontal equity and public support for the system, and these are likely to be more significant concerns in social insurance based welfare systems. For these countries, universal child allowances may be a more promising solution.

2.9 Concluding remarks on in-work poverty review

In-work poverty is driven by a combination of low work intensity at household level, low levels of pay, and household structure. High risks are faced by those working part-time or part-year; those on temporary rather than permanent contracts; those in low paid work; those who are the sole earner in the household; and those with family responsibilities. Workers are most at risk of poverty where these factors overlap – so a lone parent working part-time in a low paid job is especially vulnerable. Both absolute and relative risks vary across countries, because of differences in the structure of the labour market (such as the extent of wage inequality, and the degree to which part-time work carries a pay penalty), differences in household composition and female labour force participation, and differences in the extent of state support, especially for family responsibility.

This review has examined the evidence on a range of alternative policy directions, and suggests three broad avenues for action: improving pay, job stability and quality; facilitating maternal employment, including improving the quality of part-time options; and – crucially – increasing state financial support for households with children.

Pay, job stability and job quality

Tackling low pay must be considered one key plank in an anti-poverty strategy, although increases in minimum wages are likely to have significant effects on in-work poverty only in parts of the European Union in which minimum wages are currently low or not rigorously enforced. Because most low paid workers live in non-poor households, the majority of gains from a rise in minimum wages will accrue to households who are already above the poverty line (though still in the lower half of the income distribution), while the interaction between wages and other benefits received by low income households can leave households gaining little in practice from a minimum wage rise. Nevertheless, higher minimum wages are likely to contribute to increasing household security and resilience over the long-term. Minimum wages are also vital complements to in-work benefits, limiting the extent to which state support allows employers to reduce wages.

Alongside minimum wages, policy that tackles low pay more broadly, promotes continued wage and career progression, and reduces temporary contracts and involuntary part-time work is also vital. Poverty risk is especially high for workers who are part-time but looking for a full-time job, making the availability of longer hours a priority area for policy action. There is evidence that the weakening of unions in many European countries in recent decades has been damaging to the situation of lower paid workers. Governments should consider how to redress this balance. As Ray *et al.* (2014) conclude, in relation to in-work poverty in the UK: “Over the longer-term, policy should be focused on wider improvements in the labour market and facilitating growth in better quality and more highly paid jobs” (p.106).

Facilitating maternal employment and improving part-time work options

Both two adult households with only one earner, and lone parent households, especially those working part-time, are at high risk of working poverty. Marx and Nolan (2012) point out that this can be construed as a problem of inadequate breadwinner earnings or as a problem of non- (or insufficient) participation, and that which factor we choose to focus on makes a big difference to the policy action pursued. The conclusion of this review is that both paths should be followed. From the perspective of gender equality over the life course there are good arguments for facilitating partner and lone parent employment, and the absence of affordable childcare and of part-time work options places real constraints on parents' options. But the demands of caring responsibilities also need to be recognised. It does not seem reasonable to assume all adults will work full time all year round, and to tolerate working poverty in households where work intensity falls short because adults are seeking to balance work and care. This highlights both the importance of a focus on pay and job quality (see above), and the need for direct financial support to families with children (see below).

In terms of increasing maternal employment, there is strong evidence that paid maternity leave in the first year after birth, and publicly subsidised childcare, both help maintain women's labour market attachment after childbirth. Not much of this research looks directly at the effects on poverty, but there are likely to be two poverty-reducing mechanisms: by increasing household work intensity these policies reduce the risk of poverty in the short-term, and by limiting the loss of labour market experience as a result of childbearing they increase mothers' earnings in the longer-term.

Making it possible for good jobs to be done flexibly and part-time is also crucial. Evidence suggests that some mothers opt to stay home in the absence of a part-time employment option, but in many countries where part-time opportunities are available, they are concentrated in jobs that are lower skilled and lower paid per hour than full-time work. Increasing the availability of high quality part-time jobs will help reduce the gender pay gap and should reduce in-work poverty without requiring full work intensity in households with children. To achieve this, legislation has an important role, but changing social norms is also key, though harder to accomplish.

Policy also needs to focus explicitly on involving more men in taking up flexible and part-time working – though again changing norms is not straightforward. There is some evidence in favour of dedicated 'daddy months' in the year after birth, and these should be explored further. Certainly it is clear that parental leave needs to be properly remunerated and flexible working available in well-paid and high-quality jobs if men are to be persuaded to take these opportunities up. More gender balance in sharing work and care is important both to facilitate maternal employment in dual adult households and to normalise flexible options and reduce discrimination against those requesting them. It also matters for a third reason: the rise of the two-earner household

is part of the explanation for increased in-work poverty in Europe, as this growing standard has pushed up the average standard of living and with it the poverty line. Given the growing number of lone parent households, and the caring demands on many two adult households, this is a tension that governments need to consider explicitly. Sharing paid work more evenly within couples, rather than pushing further towards a model of two full-time earners, may be one way to help resolve it.

State financial support for households with children

Finally, it must be recognised that households with children need additional help from the state if they are to remain free of poverty. Net incomes at minimum wage for full time working lone parents are below the poverty threshold in almost every EU country. For sole breadwinner couples with children, net incomes at minimum wage also fall short everywhere, and generally by a very substantial margin. Even if a country's main approach is to increase work intensity in two parent households, lone parent households will need additional support over the long term (indeed, they will need increasing support, if a two earner income becomes ever more the norm). For couples the shift to greater work intensity is likely to take time, and never to be complete. Thus universal child allowances, and/or a system of targeted transfers to working households (such as the UK tax credit system), both of which can be implemented quickly, become an essential part of an anti-poverty strategy.

Universal child allowances have many advantages, including low administration costs and high take-up, as a result of their simplicity and the lack of any associated stigma. Crucially, they also have no work disincentive effects. But to protect lower income families from poverty they need to be generous, and in countries with higher levels of wage inequality a universal transfer of the size required may simply not be politically or economically feasible. In such countries they may still have a useful role to play in poverty reduction (and there are other reasons to value universal benefits beyond their poverty reduction potential), but they may not be adequate as the only form of state support for families.

In-work targeted support has been successful in reducing poverty in the UK. Simulations for some other European countries, including Germany, suggest this approach has wider potential. Because the benefits are targeted on household rather than individual income, and can channel most resources to very low earners (who often pay little or no tax), they are much more effective than more general reductions in income tax or social security contributions. However, household targeting also results in their main disadvantage, the work disincentive effect on second earners: the withdrawal of the benefit as income rises inevitably creates high marginal effective tax rates for second earners, almost always women. In addition, in-work support will be expensive in countries where there are very many relatively low paid workers, and are hard to target effectively in countries where there are several adults in the household (such as some parts of Southern Europe). Finally, there may be limits to how far

Bismarckian welfare systems can move in this direction, as the extension of means-testing represents a shift away from the strong link in these systems between contributions and benefits. For all these reasons, generous universal child allowances, perhaps taxed back at higher income levels to contain costs, may be a more promising solution.

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