



Gaining from Growth
the final report of the
**Commission on
Living Standards**



The Resolution Foundation Commission on Living Standards

The Commission on Living Standards is an independent and wide-ranging investigation into the financial pressures facing low to middle income Britain. Its work has focused on the long-term economic trends that are changing the reality of life on a low to middle income, from trends in the UK labour market and tax and benefit system to new pressures from the cost of living and modern working patterns.

The Commission has brought together a wide range of leading thinkers to examine these trends, from private and public sector employers to economists, experts in public opinion and representatives of parent networks. The Commission is independent and has engaged with politicians from across the spectrum. The members of the Commission are:

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- Phil Bentley, Managing Director, British Gas
- Sir Win Bischoff, Chairman, Lloyds Banking Group
- Professor Mike Brewer, Institute for Social and Economic Research, University of Essex
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- Julie Moore, Chief Executive, University Hospitals Birmingham
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- Sally Russell, Director, Netmums

The Commission’s work has been supported and hosted by the Resolution Foundation, an independent think tank working to improve the lives of people living on low to middle incomes. The Resolution Foundation has been represented by Tina Alexandrou (Resolution Foundation Trustee) and James Plunkett (Secretary to the Commission).

Publications of the Commission on Living Standards

All publications are available at the Commission's website: www.livingstandards.org

Growth without gain?: The faltering living standards of people on low-to-middle incomes

Plunkett, J. (May 2011), Resolution Foundation

Missing out: Why ordinary workers are experiencing growth without gain

Whittaker, M. and Savage, L. (July 2011), Resolution Foundation

Painful Separation: An international study of the weakening relationship between economic growth and the pay of ordinary workers

Bailey, J., Coward, J. and Whittaker, M. (October 2011), Resolution Foundation

When does economic growth benefit people on low to middle incomes – and why?

Kenworthy, L. (November 2011), Resolution Foundation

Why did Britain's households get richer? Decomposing UK household income growth between 1968 and 2008-09

Brewer, M. and Wren-Lewis, L. (December 2011), Institute for Fiscal Studies (IFS) for the Resolution Foundation

The Missing Million: The potential for female employment to raise living standards in low to middle income Britain

Plunkett, J. (December 2011), Resolution Foundation

Priced Out: The new inflation and its impact on living standards

Hirsch, D., Plunkett, J. and Beckhelling, J. (December 2011), Resolution Foundation

Decoupling of Wage Growth and Productivity Growth? Myth and Reality

Pessoa, J.P. and Van Reenen, J. (February 2012), Resolution Foundation

The changing shape of the UK job market and its implications for the bottom half of earners

Holmes, C. and Mayhew, K. (March 2012), Resolution Foundation

No snakes, no ladders: Young people, employment, and the low skills trap at the bottom of the contemporary service economy

Roberts, S. (2012), Resolution Foundation

Minimum Wage: Maximum Impact

Manning, A. (April 2012), Resolution Foundation

Inequality, debt and growth

Lucchino, P. and Morelli, S. (May 2012), National Institute of Economic and Social Research for the Resolution Foundation

Creditworthy: Assessing the impact of tax credits in the last decade and considering what this means for Universal Credit

Gregg, P., Whittaker, M. and Hurrell, A. (June 2012), Resolution Foundation

Up-skilling the middle: How skills policy can help ensure that low to middle income households share in future economic growth

Vignoles, A. (July 2012), Resolution Foundation

Fairer by design: efficient tax reform for those on low to middle incomes

Johnson, P. (July 2012), Resolution Foundation

Unfinished Business: Barriers and opportunities for older workers

Cory, G. (August 2012), Resolution Foundation

What a drag: The chilling impact of unemployment on real wages

Gregg, P. and Machin, S. (September 2012), Resolution Foundation

Who Gains from Growth? Living Standards to 2020

Institute for Employment Research (IER) and IFS (September 2012), IER and IFS for the Resolution Foundation

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The Commission on Living Standards was established in early 2011 to investigate the pressures facing low to middle income Britain. At the time, concern was growing that those on low and middle incomes – not the poorest households and overwhelmingly in work – were finding life unexpectedly hard even *before* the crisis struck. Leading thinkers from all three major parties had begun to speak about the challenges of this group. But there remained little clarity over definitions, still less about causes and solutions.

Since we began our work 18 months ago the squeeze on living standards has entered a new and more ominous phase. A return to growth has been continually postponed, prolonging income declines. But as these short-term pressures have grown, it has also become clear that the underlying problem facing low to middle income households was more structural than we had imagined. Shared prosperity began to falter even before the events of 2008. The fundamental promise of modern liberal economies – to make the broad majority of people gradually better off over time – is being called into question. The link between productivity and pay has eroded.

The Commission chose to step back from short-term, politicised arguments about the current recession and deficit to take a broader view of this structural challenge. Why did ordinary working households get better off over time and why was this no longer occurring? To what extent is this decline of shared prosperity an international phenomenon, and how does the UK really measure up? And, most importantly, when we look back as a society to assess living standards from the vantage point of 2030, what big decisions will we regret not having taken now? Alongside short-term arguments about growth and fiscal policy, these questions cannot be ignored.

This report sets out our answers. It represents the collective view of an unusually broad Commission, whose members include leading private and public sector employers and the heads of union organisations, research institutes, polling companies and parent networks. We have a wide range of views on the pace of deficit reduction and the proper role and size of the state. As a result, the findings set out in this report are not motivated by particular party political convictions or agendas but by the evidence we have examined.

Back in the boom years, few would have anticipated that simply delivering basic, material improvements in standards of living would be the great policy challenge of the early 21st century. This reality is upon us and it now needs to be achieved within tight fiscal constraints. Delivering on this policy agenda will be a 20 year project and will remain contested terrain between the parties. But there is also a simple arithmetic to living standards – people get better off over time for specific reasons and there are proven things that countries can do to encourage income growth. These practical truths are the focus of this report.

Clive Cowdery

The perfect storm

The current focus of UK political and policy debate is quite rightly securing a recovery. But the UK economy also faces a longer standing, structural problem in relation to living standards^[1]

Even in the boom years leading up to 2008, incomes were faltering for a broad swath of working households. GDP growth was strong, employment was high and inflation was moderate. Yet from 2003 to 2008 median wages flat-lined, average disposable incomes fell in every English region outside London and spikes in the prices of essential goods squeezed family budgets.

What happened in these years broke the familiar rhythm of growth and gain for ordinary working households. For most of the 20th century, living standards fell in periodic recessions and, for all except the poorest, rose again solidly in times of growth. But from 2003, millions of people on low to middle incomes – not the very poorest and overwhelmingly in work – found life unexpectedly hard during years of supposed prosperity. Then they were hit by the financial crisis and the worst recession in modern times, a blow from which they are still struggling to recover.

This breaks the familiar rhythm of growth and gain for ordinary working households

This pre-crisis stagnation in living standards for much of working Britain echoed much longer running trends elsewhere. In the US, typical wages have been stagnant for a generation. In Germany and Canada they have barely risen for 10 and 20 years respectively.

In the UK, the pre-crisis years were a perfect storm. Wages stagnated because the share of national income going to labour fell as profits rose, emulating longer running falls in other countries. At the same time, rising pension costs and National Insurance Contributions (NICs) – linked partly to policy choices but also to the demands of an ageing society – squeezed the share of compensation that finally reached pay packets. The changing nature of inflation accentuated the problem for lower income households as prices for staple foods and fuel soared, meaning that official measures of inflation understated the pressures they experienced. By the time the crisis struck, these shifts in the nature of inflation meant that low to middle income households were typically paying a £400 premium on their annual shopping bills compared with those on higher incomes.

Storing up trouble

These relatively recent developments are concerning. But they come on the back of more established trends that don't bode well in terms of the prospects for shared prosperity over the next generation. Low to middle income households get better off over time for three reasons: hourly wages grow, employment or working hours go up, or state support becomes more generous. Even before the financial crisis struck these motors of rising living standards had faltered.

Weak wages in the bottom half

As the result of a mixture of historical circumstance, policy choices, and global trends, the UK has arrived at an economic model in which a relatively small proportion of overall GDP growth trickles down to the wages of the bottom half of the working population. The UK's direction of travel is not unique; over the last generation, inequality has risen across the developed world as new technologies have boosted demand for skilled workers and labour market institutions like collective bargaining have eroded. But the UK stands out in important ways. Only 12 pence of every pound of UK GDP now goes to wages in the bottom half, down 25 per cent in the last three decades.

Meanwhile, low pay is pervasive. One in five workers in Britain is paid below two-thirds of the median wage (below £7.49 an hour or £13,600 a year for full-time work) compared with fewer than one in 10 in some other

European countries. The UK pays a high price for this scale of low pay. This price is paid most directly by the individuals and families reliant on low pay. But the taxpayer is affected too - by as much £4 billion a year through in-work cash transfers. This too is partly a global phenomenon. But while insecure work, for instance in personal and caring services, has grown across the developed world, the UK labour market has created worse paying, lower status versions of these jobs than most other advanced economies.

A key reason for these outcomes is that the UK has an institutional setup that encourages employers, particularly in some sectors, to seek low-paid, low-skilled routes to business success. Employers are pulled in this direction by three characteristics of the UK labour market in particular: a chronic lack of skills in the bottom half of the UK workforce; a lack of structure in the jobs market, both for employers trying to make long-term plans about skills and for young people making the transition from education into work; and a lack of countervailing pressure for employers to pay above the bare minimum, even when they can afford to.

The whole population pays a price for this economic model. But the costs to individuals fall particularly heavily on people who don't go to university and have few formal qualifications, who find themselves struggling – more than they would in many other countries – to progress or secure a decent standard of living. The costs are particularly high for employees in the UK's large and

[1] Much of the analysis outlined in this report applies to the UK as a whole. In relation to policy, some areas of government responsibility extend across England, Northern Ireland, Scotland and Wales while others are devolved, in differing settlements, to the administrations in Northern Ireland, Scotland and Wales. While the broad arguments of the report are likely to apply across the UK, we would anticipate that the Devolved Administrations would tailor their approaches to meet the specific needs of their countries.

growing, non-traded, low status service sectors, above all for those working part-time. More often than not this means women, who in the UK face a higher risk of low pay than in most other advanced economies.

Changing patterns of employment

For a time the impact of these pressures were, to some degree, offset by trends in employment. In the latter half of the 20th century, female employment soared. Employment income from women provided more than a quarter of income growth in low to middle income households from

Far from softening the malign trends in wages and employment, state support is now going to amplify them

1968 to 2008 while men's work provided less than a tenth. Second earners came to provide a bigger share of household income. Meanwhile, as employment among older workers became increasingly important, the UK began to reverse a long-term fall in the employment rates of this crucial group.

Now the rise of female employment has stalled, increasing just 1 percentage point in each of the last two decades at the same time as male employment has continued to decline. Such trends are not facts of life in mature economies; the UK under-performs. The UK ranks 15th in the Organisation for Economic Co-operation and Development (OECD) on female employment, largely because of under-performance among women in their early 30s, who are most likely to have dependent children; as well as poor performance among those over 50. Compared with the best performing economies, around 1 million women are missing from UK workplace.

For women with children, the UK's underperformance stems from a toxic mixture of unusually high childcare costs, a lack of high quality part-time work and a poorly designed tax and benefit system. Together these factors mean that work simply doesn't pay for many women in modern Britain. A full-time second earner with two young children in a typical middle income household on

a salary of £19,550 keeps just £1,060 a year after childcare costs, taxes and lost benefits – just £20 a week.

Meanwhile, employment rates among older men and women in other countries continue to outperform those in the UK, despite our recent improvements. The UK is a middling performer internationally but lags better performing countries by big margins, particularly for older men. This underperformance arises partly from the UK's particular pattern of deindustrialisation. But policy choices also matter. Financial incentives affect older workers strongly and in the UK they are weak. Meanwhile, patchy and inadequate social care prevents many over 55s from working, as they care for elderly parents or partners.

The UK's under-performance on all of these fronts is worsened by the calibre of part-time work. In many other countries part-time work offers parents with dependent age children, and older workers, flexibility and a satisfactory way to achieve work-life balance. In the UK, part-time work is still often synonymous with insecurity and low pay.

Declining state support

Together these trends in wages and employment have left the state providing a large portion of recent income growth in low to middle income households, particularly through tax credits. Now fiscal constraints severely limit this source of rising living standards. These constraints stretch well beyond current plans for deficit reduction as longer term pressures from an ageing society start to bite. The result is that, far from softening the blow from stagnant wages and employment, the state is set to add to that pressure as support declines, leaving households on low and middle incomes to fall behind.

Worse, because such large numbers of households now receive substantial means-tested support, many low income households take home only around 55 to 65 pence of every extra £1 of earned income. As income from employment becomes the only significant source of rising incomes in the coming years, these households will be running up a steep hill.

The big choice

Together, these trends now confront us with a stark choice. On the UK's current path, come 2020, household incomes across the bottom half of the working-age population look likely to be lower than they are today. A typical low income household in 2020 is set to

Declining living standards are not a fact of life in all maturing economies

have an income 15 per cent lower than an equivalent household in 2008, a return to income levels not seen since 1993. A typical middle income household in 2020 is set to have an income 3 per cent below that of 2008, a return to income levels last seen in 2001. These declines, representing between two and three decades of missed income growth, do not arise from a doomsday scenario. They are premised on GDP growth averaging 1.9 per cent from 2010 to 2015 – more optimistic than many current forecasts – and 2.5 per cent from 2015 to 2020.

Britain has not seen declines of such duration and depth – particularly during a period of growth – in living memory. Although they now look far from unlikely, they could still be avoidable. There is, of course, always much uncertainty about future projections. But alternative choices could be made. Were the UK to boost skills in the bottom half of the

workforce to an ambitious but plausible degree, raise female employment so that it matches leading international benchmarks, and repeat the scale of past successes in combating low pay, the combined effect on household incomes could be highly significant. In a scenario that combines success on each of these fronts, a typical middle income household looks set to have an income roughly £1,600 higher in 2020 than on the UK's current path, a 7 per cent improvement that turns steady decline into gradual progress.

Achieving broader-based growth of this kind will be hard but not impossible. Faltering living standards are not a fact of life in maturing economies. Other countries, from the Netherlands' record of fast-growing employment among women in the past two decades, to the US's tight labour market of the mid to late 1990s, as well as the UK's own experience in the late 1990s, have struck upon recipes for shared growth. The key lesson is the need to not only secure steady growth but also to shape that growth so that it benefits the broad majority. Indeed, headline GDP growth figures have not been a good predictor of how well low to middle income households have fared in mature economies over the last generation. Growth is obviously essential, but not all growth is shared.

A new approach

In the environment the UK is now entering, this will require quite a different approach to strategies pursued in the past. While in-work cash transfers for low income working households are now an important fact of life in mature economies as diverse as the US and Sweden, the central task is to rebalance income growth in low to middle income households away from state support towards employment income.

While the UK focuses on what children achieve by 16, other advanced economies have moved to focusing on outcomes by 18

those with children. The only way to square this circle is to be far more active and ambitious in supporting growth in wages, employment and working hours in low to middle income households.

New ways to boost pay among the bottom half of earners

In the case of wages, skills policy will be key, particularly in the way that it responds to today's labour market trends. Employment is now growing fast in top jobs, declining in middle-skilled jobs, and gradually growing in low skilled, low status service sector roles, effectively polarising the UK labour market. Skills policy alone cannot turn back tides like these. But the skills profile of a workforce can mitigate the impact that these structural trends have on wages and it may be able to slow them down – or at least avoid

amplifying them, as the UK's weak performance on intermediate skills does at present. It can help ensure that the opportunities and rewards that will continue to arise in the jobs market will be shared more widely.

In practice this means two things. First, the UK must improve skills supply, above all for young people. With a growing proportion of good jobs coming from hi-skilled, knowledge sectors, it is vital that more young people who don't go to university are able to compete for these traditionally graduate-only roles. Improving the quantity and quality of intermediate skills is the defining skills challenge of this generation and the main route to more broadly shared prosperity. At the same time, it is increasingly untenable for the UK workforce to contain such a long tail of people without basic literacy and numeracy, leaving so many to languish in elementary service roles with little chance of progression.

As things stand, national debate about the UK's formal education system focuses on what children achieve by 16. Meanwhile other advanced economies have moved on to focus on outcomes by 18, leaving the UK behind. The government is about to raise the leaving age for education to 18 and yet there is little clarity about what this will achieve, or what children will be expected to learn. A higher leaving age presents a crucial opportunity to require all young people to study English and maths to age 18, ensuring that everyone leaves education with the basic abilities needed to function in a modern labour market. Longer term, the aim should be a standard leaving exam at 18 focused on increasing the proportion of young people who leave education with the skills they need to secure a strong footing in the jobs market, as well as

university readiness for the growing numbers proceeding to higher education.

But there is now a broad consensus that, in a polarising labour market in which low skilled service roles are expanding, simply increasing skills supply is not enough. The second plank of 21st century skills policy must be action to boost demand for skills and, however gradually, to encourage more employers to seek higher skilled, higher paying routes to success. This is hard, slow work and ultimately comes down to institutional innovation. The end goal is that employers in the UK's major sectors work together, through powerful sector-based institutions, to identify skills gaps and to design structured routes into the sector for young people.

Government has a direct role in helping establish these institutions and they need real, practical powers, such as the remit to license occupations. Such institutions are particularly important for encouraging employers to invest in today's adult workforce, which makes up more than 80 percent of the workforce of 2020 and so will determine much of the skills profile of the future UK workforce. Of equal importance are more structured transitions for young people into work, particularly through high quality apprenticeships.

More direct labour market policy

The more active use of skills policy must be part of a broader strategy to reduce, over time, the UK's reliance on low pay. This also requires more direct labour market policy, particularly by strengthening and broadening the architecture of the National Minimum Wage. For too long UK policymakers have mistaken a minimum wage for a wider strategy to reduce low pay. They are not the same thing. Many sectors in the UK economy could, even now, afford to pay more to their lowest paid workers. The Low Pay Commission should be strengthened, tasked with taking a regular view on whether some sectors could sustain an "affordable wage" higher than the legal minimum; advising on blockages to securing a higher National Minimum Wage over time; and more generally on how to reduce

the incidence of low pay. With the taxpayer footing the bill for low pay, not least through the billions spent on in-work cash benefits, government should be obliged to respond to such advice.

The government should also foster innovation in local areas and from employers, as is happening in other countries, recognising that regulation won't provide all the answers. This may mean working with specific cities or sectors to trial new ways to help employers reduce their reliance on low pay. And the state should reinforce changing attitudes to pay by requiring companies to report the proportion of their workforce paid below thresholds like the Living Wage. Combating low pay and reducing its costs will require these kinds of actions across a broad range of fronts.

New efforts to broaden employment

Practical steps to bolster pay in the bottom half of the workforce must run alongside new efforts to boost employment in low to middle income households. Right now this means emergency steps to reduce

unemployment, particularly among the young. Longer term it means both government and employers adapting to the changing nature of the UK workforce.

The UK needs pro-employment public services. Over the last decade or so, much progress has been made building a system of childcare. But there is still a long way to go before the childcare in the UK supports a proper balance between higher employment levels and good quality care. This is in part because early progress on childcare focused almost exclusively on child development. This was a good first step but it meant big shortcomings in relation to the objective of supporting parental employment. Today's 15 hours of free care for three and four year olds (and some two year olds) is simply not enough to cover the part-time jobs that many parents prefer. Nor does the current offer cover school holidays, when many parents struggle to find cover.

The free places should be extended to 25 hours a week, 47 weeks a year. The new hours should be charged at a regulated £1 an hour to make sure they are valued, and should be provided flexibly. The cost to government would be £2.2 billion. For parents, the result would be a childcare system in which the equivalent of three days a week of childcare, enough to cover many part-time jobs, would cost £10 a week. This would substantially improve work incentives, resulting in a significant boost to the take home pay of a typical middle income second earner.

Supporting employment in a world of fiscal constraints also requires a smarter tax and benefit system. Parents typically want to work more hours as their children get older so the government should target more cash support at those with younger children and give relatively less once children start school (this could be done in a revenue neutral way). This means front-loading the Child Tax Credit and its replacement, the Universal Credit. There would be a strong case for backing this reform with the gradual expansion of childcare during school holidays, provision which is currently woefully inadequate and a major barrier to full-time work for parents of older children.

Such steps run with social trends rather than against them. The same arguments apply to welfare reform. The government is about to move to a system for second earners premised on a single (normally male) breadwinner model of work. By withdrawing support from the first pound that second earners are paid, Universal Credit will put an effective tax rate of 65 per cent on some of the lowest paid women in the UK. Second earners should keep more of their pay. We suggest that they should be allowed to earn the same amount as the first earner (£1,920) before support is withdrawn, at a cost of £700 million. This would increase the share of pay that is actually taken home by a typical low-paid, part-time second earner from a third to a half.

These arguments also apply to encouraging employment among older workers. As society has aged, the government has moved towards an approach that relies mainly on new obligations, such as the higher state pension age, at the same time as existing entitlements are preserved. Our view is that a different settlement with those over 50 is needed. As part of this the government should finally put social care on a sustainable footing by implementing the reforms proposed by the Dilnot

The state must do less of some things as it does more of others

Commission. More help should also be given with barriers to work, from retraining to tailored job search. And, as with parents, the tax and benefit system needs to do more to encourage employment. For example, people become more responsive to financial incentives as they near retirement. In response, we support taxing older workers less, raising the annual threshold for employee NICs on the over 55s to £10,000 to promote continued working. Older workers present one of the great opportunities for raising living standards in the coming decades.

In return, the older generation, largely spared from fiscal consolidation, would have to see a change in some of its tax and benefit entitlements. In particular, the prevailing view of the Commission is that government should means-test universal non-pension benefits, raising £1.4 billion, though some would prefer a different balance of revenue, raising relatively more by restricting pension tax relief (see below). Likewise, National Insurance payments should be extended beyond the State Pension Age (SPA), raising around £800 million per year.

Funding a new settlement

All of these choices are limited by fiscal constraints. This requires honesty about the priorities we choose. Every costing we provide for our recommendations is conservative, not banking a penny from the likely upsides such as

increased tax revenues from higher female employment. Even so, we have sought to identify revenue sources commensurate with the new priorities identified in this report. This is because, while we have not sought a common position on deficit reduction, our view is clear: whatever one's position on the deficit, there are things that can be done to alter the trajectory of living standards.

This means that the state must do less of some things as it does more of others. One thing it should do less of is giving generous pension tax reliefs to the very wealthy. The lifetime allowance for pension contributions should be reduced from £1.5 million to £1 million, saving between £1bn and £1.5bn (the higher figure being more likely) – money better spent on making childcare highly affordable for working parents.

But as we have seen, the role of the tax and benefit system is about more than just moving money around. When resources are tight, both households and government can afford flawed and regressive taxes less than ever. Perhaps the most egregious of these is Council Tax, falling squarely on low to middle income households, resulting in a bill that eats up 5 per cent of disposable income on average and that rose 67 per cent during the 2000s. We propose that several new Council Tax bands for higher value properties should be added to pay for a cut in rates for lower value homes.

Conclusion

The road to shared growth will be paved with practical steps like these, boosting wages and employment while focusing relentlessly on material living standards for low to middle income households. This does nothing to diminish the urgency of securing a recovery. Without sustained growth, rising productivity and growing employment we will get nowhere.

But while benign macroeconomic conditions

provide the potential for widespread prosperity, they may not be enough to guarantee it. All too often today, loud arguments about securing a recovery betray the sanguine view that steady growth is sufficient. The evidence we have studied suggests that shared growth in 21st-century Britain will not emerge by accident. But it also suggests that the right steps, taken boldly enough, can help to build it.

Chapter 1

Introduction

1a A crisis on top of an underlying problem

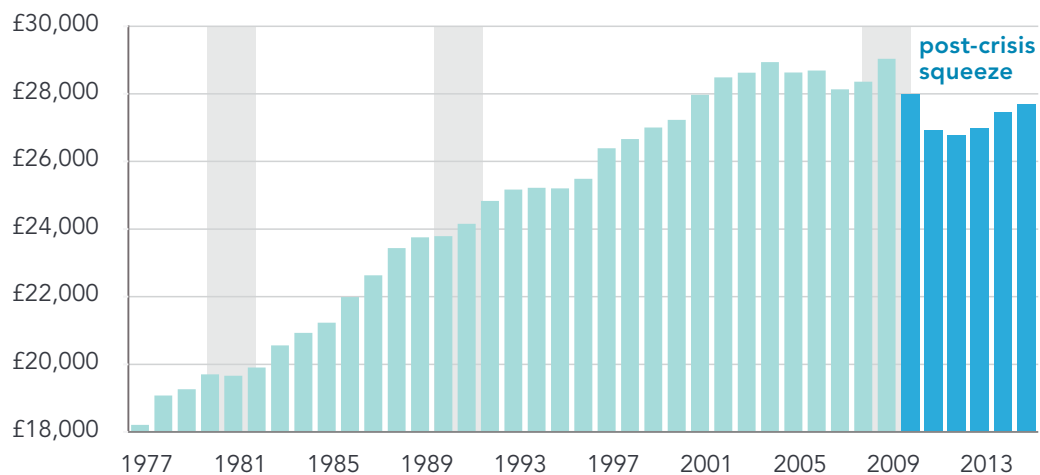
The current focus of UK political and policy debate is – rightly – securing a return to sustained economic growth. UK GDP is more than 4 per cent below its pre-recession peak and central forecasts for short- and medium-term growth are low and still routinely being downgraded. For the first time in living memory, serious commentators are discussing the possibility that the UK will experience a sustained period of no or very low growth. Avoiding this is, without question, the most important thing that could be done for the living standards of low to middle income Britain. Right now, it overshadows everything else.

Yet there is also growing recognition of a longer-term, structural problem for living standards in the UK economy. Since 2008, real incomes have seen some of the steepest declines in living memory. But even in the run up to the crisis, when GDP growth was strong, living standards for low to middle income households were, at best, broadly stagnant and, at worst, had eroded over

time (Figure 1.1). Overall employment was relatively high and inflation was moderate. Yet median wages were flat-lining, disposable incomes were falling outside London, and sharp spikes in the price of essential goods were piling pressure on ordinary working people.

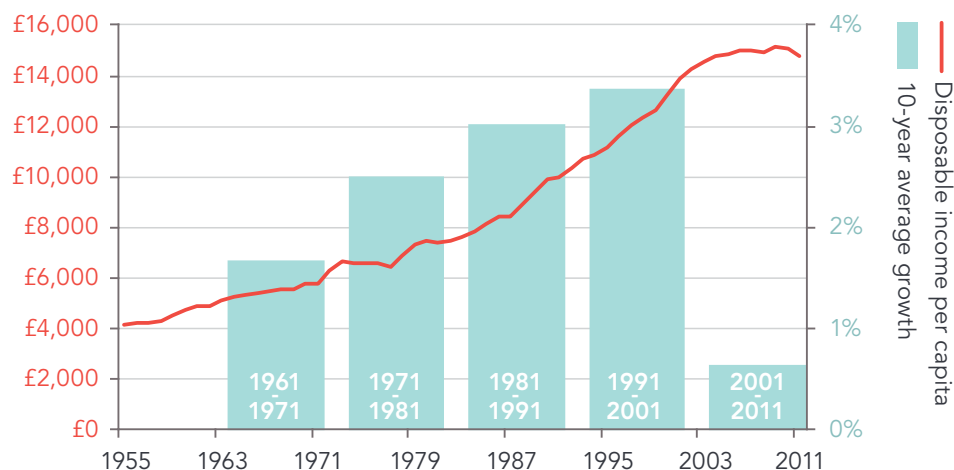
Stagnation followed by crisis has already taken us to uncharted territory. The past decade has seen by far the weakest growth in disposable incomes of any on record (Figure 1.2). The squeeze is still ongoing and there remains great uncertainty about what will happen next. There is ongoing turmoil in the global economy, making growth forecasts very unreliable. Historically high levels of debt overhanging the UK private and public sector will take years to pay down. There is growing evidence that the UK economy's long-term growth rate has been damaged. This uncertainty needs to inform how we interpret our projections as to what might happen to living standards over the next decade. But one thing is clear: on our current path, the outlook is not good.

Figure 1.1: Gross median weekly earnings, male employees, constant 2010 prices



Notes: Controlled for RPI inflation. Post-crisis projections calculated on the basis of OBR March 2012 forecasts for RPI and average earnings.
Source: ONS ASHE and OBR

Figure 1.2: Long-term trends in UK real household disposable income per capita, 1955–2011



Source: Office for National Statistics (ONS), ONS data series CDID

Beyond the overall economic gloom, pre-crisis trends in incomes raise concerns of a dangerous and puzzling disconnect between headline economic indicators like GDP and the financial health of ordinary working households. They are given added salience by developments in a number of other advanced economies, including the US, Canada and, more recently, Germany, where ordinary working people have become no better off over time, even in periods of growth. Although much of the intensity of the current UK squeeze is explained by unique, post-crisis factors, the bleak trajectory for living standards arises as much from this more established, pre-crisis, direction of travel.

This unprecedented position raises the bar for action in many ways. Certainly we need to fight hard to stem falling incomes and for a return to growth and productivity. But economic policy makers also need to recognise that this is only half the story. Growth makes rising living standards possible – but it doesn't guarantee it. This means being hard-headed in identifying the ways in which economic growth flows through into income growth for ordinary working households, and it means admitting where our labour market falls short and

taking steps to ensure that we eke out every possible gain for ordinary working households. Our success will decide whether much of the population makes a difficult but steady climb back to economic health when growth resumes, or walks a long, flat road in which a full generation of rising living standards is lost.

The hard truth is that the UK has yet to wake up fully to this challenge, let alone answer it. In the US, where the stagnation of living standards is far deeper and longer running, an informed debate is taking place at the highest level of politics about the links between growth, productivity and broader trends in the labour market – colloquially speaking, a debate about the demise of the American “middle class”. US academics and policy experts from Tyler Cowen to David Autor have written eloquently on the challenge. Major research institutions have taken up the task. Serious journalism has put the issue centre-stage. Politicians including President Obama have put the question at the forefront of political debate.^[1]

Here in the UK our own debate on these issues is starting but it is far less developed. That must change now if we are to secure shared prosperity.

1b Low to middle income Britain – too rich, too poor

The issues and trends examined in this report have impacted on the vast majority of households in Britain to a greater or lesser extent. Few escaped the pre-crisis faltering of living standards or the impact of the recession itself. As ever, in tough times like these, life is hardest for those on the lowest incomes,

Life on low to middle income in modern Britain is hard and getting harder

many of whom struggle with complex disadvantages, finding themselves in need of significant external support.

But our main focus as a Commission is the large swathe of the UK population living on low to middle incomes. They are not the poorest households in Britain and are not the main focus of debates about poverty and the socially excluded. They are mostly in work and so rely less heavily on our main systems of state support than the very poorest. But those in this group – living on incomes below the median, often trying to raise a family – also find life a struggle. Life on low to middle income in modern Britain is hard and getting harder.

Any definition of a socioeconomic group is to some degree arbitrary, and low to middle income Britain is

not static. Only one-third remain in the group after 10 years. But for the purposes of analysis it is important to be specific. We therefore define this group – at once too rich and too poor – as working-age people living in households with incomes below the median but above the bottom 10 per cent. (See Annex B for more details.) This is not to deny that many households with incomes below this group will share its characteristics or that many with incomes above it will also be struggling, nor of course that there is substantial hardship in our pensioner population.

We focus on a group that makes up roughly one-third of the UK population and yet too often gets overlooked in our national policy debate. It is a group whose members are in work but on low pay; who work across all sectors, especially those – like retail and hospitality – that are rarely discussed in relation to policy; and who struggle to get on the housing ladder, to secure promotion and to save. These households are on the front line in turbulent times, acutely vulnerable to knocks that would seem modest to high income households, from a big electricity bill to car repairs. Life's running expenses, from food to work-related costs like childcare and transport, leave no room for manoeuvre.

[1] See for example the White House Middle Class Task Force, “a major initiative targeted at raising the living standards of middle-class, working families in America” established by President Obama and chaired by Vice President Joe Biden: www.whitehouse.gov/strongmiddleclass/about (accessed 27 August 2012). The phrase “middle class” has traditionally been defined more broadly in the US than in the UK although there is some evidence that the two have been converging. The proportion of Americans identifying as middle class is now around 49 per cent, having fallen in recent years, while the proportion of people in Britain self-identifying as middle class is now around 44 per cent, having risen significantly in recent decades (Pew Social Trends, Lost Decade of the Middle-Class, 22 August 2012; Ipsos MORI, Perceptions of Social Class, 19 March 2008).

1c Our approach as a Commission

Our concern as a Commission is the living standards of this group and the way in which long-term trends in our economy are eating away at the kind of life they can afford to live. As in any Commission, we have had to make some difficult judgements about scope. Living standards can be defined

We are not here to comment on the impact of this or that spending cut

in many ways and we have taken an unashamedly direct approach, focusing on the financial aspects of life, and in particular household earnings and incomes, rather than broader and less tangible aspects of wellbeing.

In all of our work, we have followed standard practice and been careful to talk about real incomes over time adjusted for inflation. But we have also looked at how headline inflation can understate the pressures on lower income households, who spend more of their income on some essential goods. We also take into account the importance of household size, recognising that a family with children will struggle far more than

a single person on the same income.

There are many issues that, though clearly highly relevant to living standards, we have simply had to rule out of scope. For example, public services play a critical role in supporting living standards and were responsible for many tangible improvements in the past 10 years, but questions of spending on, or reform of, health and education have not been our primary focus. Other similarly important issues such as housing policy, youth unemployment and the structure of energy markets have also been beyond our scope.

Finally, we are clear that our focus is long term. We are not here to comment on the impact of this or that spending cut. Our arguments about policy also focus on the big picture. That will disappoint some people. This report contains no simple remedy and no headline grabbing policy initiative. Nor do we provide a long list of policies or a manifesto. Instead, we have taken big judgements on the direction of reform that will matter, illustrated by some practical, funded, incremental steps.

The structure of this report

Section 1 sets out the most detailed account to date of living standards in the run up to the crisis. Chapter 2 explores the period 2003–2008 in detail, explaining how incomes and earnings stagnated even as the economy grew. We also describe how soaring household debt and spikes in the prices of essential goods affected households. Chapter 3 looks at Britain in an international context within the same period, finding that the country's recent performance carries worrying echoes of longer running stagnation in other countries, while some countries have maintained a stronger link between growth and personal gain, suggesting they have a degree of choice.

It is important not to dwell too heavily on one short period. In Section 2 we therefore put the period 2003–2008 into perspective. Over the long term, people get better off for three reasons: rising wages, growth in employment or working hours, and rising support from

the state. We examine each of these factors in turn. We look first at how much of growth reaches wages for those in the bottom half of the wage distribution (Chapter 4); second at how the distribution of employment and working hours has changed, in particular through the rise of women's work (Chapter 5); and third at how the role of the state has grown and will need to adapt to a new fiscal climate (Chapter 6). Although the period since 2003 brought a perfect storm for living standards, the UK had long been storing up trouble.

Section 3 looks forward to sketch out the prospects for low to middle income Britain in the coming decades according to a range of different scenarios. Underpinning this section is a major new piece of analysis, carried out for the Commission, which gives a sense of what the future might be if we maintain our current direction (Chapter 7), of possible optimistic and pessimistic circumstances, and of the

scale of difference that can be made by ambitious interventions (Chapter 8).

Section 4 describes what we call the ingredients for shared growth. First, we make the case for a more active role for government and public policy in creating broader-based wage growth in the labour market (Chapter 9). We then turn to employment and participation, arguing that there is significant economic potential in raising employment levels among groups that want to work but who are currently economically inactive in the UK (Chapter 10). Finally, we consider the role of the tax and benefit system (Chapter 11). Rather than proposing greater redistribution, we ask how we could do more to boost employment incomes by reprioritising current spending and tax reliefs into more productive forms of support.

We argue for new ways of thinking in each of these areas, and demonstrate each case with practical, funded first steps.

{Section 1}
**Alarm bells: Faltering
living standards from
2003 to 2008**

Chapter 2
Stagnation

Chapter summary

- The incomes of low to middle income households grew by just 0.3 per cent a year from 2003 to 2008 even while the UK economy grew at 1.4 per cent a year.
- This income stagnation was caused by flat-lining wages for both men and women leaving tax credits as the only source of income growth among this group.
- Wages were squeezed because the share of GDP going to workers fell at the same time as the share of compensation going to wages fell as a result of rising non-wage costs like National Insurance and pensions contributions.
- Specific policies like tax credits and immigration that have been blamed for wage stagnation played less of a role than has been claimed.
- While the income squeeze affected most households, the soaring prices of essentials piled pressure on lower income households.
- Soaring household debt, mainly in the form of mortgages, means lower income households now face large debt servicing costs which are set to rise when interest rates return to normal levels.

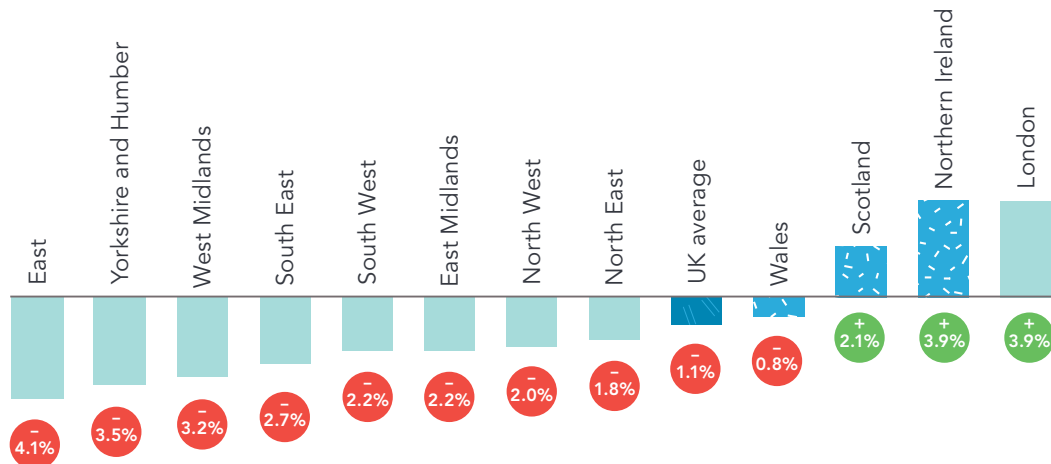
2a Stagnation during growth: flat household incomes 2003–2008

Incomes in low to middle income households were flat or falling well before the recession

Since the recession of 2008–09 there has been an unprecedented decline in the real incomes of those in low to middle income households (Figure 2.1). Yet as we saw in Chapter 1, this period has been hard partly because incomes for low to middle income Britain were already stagnating in the pre-crisis period from 2003 to 2008, with an average annual growth

rate of just 0.3 per cent from 2003–04 to 2008–09.^[1] This was despite a broadly benign macroeconomic environment in this period, with UK per capita GDP growing by 7 per cent as a whole, an average annual rate of growth of 1.4 per cent.^[2] Inflation was modest, though not as low as it had been in the late 1990s, while overall employment levels were relatively strong.

Figure 2.1: Gross disposable income per head in UK, by region, 2003–2008



Source: ONS, Gross Disposable Household Income per head

This was driven by weak or negative growth in earnings

The key cause of low-income growth in this period was stagnant earnings. A middle earner in 2008 did not earn noticeably more than a middle earner in 2003. Median hourly earnings for men grew by 0.1 per cent a year in real terms from 2003 to 2008 while

weekly earnings fell 0.2 per cent. For women hourly pay rose by 0.7 per cent a year but weekly pay rose by only 0.3 per cent a year.^[3] Even this short-term period of weak wage growth had a big effect. If wages had kept growing at the same pace as they did from 1977 to 2003, a typical middle earner would have entered 2008 being paid over £2,000 more a year.^[4]

[1] Family Resources Survey, equivalised net household income. [2] ONS, GDP (average) per head, seasonally adjusted (ONS data series IHXW). [3] Weekly gross earnings, Annual Survey of Hours and Earnings, ONS. [4] Plunkett, J., (2011), *Growth Without Gain*, Resolution Foundation, London, p 29.

In depth 2.1: Low to middle income households in recession

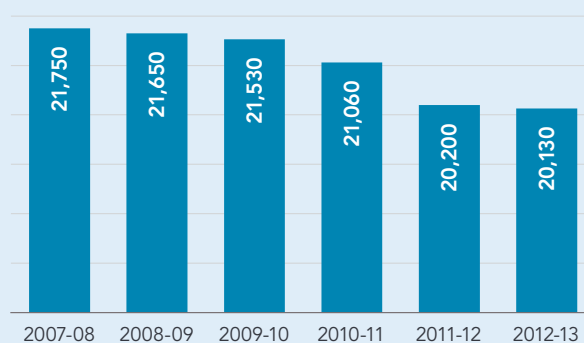
Since the financial crisis fed through to the real economy in 2009, employment has fallen and wages have failed to keep pace with inflation across much of the earnings distribution. While increased state support in the early stages of the recession offset falling earnings, significant cuts to tax credits since 2010 have amplified income declines for low to middle income households. The combined effect of this double squeeze has reduced net incomes in low to middle income households by 7.5 per cent since 2007-08. Figure 2.2 shows the average net household income of those in the low to middle income group in the UK between 2007-8 and 2012-13.

Given the scale of contraction since 2008, overall unemployment has risen less than expected. In part this may be because there has been a shift to lower productivity work such as short-hours self-employment. Dysfunction in UK financial markets may also be playing a role, stopping capital from being allocated effectively. However, it is also likely to represent a success for labour market policy, reflecting a more flexible labour market in which employers have adjusted wages and hours to deal with reduced demand rather than laying off workers.

Even so, people on low to middle incomes have proven highly vulnerable to the weaker jobs market, in large part because of the jobs they do. With the exception of the health and social work and education sectors, job losses have been greatest in those industries with the largest concentrations of low to middle income workers. The four worst performing sectors – retail, manufacturing, construction and public administration – together accounted for 3.5 million low to middle income jobs in 2009-10, 40 per cent of all jobs in these households. Occupations dominated by low to middle income households have borne the brunt of unemployment,^[5] while workers in these occupations have also had longer spells of unemployment.^[6]

These uncertain work prospects have fed through into acute financial vulnerability. At the end of 2011, one-third of low to middle income families said they had “no idea” (36 per cent) what their income would look like in a year’s time while one in five (20 per cent) was having difficulty paying for their accommodation and more than one-third (36 per cent) were struggling to obtain credit.^[7]

Figure 2.2: Average net household incomes in the low to middle income group, UK, 2007-8 to 2012-13



Notes: Figures for 2011-12 and 2012-13 are projections, which are calculated by splitting after-tax income into its various components. Net earnings are assumed to grow in line with projected growth in real gross weekly earnings at the 25th percentile of the earnings distribution. State support is estimated to grow in line with the OBR's projection for real-terms expenditure on aggregate non-income-related and non-contributory benefits. All remaining income is expected to keep pace with Retail Price Index (RPI) inflation. Sources: Resolution Foundation analysis of ONS, ASHE; Resolution Foundation analysis of DWP, Family Resources Survey; OBR, Economic and Fiscal Outlook, March 2012; DWP, Benefit expenditure tables: medium-term forecast, December 2011

[5] Low to middle income workers are significantly over-represented in the five occupational categories elementary occupations, sales and customer services, personal services, process and machinery operatives and skilled trades. Together, these categories accounted for three-quarters of the overall increase in Jobseeker's Allowance (JSA) claimants between the start of the recession and the end of 2011. Analysis of DWP, *Family Resources Survey 2009-10*, and ONS, *Labour Market Datasets*. [6] Of those exiting the claimant count at the end of 2001, 84 per cent of professionals had been on JSA for 26 weeks or less; in contrast, just 73 per cent of elementary workers left the count within this timeframe. [7] Resolution Foundation analysis of Bank of England, (2011), *NMG Survey*.

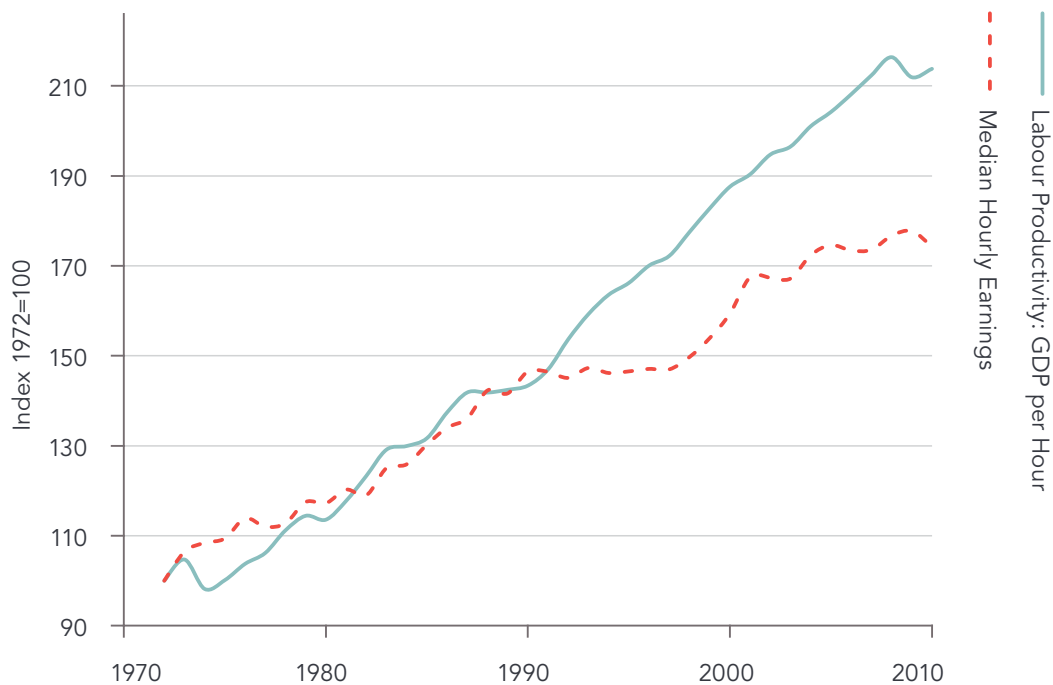
This pre-crisis slow down in wage growth did not stem from slowing productivity. Labour productivity continued to grow near to its long-run average rate until the 2008-09 crisis hit (Figure 2.3). Indeed, there is now good evidence that overall UK growth was strong compared with other countries in the period before the crisis. Comparatively robust productivity figures were broadly driven from a range of sectors and were supported by improvements in economic fundamentals like foreign direct investment, innovation and entrepreneurship.^[8]

As a result, the wage slowdown proved to be a troubling decoupling of overall economic performance from the financial health of households. Figure 2.3 illustrates the relationship between productivity and median wages,

showing the widening gap from the early 2000s. By the time the 2008 crisis struck, median earnings for all workers had already begun to lag markedly behind GDP per hour worked.

Although those on lower earnings would have felt it more sharply, the weak wage growth experienced in this period did not just affect those in the bottom half. Wage growth was slightly faster higher up the distribution but wages only grew in real terms for those at the very top (Figure 2.4). Wage trends also played out differently for different groups. Because women's earnings continued to catch up with men's earnings, they showed slightly better growth rates over time. Wage growth was also noticeably weaker for younger workers, whose labour market position worsened notably from the early 2000s onwards.^[10]

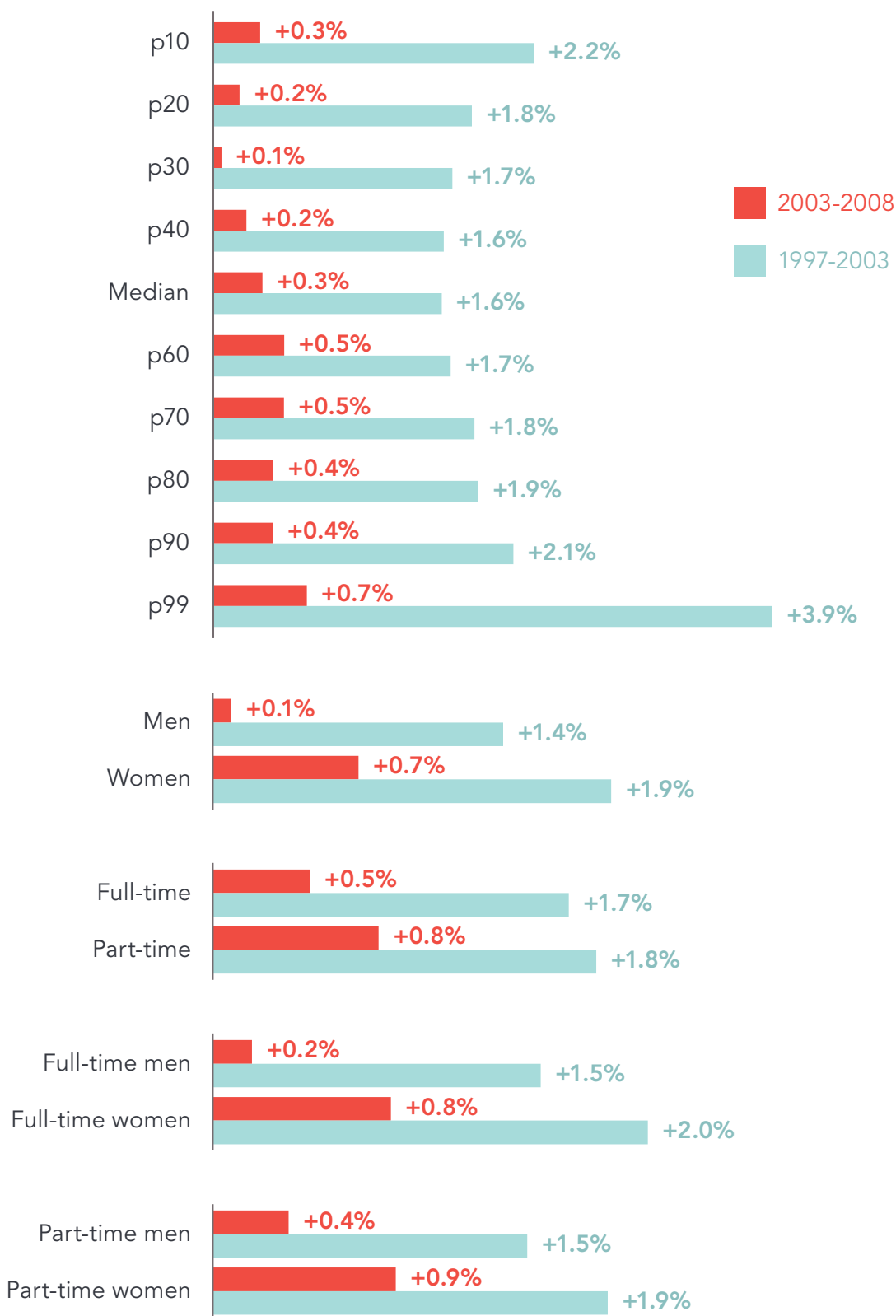
Figure 2.3: UK trends in hourly earnings and labour productivity, 1970–2010



Notes: All data is controlled for the GDP deflator. “Workers” includes employees and self-employed. Source: Analysis from Pessoa and Van Reenen, *Decoupling of Wage Growth and Productivity Growth? Myth and reality*, Resolution Foundation, London. [9] ONS, General Household Survey (GHS), Labour Force Survey (LFS) and Annual Survey of Hours and Earnings (ASHE)

[8] Corry, D., Valero, A. and Van Reenen, J., (2011), *UK Economic Performance Since 1997: Growth, Productivity and Jobs*, Centre for Economic Performance Special Paper. [9] Pessoa, J. and Van Reenen, J., (2012), *Decoupling of Wage Growth and Productivity Growth? Myth and reality*, Resolution Foundation, London. [10] See Annex B for a fuller discussion of trends in incomes and wages for different groups.

Figure 2.4: Average annual increase in real terms hourly pay, UK, 1997–2008



Note: These figures take account of two methodological breaks in the data source – in 2004 and 2006. Source: ONS, ASHE

The male employment rate declined

Although there was strong overall job creation between 2003 and 2008, poor wage growth was compounded by weak employment among some groups. The male employment rate continued its long-term decline, counteracted by a small rise in female employment.^[11] Employment was surprisingly poor in sectors with a large concentration of people on low to middle incomes and young workers. While the economy as a whole was growing, employment in wholesale, retail, hotels and restaurants (which provides a large share of employment in low to middle income households and also employs around 50 per cent of 16–21 year olds) fell by 200,000 from 2004 to 2007.^[12] Combined with poor wage performance, this put downward pressure on employment income, with overall income from employment in low to middle income households falling over time.

With earnings growth faltering, income growth came from tax credits, benefits and hours worked by women

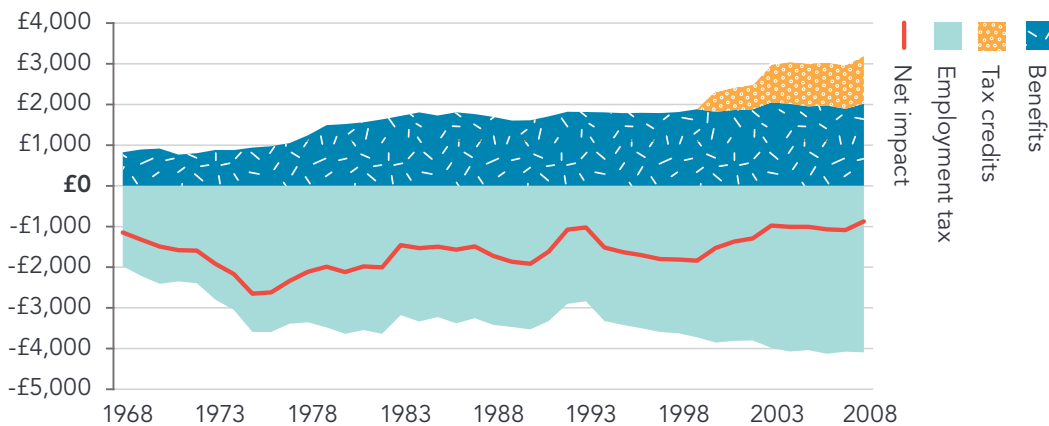
tration of people on low to middle incomes and young workers. While the economy as a whole was growing, employment in wholesale, retail, hotels and restaurants (which provides a large share of employment

During this period, tax credits were the only significant source of income growth

The way these weak labour market outcomes played out was that income growth was driven by other sources, principally tax credits and benefits and to a lesser extent hours worked by women. The creation and expansion of tax credits in 1999 and 2003 delivered significantly more generous support to low to middle income households, particularly those with children and those in work but with low incomes.^[13] (Figure 2.5)

The result of this increase in cash transfers was that tax credits provided the only substantial source of income growth between 2003 and 2008, and by the end of this period a larger share of overall income came from the state. Together, tax credits and benefits added £730 a year to average income in low to middle income households while combined income from other sources fell by £570, leaving overall income to grow by only £160 on average.^[14] Put another way, without rising state support, low to middle income households would have become significantly worse off over time.

Figure 2.5: Net position of low to middle income households in the UK, including role of tax credits, 1968–2008, constant 2008-09 prices



Note: Tax includes Income Tax, employee National Insurance and Council Tax. Source: Resolution Foundation analysis of data provided by Institute for Fiscal Studies (IFS)

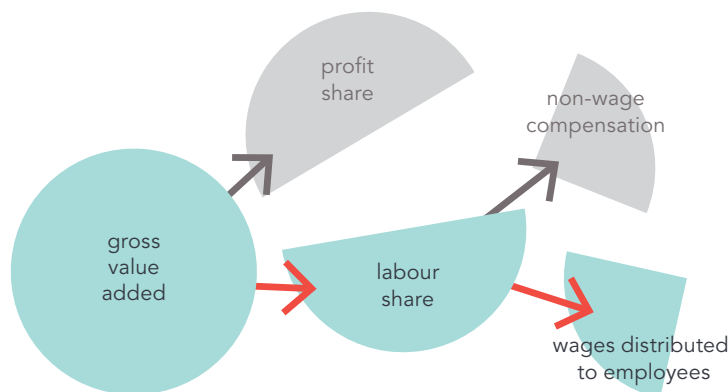
[11] The male employment rate fell by 1.1 percentage points from Oct–Dec 2003 to Oct–Dec 2008, counteracted by a 1.1 percentage point increase in the female employment rate. Annex C contains more detail on trends in employment during this period. [12] ACEVO, (2012), *Youth Unemployment: The crisis we cannot afford*, Association of Chief Executives of Voluntary Organisations, London, p. 122. [13] The Working Family Tax Credit was introduced in 1999, replacing the more targeted Family Income Supplement (later Family Credit), and the Child Tax Credit and the Working Tax Credit were introduced in 2003. [14] Brewer, M. and Wren-Lewis, L., (2011), *Why Did Britain's Households Get Richer? Decomposing UK household income growth between 1968 and 2008–09*, IFS Briefing Note BN125, IFS analysis for the Resolution Foundation.

2b Where did the money go?

The combination of growth and stagnation in this period presents a conundrum. If growth was not feeding through to those in the bottom half, where did the value being created in the UK economy go? We can answer this question specifically for this period by breaking down the path from GDP to wages into three stages: the growth that flows to all workers as compen-

sation (the labour share) versus the portion that goes to capital as profits (the profit share); the labour share that goes directly into wages (the wage share) versus non-wage compensation like employer National Insurance Contributions (NICs) and pension contributions; and the wages that go to employees in the bottom half rather than those in the top half (the distribution of wages) (Figure 2.6).

Figure 2.6: How GDP flows into wages



The decline in the share of GDP being paid out in wages in the 2000s

Stagnation in the 2000s can be explained by relatively recent declines in the overall size of the wage pot accruing to workers. The UK experienced a steady reduction in the labour share of income from around 2003 onwards and at the same time there was a sharp reduction in the share of compensation feeding through into wages. These developments, squeezed the overall share of GDP finding its way into wages, affecting earnings across most of the distribution.

In part, this reflects an increase in the share of GDP taken as profits

What was behind these changes in the labour share and wage share and how much should they worry us? It has often been claimed that UK workers have suffered from a long-term decline in their share of national income, losing out increasingly to the owners of capital.^[15] We don't find this to be the case. Although the labour share declined and in fact was unusually low for the entire "long boom" between 1994 and 2008-09, this decline reversed with the onset of the 2008-09 crisis (see Figure 2.7). Following a sharp increase in 2009, the labour share is now at roughly the same level as it was in 1972, in line with the long-term trend of between 65 and 66 per cent.

This long-run fluctuation of the labour share around a steady average fits economic theory, which suggests that the labour share acts in a counter-cyclical fashion, with profits rising in boom years, reducing the labour share,

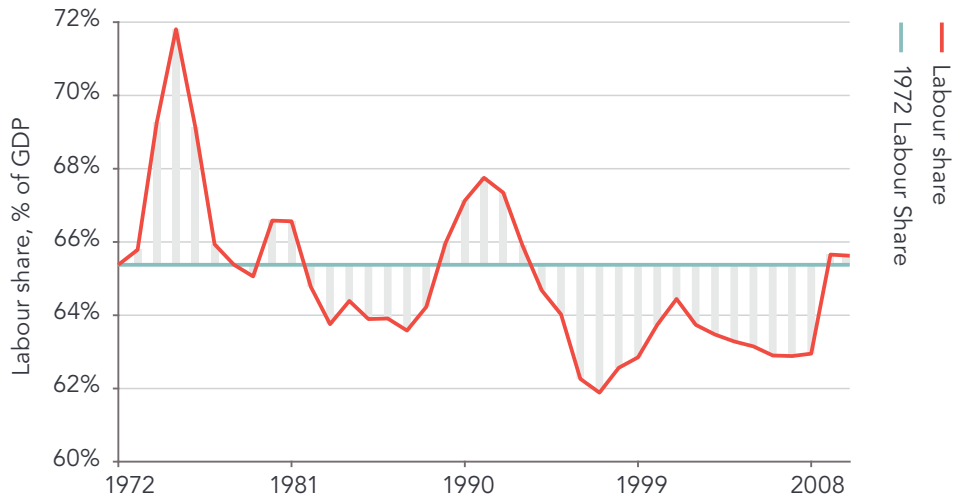
only to return in times of contraction.^[16] The difference between this and other accounts that show a long-term steady decline in the UK labour share is that we control for self-employment. This rose strongly in the 1980s and (because self-employment income is classified in the profit share) can be misconstrued as a fall in the labour share of income.

Yet even though the UK labour share is now at the same level it was at in 1972, the peak in the 2008-09 recession is markedly lower than that in previous downturns. Indeed, given the scale of the downturn one might have expected a much more significant increase. This is worrying because most other advanced economies have seen a significant decline in the labour share in recent decades.^[18] Taking the OECD as a whole, the median labour share dropped from 66.1 per cent in the early 1990s to 61.7 per cent in the late 2000s, with many countries experiencing declines of 10 percentage points or more^[19]. The causes of this trend are not well understood, despite much analysis. Globalisation, financialisation and the decline of worker bargaining power are commonly suggested to be potential causes, though isolating causes for macroeconomic phenomena like this is difficult.^[20]

It will be important to see where the labour share heads next in the UK. Given the depth of the 2008-09 recession it would be hoped that forthcoming data for 2011 shows a strong recovery in the labour share. If pre-recession declines were to resume there would be reason to believe that Britain is also experiencing a more structural decline, similar to those seen in other countries.

[15] Pessoa and Van Reenen, *Decoupling of Wage Growth and Productivity Growth?*; Macallan, C., Millard S., Parker, M., (2008), *The Cyclicalities of Mark-ups and Profit Margins for the United Kingdom: Some new evidence*, Working Paper No. 351, Bank of England. [16] Macallan, Millard and Parker, *The Cyclicalities of Mark-ups and Profit Margins for the United Kingdom*. [17] Pessoa and Van Reenen, *Decoupling of Wage Growth and Productivity Growth?* [18] Ibid. [19] In Germany, the labour share fell from about 75 per cent in 1975 to 65 per cent in 2006; in Japan from 73 per cent in 1975 to 57 per cent in 2006; in France from 80 per cent in 1975 to 67 per cent in 2006; and in Italy from 80 per cent in 1970 to 67 per cent by 2006. See OECD, (2012), *OECD Employment Outlook*. [20] Azmat, G., Manning, A. and Van Reenen, J., (2011), "Privatization and the Decline of Labour's Share: International evidence from network industries", *Economica*, 79 (315), pp. 470-492; Blanchard, O. and Giavazzi, F. (2003), "Macroeconomic Effects of Regulation and Deregulation in Goods and Labor Markets", *Quarterly Journal of Economics*, 118 (3), pp. 879-907.

Figure 2.7: UK labour share as a percentage of national income, 1972–2008



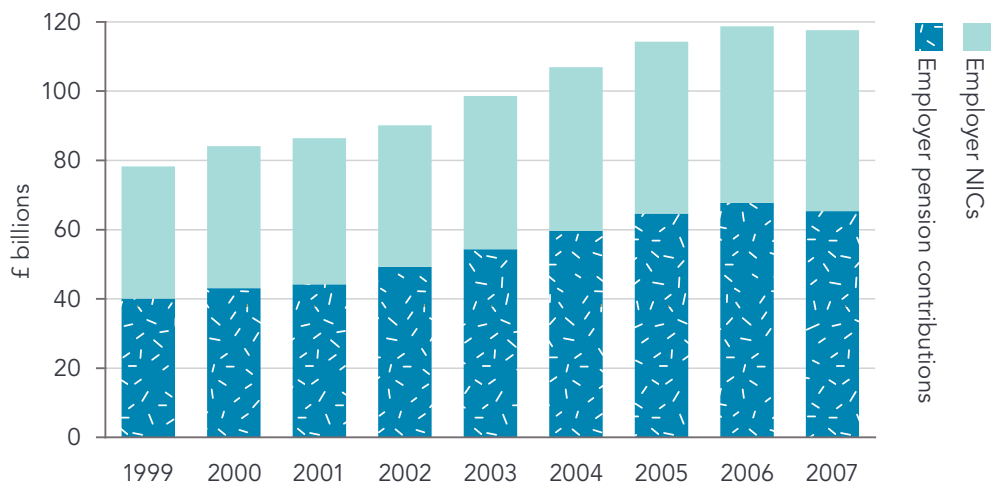
Note: All measures controlled for self-employment. Source: Analysis from Pessoa and Van Reenen, *Decoupling of Wage Growth and Productivity Growth?*^[17] ONS, Organisation for Economic Co-operation and Development (OECD); and EU KLEMS

At the same time, other sources of compensation (like pensions) squeezed out wages

At the same time as the labour share fell, so did the portion of compensation going into wages. Figure 2.8 illustrates this decline, showing how the value of the two key components of non-wage compensation changed between 1999 and 2007. Employer NICs grew by 37 per cent from £38 billion to £52 billion in real terms from 1999 to 2007^[21] while

employer pension contributions grew 63 per cent from £40 billion to £65 billion in the same period. It is therefore pension contributions that explain most of the decline. Their strong growth in this period in part reflects a growing pensioner population but also the fact that employers were making catch-up payments to reduce deficits in pension schemes.^[22] It may also reflect a range of new legislation that affected pension schemes in the 1990s.^[23]

Figure 2.8: Growth in non-wage aspects of compensation in the UK, £bn, constant prices, 1999–2007



Source: Analysis from Pessoa, J. and Van Reenen, J., (2012), *Decoupling of Wage Growth and Productivity Growth?*^[24]; original data from ONS, United Kingdom National Accounts: The Blue Book, 2008

[21] This data is currently only available up to 2008. [22] Special contributions by employers to pension schemes rose quickly in the early 2000s. For a breakdown of contributions by type see p.56, Pension Commission, (2005), ‘A new New Pension Settlement for the Twenty-First Century: The Second Report of the Pensions Commission’, Pension Commission [23] The Welfare Reform and Pensions Act 1999, the Pensions Act 1995 and the Pension Schemes Act 1993

There is reason to believe that at least part of this trend will continue. Inflationary pressure on non-wage compensation is closely linked to our ageing society, whether through pension contributions or healthcare costs. In the case of pension contributions, rising life expectancy forecasts, combined with declines in long-term expected returns to pension funds since 2008, will require further catch-up payments by employers. The upcoming introduction of pension auto-enrolment may well also increase pension contributions as employers who don't currently provide a pension for their employees adjust to the new system.

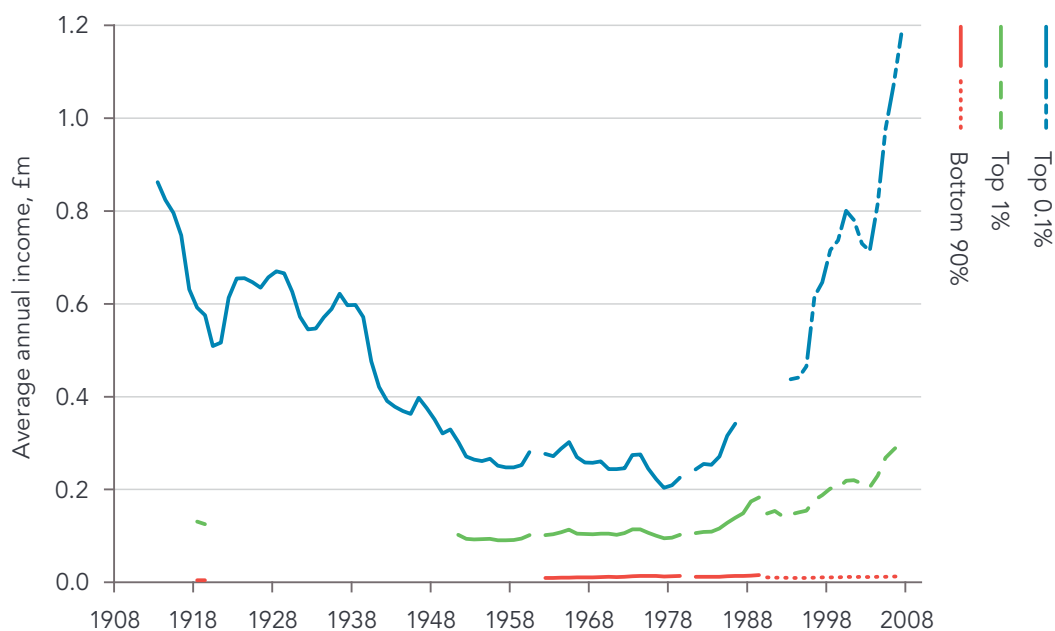
The trade-off between National Insurance and wages raises bigger questions about the size and role of the state, beyond the scope of our work. Yet our research also shows that non-wage compensation has risen in almost every advanced economy for which there is data over the past 30 years, suggesting that new pressures on the wage share may be a reality of life in a 21st-century economy

as the UK makes up for years of under-saving and adapts to the need to support a larger older population from a relatively smaller working-age population.

Soaring incomes at the top may have had some effect

While the middle has struggled, the pay of Britain's highest earners has soared in recent years. Figure 2.9 shows how unusual the 2003 to 2008 period was for those at the top (because of data limitations the figure illustrates incomes rather than earnings). After a brief dip from 2001 to 2003, average incomes in the top 0.1 per cent of the UK income distribution accelerated upwards rapidly. Average incomes among the top 0.1 per cent grew 65 per cent in real terms from 2003 to 2007, an annual rate of 13.4 per cent a year, easily the most rapid period of growth in the past 100 years. This ran alongside annual income growth of 1.6 per cent for the entire bottom 90 per cent of the population.

Figure 2.9: Average income at top and bottom of the income distribution in the UK, constant 2010 prices, 1908–2008



Note: Dotted series represent a shift from "tax units" to "adults" as the unit of measurement from 1990 onwards. Source: Atkinson, "The Distribution of Top Incomes in the United Kingdom 1908–2000"^[25]

Although this highly skewed growth affected wages at the median, the top income group ultimately makes up a small portion of overall income. At its peak in 2007, the top 0.1 per cent accounted for around 6 per cent of all UK income. While grossly disproportionate, its impact on wages in the bottom half is likely to be far smaller than the impact of the more general growth in inequality that occurred in the 1980s. It also seems likely that extreme income growth at the very top requires different explanations to inequality more generally.

For example, research in the US suggests that for much of the 20th century pay in the finance sector was broadly equivalent to what would be predicted by employees' levels of skills and employment risk.^[26] In just two periods, pay in finance has diverged sharply from the rest of the private sector, suggesting pay over and above market rates (in technical terms, rent seeking behaviour): from the mid-1920s to the mid-1930s and from the mid-1990s to 2006. Other work suggests that similar dynamics have taken place in the UK.^[27]

[24] Pessoa and Van Reenen, Decoupling of Wage Growth and Productivity Growth? [25] Atkinson, A. B., (2007), "The Distribution of Top Incomes in the United Kingdom 1908–2000", in Atkinson, A. B. and Piketty, T. (eds) *Top Incomes over the Twentieth Century. A contrast between continental European and English-speaking countries*, Oxford University Press, Oxford. [26] Philippon, T. and Reshef, A., (2009), *Wages and Human Capital in the US Financial Industry: 1909–2006*, NBER Working Paper No. 14644, National Bureau of Economic Research. Research in the UK also suggests there is a relatively weak relationship between pay for senior executives and company performance. See Incomes Data Services, (2010), *What are we paying for? Exploring executive pay and performance*, discussion paper for the High Pay Commission. [27] Dolphin, T., (forthcoming), *Don't Bank On It: The financialisation of the UK economy*, Institute for Public Policy Research, London.

2c More specific explanations for the squeeze – tax credits and immigration

In summary, there was a change in the distribution of economic value in the run up to the 2008 recession as more of UK GDP has been directed towards the owners of capital and more of workers' compensation has been directed towards non-wage costs to meet broader societal needs. In this period there was also very rapid growth at the top, albeit among a very small group. These factors account for the distribution of the value generated by the UK economy during this time and help to explain why wage growth was so weak.

There are also other more specific ways of explaining wage stagnation in this period, which warrant serious discussion. One of these is the relationship between unemployment and real wage growth. We discuss this in more detail in Chapter 4 with new research for the Commission suggesting that in the period since 2003 unemployment may be restraining real wage growth more than it used to.^[28] Two other policy explanations are the rise of tax credits and high immigration.

Tax credits are unlikely to have significantly depressed wage growth

It has been argued that in the early 2000s tax credits pushed down wages for the low paid. In theory, this would make sense for the following reasons:

- *Tax credits attract people into work who are likely to be lower paid than existing workers, which drags down average pay.*
- *By boosting the supply of workers, tax credits may well also pull down wages for existing employees.*
- *Employers may decide to pay less to workers who receive tax credits, hitting the pay of recipients.*

The result of these three effects would be that some spending on tax credits reaches recipients and some goes to employers who are able to reduce wages.

Evidence on the size of these effects is strongest in the US, where the Earned Income Tax Credit (EITC) is a similar but more targeted version of tax credits. Evidence suggests that although the EITC has reduced the wages of recipients, it has more than made up for this by bringing more people into work.^[29] Overall, while both recipients and their employers have benefited, those who have lost out have been low paid people not receiving EITC, whose wages have been squeezed.^[30]

It seems likely that any effect of tax credits on wages will continue to be small

In the UK, any impact of tax credits on wages is likely to be smaller because tax credits are less targeted than the EITC and the minimum wage is higher, pushing against downward pressure. Evidence suggests that, in the case of the old system of Working Families Tax Credit, around one-third (34 per cent) of the tax credit payment was lost in reduced wages for male eligible workers but that there was no effect for women.^[31]

New research for the Commission suggests that any impact from the current system of tax credits on wages has been modest at most.^[32] Wage growth for the low paid was strong in the period when tax credits increased the most, not least because of the countervailing force of the National Minimum Wage. There has not been slower wage growth at the point in the wage distribution where tax credits bite, nor lower wage growth for workers with the characteristic of tax credits recipients, for example low income mothers with children.

These findings make sense because of the design of the current system. Because tax credits are targeted at low and modest income households (rather than low-paid workers) – as is also the case with the forthcoming Universal Credit – their effect on pay is thinly spread.^[33]

Payments are also no longer visible to employers so it is hard to consciously pay recipients less. Since the National Minimum Wage is also much stronger in the UK than in the US, it seems likely that any effect of tax credits on wages will continue to be small.

Others have claimed that rising immigration has held down wages

Did immigration squeeze wages in the run up to 2008? There is a noteworthy coincidence between the enlargement of the EU in 2004 and the subsequent influx of migrants from the A8 accession countries and wage stagnation. From mid-2003 to mid-2008 net inward migration to England and Wales was 960,000, a substantial increase in the labour supply that might be expected to put significant downwards pressure on wages, particularly in low wage labour markets.^[34] Immigrant workers could dampen (or indeed boost) the pay of native workers. Even if native workers' pay is not affected, immigrants could also affect average or median pay simply by changing the composition of the workforce.

There is a broad consensus that immigration has no substantial negative impact on average wages for native

[28] Gregg, P. and Machin, S., (2012), *What a Drag: The chilling impact of unemployment on real wages*, Resolution Foundation, London. [29] Figures don't sum to \$1 due to rounding. See Rothstein J., (2008), *The Unintended Consequences of Encouraging Work: Tax incidence and the EITC*, CEPS Working Paper No. 165. See also similar findings from Leigh, A. (2010), *Who Benefits from the Earned Income Tax Credit? Incidence among recipients, coworkers and firms*, Forschungsinstitut zur Zukunft der Arbeit, No. 4960. Specifically, a \$1 increase in payments appeared to leave EITC recipients \$0.70 better off, employers \$0.72 better off and low paid non-recipients \$0.43 worse off. In other words, EITC did reduce wages slightly but for individual recipients this was more than offset by the EITC payment itself. Non-recipients meanwhile only saw the wage loss. Importantly, although each person already working received \$0.70, because EITC also brought more people into work, average incomes among the entire target population rose by more than \$1 for every \$1 spent. [30] Rothstein, *The Unintended Consequences of Encouraging Work*; Leigh, *Who Benefits from the Earned Income Tax Credit?* [31] Azmat, G., *Incidence, Salience and Spill overs: The direct and indirect effects of tax credits on wages*, Universitat Pompeu Fabra and Barcelona GSE, October 2011. See also Gregg, P. and Harkness, S., "Welfare Reform and Lone Parents Employment" in Dickens R, Gregg, P. and Wadsworth, J. (eds), (2003), *The Labour Market Under Labour: State of working Britain*, Palgrave, London, which found no impact from tax credits on the wages of existing workers. [32] Whittaker, M., (2012), *Credit Worthy*, Resolution Foundation, London. [33] As a result, low paid workers receive a surprisingly small share of tax credit spending, 41 per cent of tax credit spending goes to non-earners and 10 per cent to the self-employed, leaving 49 per cent for wage earners, with the first decile of earners receiving 8 per cent of total tax credit spending and the second 11 per cent. See Whittaker, Credit Worthy, Resolution Foundation. [34] ONS Population Estimates Unit. [35] For a recent review of the literature, see Migration Advisory Committee, (2012), *Analysis of Impacts of Migration*, UK Border Agency.

workers nor on the overall level of unemployment, findings which hold both nationally and in local labour markets.^[35] The most detailed study to date finds no impact from A8 migration on either unemployment or wages at any point in the wage distribution or for any subgroup, including the young and low skilled.^[36] The largest effect found in any study suggests that a 10 percentage point

Immigration hasn't had the effect on wages one might expect

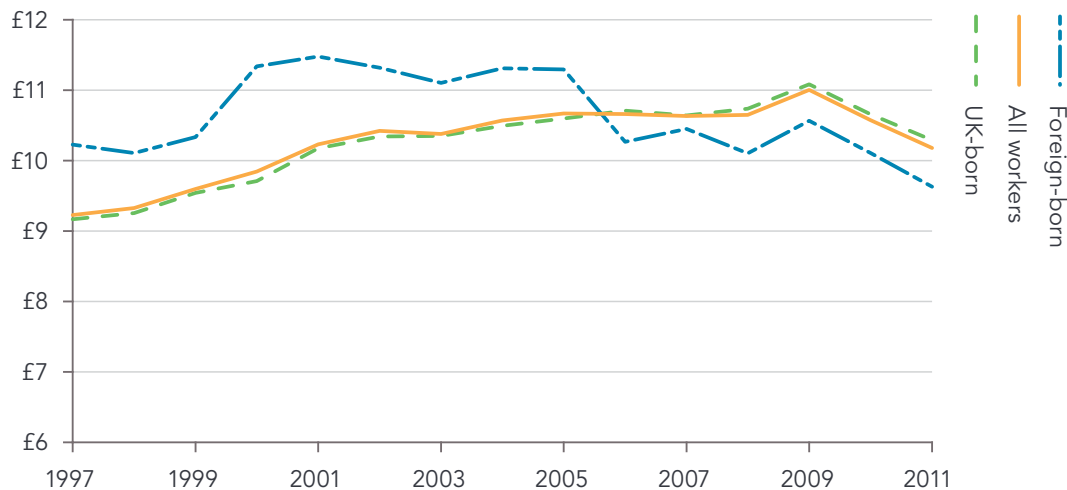
increase in the share of immigrants working in semi and unskilled services – care homes, bars, shops, restaurants and cleaning – is associated with a 5 per cent reduction in pay.^[37] Given the weight of the literature, this seems likely to be an extreme upper bound.

There are a number of reasons why increased immigration doesn't have the effect on wages one might expect.^[38] The UK has a large and diverse traded sector and doesn't contain a fixed number of jobs, so increased immigration is likely to affect the mix of output rather than the level of employment.^[39] It also seems that there is relatively little substitution between the immigrant

and native workforces. To the extent there is an effect on wages, it likely limits the wages of other immigrants.^[40]

While immigration in the last decade may not have directly suppressed wages, the influx of immigrants could have changed the composition of the UK workforce in such a way as to pull down median wages. Figure 2.10 shows that any such effect was extremely small. Before the early 2000s, median pay among foreign-born workers in the UK was higher than overall national median pay, reflecting the fact that large parts of the foreign-born workforce are highly skilled and well paid. The entrance of A8 migrants in the early 2000s at much lower levels of pay pulled down median pay among foreign-born workers significantly. However, even after the large increases seen in the early 2000s, the overall proportion of foreign-born workers in the UK workforce was far too small to have substantially altered the path of median pay. At its widest point in 2011, the gap between the pay of all workers and UK-born workers was only 1 per cent. In short, increased immigration did not change the make-up of the UK workforce enough to explain stagnating pay.

Figure 2.10: Median hourly pay in the UK among all workers by country of birth, 1997–2011



Source: ONS, LFS (all data for Q4 in given year)

So particular parts of the policy environment, from tax credits to immigration, account for at most a small part of the faltering of wages. This is not to say that

policy in general plays no role. As we will see in Section 2, the policy environment helps to explain why some countries do better than others in mitigating international trends.

[36] Lemos, S. and Portes, J., (2008), *The impact of migration from the new European Union Member States on native workers*, Department for Work and Pensions. Other studies find negligible impacts in the case of unemployment and small, positive impacts on wages, with any negative wage effect limited to the wages of other immigrants. See Dustmann, C. et al., (2003), *The Local Labour Market Effect of Immigration in the UK*, Home Office Online Report 06/03, Home Office; Mancorda, M. et al., (2006), *The Impact of Immigration on the Structure of Male Wages: Theory and evidence from Britain*, Centre for Economic Performance, LSE. [37] Nickell, S. and Saleheen, J., (2008), *The Impact of Immigration on Occupational Wages: Evidence from Britain*, Working Paper, Federal Reserve Bank of Boston. [38] For the argument that immigration holds down wages only in economies with a small and homogenous traded sector see Dustmann, *The Local Labour Market Effect of Immigration in the UK*. For the argument that immigration doesn't impact on wages for the native-born because immigrants and natives are not, in general, competing for the same jobs see Mancorda, *The Impact of Immigration on the Structure of Male Wages*. [39] Dustmann, *The Local Labour Market Effect of Immigration in the UK*. [40] Mancorda, *The Impact of Immigration on the Structure of Male Wages*.

2d The build up of household debt

We have seen that incomes and earnings stagnated in the run up to 2008. But to understand what this period actually felt like for households requires a fuller understanding of people's purchasing power. We therefore finish our account of living standards before the crisis period by considering debt and consumption. These are key to understanding how weak incomes and earnings affected day to day life for households. Some have argued that Britain's households – particularly those on lower incomes – spent the late 1990s and early 2000s funding their consumption unsustainably through borrowing. What does the evidence say?

The savings position of households was historically poor in the pre-crisis period (Figure 2.11). The aggregate household savings ratio – the proportion of income which is saved – turned negative in 2008 for the first time since records began. Research for the Commission confirms that consumption outpaced income growth across the distribution between 1997 and 2007 and shows that, while the savings ratio worsened in every income decile, overall averages conceal a particularly stark long-term decline in the saving position of the poorest 10 per cent of households.^[41]

The stock of UK household debt has soared

However, this is different from saying that the increase in household debt before the crisis was the result of unsustainable consumption. Certainly the stock of UK household debt rose sharply in the run up to the crisis with the household debt to income ratio growing from 93 per cent in 1995 to 143 per cent in 2010. However, as economic commentators have pointed out, nearly all

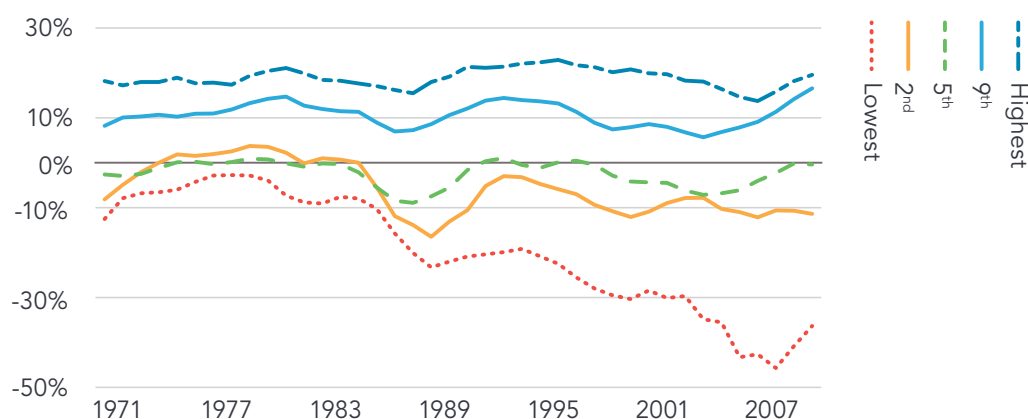
of this rise is accounted for by mortgages and secured loans. Only a small fraction of the increased stock of debt is made up by unsecured personal loans and credit cards, that more directly finance consumption.

Nor does this increase in housing debt seem to have meant that people borrowed against their homes to fund consumption. Equity withdrawal did rise sharply in the early 2000s, reaching 8 per cent of post-tax income, its highest level since records began in 1970. However, the bulk of equity withdrawals occur when people downsize or exit the housing market, often later in life, and much of this money is either saved or used to pay down debt.^[43] Evidence suggests that more commonly understood forms of equity withdrawal – such as advances secured against a home – rose slightly in the early 2000s but not substantially by comparison with mortgage repayments.^[44]

The distribution of debt could mean that many households face difficulties

Perhaps the key issue raised by these trends is how much ordinary working households are spending on debt repayments and how long it will take to pay down this debt. While there is broad agreement that households need to reduce their debts – to deleverage, in technical terms – opinions vary widely on the depth and pace required. Some take the relatively sanguine view that although income to debt ratios have eroded badly, the debt to asset position of UK households has not. People have more debt but also much more valuable homes. Other studies suggest the the UK household sector needs to deleverage heavily and that this process will last until the end of the decade or beyond, acting as a sustained drag on consumption.^[45]

Figure 2.11: Savings ratios by income decile, adjusted to match national aggregates, UK, 1971–2007



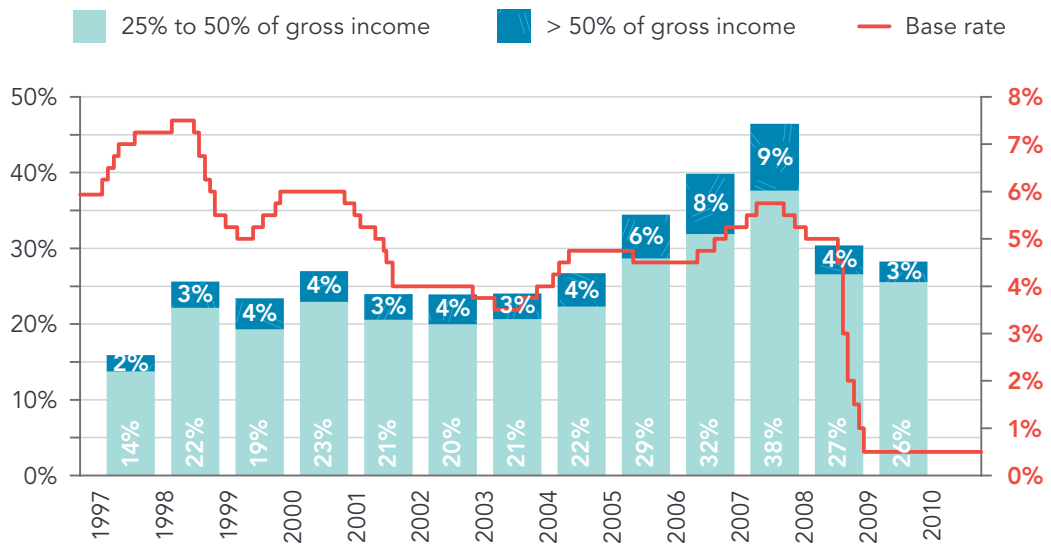
Notes: Figures reported are plutocratic saving ratios. Plutocratic measure reflects the fact that rich households contribute far more than other households to total saving and so are given a higher weight in the average. Source: Estimated from the Family Expenditure Survey (FES), 1971–2010; and NIESR, Inequality, Debt and Growth^[42]

[41] Lucchino, P. and Morelli, S., (2012), *Inequality, Debt and Growth*, Resolution Foundation, London. [42] National Institute for Economic and Social Research, (2012), *Inequality, Debt and Growth*, Resolution Foundation, London. [43] Benito, A., Thompson, J., Waldron, M. and Wood, R., (2006), "House prices and consumer spending", *Bank of England Quarterly Bulletin*, Summer, pp. 142–54. [44] Reinold, K., (2011), "Housing equity withdrawal since the financial crisis", *Bank of England Quarterly Bulletin*, Q2. [45] McKinsey, (2012), *Debt and Deleveraging: Uneven progress on the path to growth*; Royal Bank of Scotland, (2012), *UK Household Deleveraging*. [46] The equivalent figure for those on higher incomes was 14 per cent; Resolution Foundation analysis of English Housing Survey, 2009–10; Whittaker, M., (2011), *Squeezed Britain*, Resolution Foundation, London. "People on higher incomes" are defined here, and throughout this report, in line with the Resolution Foundation's standard definition as people living in households with above median income, based on an equalised household income distribution for working-age households.

Either way, the distributional aspect of this story will be key. The rise of mortgage debt in the build up to 2008 was heavily supported by loose credit: in 2006-07, 20 per cent of low to middle income first-time buyers bought with a 100 per cent mortgage.^[46] Importantly, our analysis shows that even as interest rates have fallen to historic lows, the reported burden of mortgage repayments for low to middle income

households is *higher* than in the mid-1990s when the Bank of England base rate stood at 7 per cent (Figure 2.12). In the medium term, households in the bottom half are likely to face a painful combination of weak income growth, high debt to income ratios, high loan to value ratios, and rising interest rates, all starting from a position in which debt servicing costs are *already* proving burdensome.

Figure 2.12: Mortgage payments as proportion of gross household income among low to middle income mortgagors, England, 1997–2010



Source: Resolution Foundation analysis of Department for Communities and Local Government (CLG), English Housing Survey 2009-10 (and earlier)

2e The soaring cost of essentials

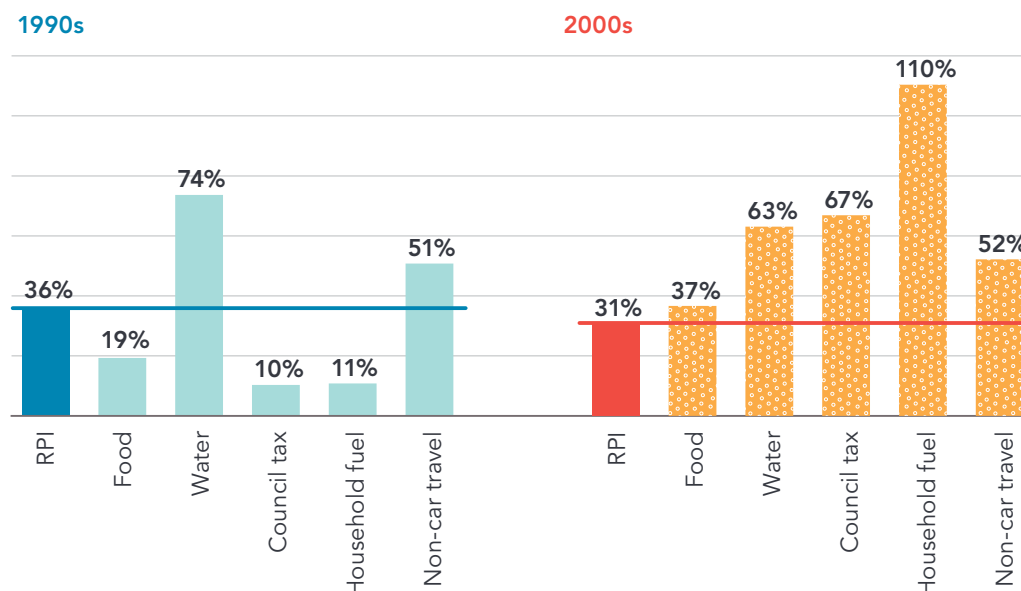
The rising price of essentials aggravated the squeeze on real incomes

Finally, it is important to understand how income and prices interact. Lower income households pay a substantial premium for goods and services, partly as a result of higher costs of credit and a lack of access to financial services.^[47] In recent years, there is evidence that the premium paid by lower income households may be rising, with strong growth in expensive forms of credit such as pay day loans.^[48]

Even without these extra costs, recent trends in prices alone have disadvantaged lower income households. Although all of the above analysis has

controlled for inflation, changes in relative prices that affect lower income households are not picked up in headline measures of inflation, which are based on the average shopping basket.^[49] This is important because from the early 2000s, the cost of basic goods, including staple foods, household fuel and Council Tax, rose far faster than headline inflation (Figure 2.13). This sharply eroded the purchasing power of low to middle income households, who spend a larger proportion of their budgets on essential goods than higher income households.

Figure 2.13: Cumulative RPI inflation and inflation in key categories, UK, 1990s and 2000s



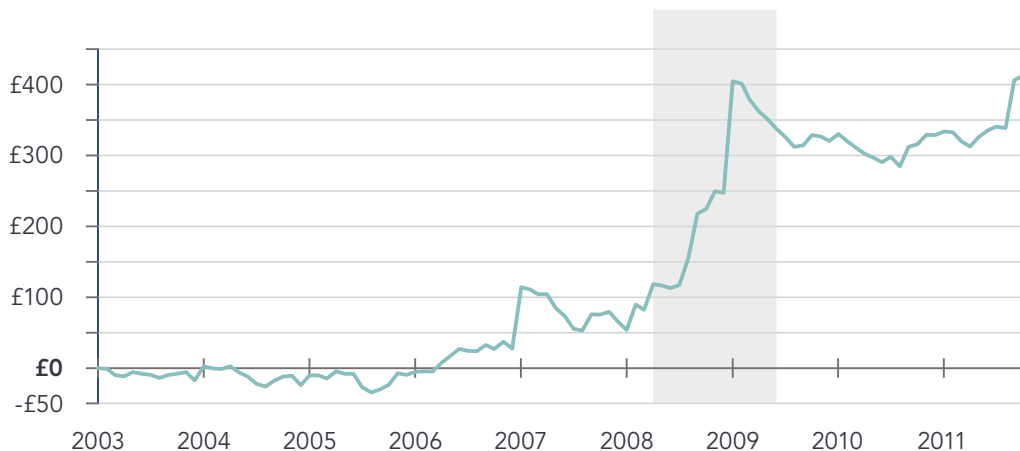
Note: 1990s = April 1990 to April 2000; 2000s = April 2000 to April 2010. Source: ONS category-level price inflation, Hirsch, Plunkett and Beckhelling Priced Out^[50]

Although often missed from our public debate, the impact of this relative shift in prices has been substantial. Consumer price indices constructed specifically for low to middle income and higher income households on the basis of their consumption patterns show that prices were broadly in line for the two groups up to 2006 but then began to diverge, particularly in 2008 and 2009.^[51] At its peak in 2009 the real inflation rate experienced by low

to middle income households was more than an entire percentage point (1.1 per cent) higher than the inflation rate experienced by higher income households. The cumulative impact of these different inflation rates was that at their peak in 2009 the typical basket of goods for a low to middle income family cost £400 more than it would have if inflation had been at the level experienced by the higher income group since 2000 (Figure 2.14).^[52]

[47] Save the Children, (2007), *The Poverty Premium: How poor households pay more for essential goods and services*, Save the Children, London [48] Burton, M., (2010), *Keeping the Plates Spinning: Perceptions of payday loans in Great Britain*, Consumer Focus, London. [49] The ONS is currently consulting on changes to its headline measures of inflation, which could have a significant impact on lower income households. For more details see ONS, (2012), *National Statistician to Seek Users' Views on the Retail Prices Index*, Office for National Statistics, London. [50] Hirsch, D., Plunkett, J. and Beckhelling, J (2011), *Priced Out: The new inflation and its impact on living standards*, Resolution Foundation, London. [51] Based on consumption patterns as recorded in the Living Costs and Food Survey. [52] Whittaker, Squeezed Britain. [53] Hirsch, Plunkett and Beckhelling, Priced Out.

Figure 2.14: Cumulative difference between the annual shopping bills of low to middle income households and higher income households because of differential rates of inflation, UK, 2003–2011



Notes: Annual cash difference in the cost of a low to middle income household's basket of goods when applying low to middle income and higher income inflation rates based on consumption patterns: low to middle income and higher income Consumer Price Index (CPI) weights based on proportion of total consumption expenditure spent on various CPI components 2003–2009. Sources: ONS, detailed CPI statistics; Resolution Foundation analysis of ONS, Living Costs and Food Survey 2009 (and earlier)

It is very hard to predict whether such price rises will continue. It is reasonable to think that some of their underlying drivers, such as the growth of emerging economies, will do so.^[53] This is not to say that policymakers are powerless; the way these trends impact on Britain's households is shaped

by UK markets, so the government may be able to make a difference at the margins. It is also the case that some categories in which there have been particularly strong price rises – particularly work-related costs like transport and childcare – depend on mostly domestic factors and are therefore more tractable for UK policymakers.

2f Conclusion

We began this report by describing a pre-crisis period in which there was an uncomfortable disconnect between the UK's overall economic health and the daily reality for households. When we look at the measures that matter for living standards – from real income and earnings growth to patterns of debt and inflation – it is clear that by the time the crisis struck, the squeeze had already begun.

These are worrying findings for those who take the

view that we simply need to get the UK economy back on the road. They also echo similar trends developing in other countries, most saliently the long-running median income stagnation seen in the US. Before taking a look at longer-term UK trends in Section 2, we ask how Britain really measures up against other countries. Is the UK following others down a road to long-term stagnation? And what genuine trade-offs do national governments face?

{Section 1}
**Alarm bells: Faltering
living standards from
2003 to 2008**

Chapter 3
**How Britain
measures up**

Chapter summary

- The UK's short period of stagnation echoes far longer trends elsewhere, particularly in the US where median household income has grown at an average of just 0.2 per cent a year since 1979.
- Different countries vary widely in their ability to deliver rising incomes for low to middle income households, with the UK a relatively good performer when averaged over the long term.
- Internationally, the shape of growth has mattered more than the overall level of growth in delivering rising incomes for low to middle income households.
- Britain's labour market is relatively ineffective at sharing the proceeds of growth, leaving more work for the tax and benefit system to do.
- The UK's effectiveness at sharing growth through the labour market has eroded significantly over time.

The poor performance of incomes in the UK from 2003 onwards carries worrying echoes from other countries, most notably the US (Figure 3.2). US median household income grew by only \$3,400, from \$46,100 in 1979 to \$49,500 in 2010, an annual growth rate of just 0.2 per cent over a 30-year period.^[1] As in the much shorter period of income

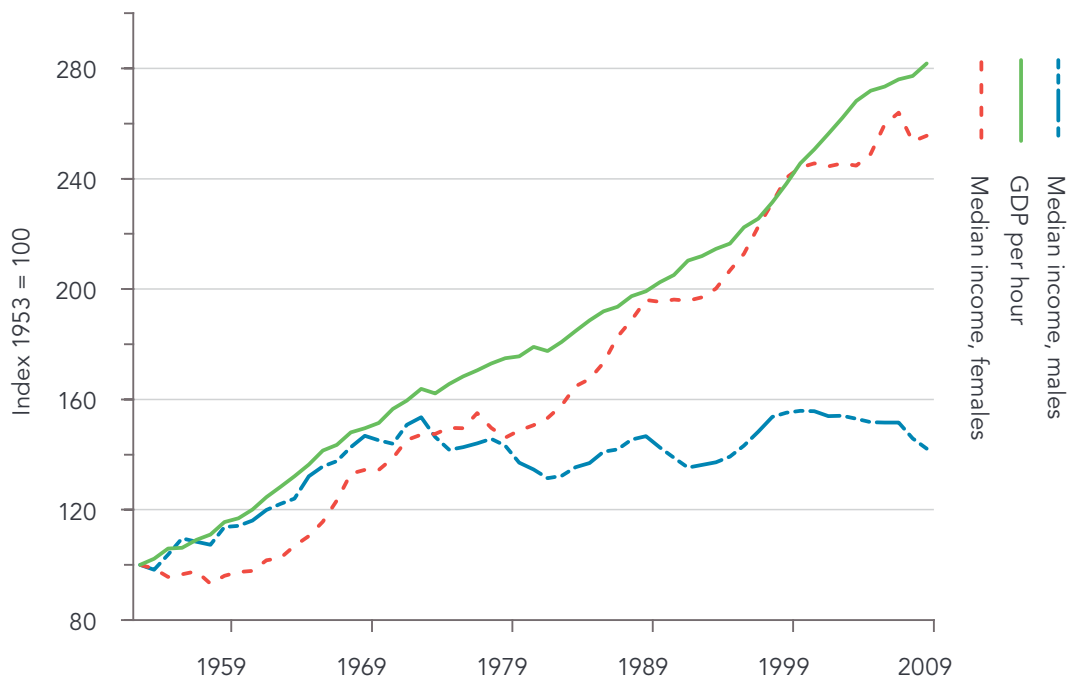
stagnation in the UK, the root cause is a stagnation in employment income.^[2] Median earnings for full-time male earners in the US rose by just \$100 from 1979 to 2010, though rising much faster for women – by \$8,500 – as the gender pay gap narrowed (but did not close).^[3] Other trends like soaring household debt are also notably similar in the US and the UK.

3a The US story

The long-running squeeze on US incomes has attracted a lot of debate. This is a far more established phenomenon than the squeeze we have seen in the UK and many researchers have tried to identify its causes.^[4] Several factors have been found to be key, most centrally the rise of wage inequality. Rising health insurance costs have also exerted a big squeeze on wages as more of the

US labour share has been devoted to this non-wage part of compensation. Original research for the Commission has confirmed these findings.^[5] More recently there has also been a debate about the role of changes in the make-up of the US population (see In depth 3.1). Figure 3.1 shows US trends in incomes and labour productivity between 1959 and 2009.

Figure 3.1: US trends in incomes and labour productivity, 1959–2009



Note: Controlled for CPI. Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplements

[1] Economic Policy Institute analysis of US Census Bureau, *Income, Poverty and Health Insurance Coverage in the United States: 2010 – Historical Income Tables*. [2] For discussion on the importance of compositional changes to US median income stagnation see Landsburg, S., (2012) “The Numbers Racket”, <http://bit.ly/P06Q0C>; Kenworthy, L., (2012), “Wage Stagnation Isn’t Due to a Compositional Shift”, <http://bit.ly/QjPv2F>; McNeil, J., (2011), “Changes in Median Household Income: 1969 to 1996”, US Census Bureau, <http://1.usa.gov/U01Rz0>. [3] *Economic Policy Institute analysis of US Census Bureau, (2010), Income, Poverty and Health Insurance Coverage in the United States: 2010 – Historical Income Tables*, Table P-41: Work Experience – All Workers by Median Earnings and Sex. [4] Led in particular by the Hamilton Project at Brookings and the Economic Policy Institute. [5] Pessoa and Van Reenen, *Decoupling of Wage Growth and Productivity Growth?*

In depth 3.1: Is US stagnation explained by compositional changes?

The long-running stagnation in US incomes and earnings has led to lively arguments about causes. One important debate is over the role of changes in the composition of the US population and workforce. Some economists argue that stagnation is largely – or even wholly – explained by the fact that low income groups have expanded in number over time. This has led some to claim that stagnation is an “illusion”; households have not really failed to progress over time, it is just that the mix of households has changed.^[6]

The claim that so-called composition effects dispel the need to worry about stagnation rests on a mischaracterisation of the problem. Any measure of median incomes in a country over time results from a constantly changing population. Stagnant median incomes are a worry not because they show that individual households have stopped progressing but because they show that certain parts of society are not becoming better off over time as one would expect.

So rather than being a eureka moment, compositional changes are one possible – and potentially important – explanation for this worrying development. Do compositional effects in fact explain US stagnation? On most dimensions for which there is good data they seem to play a small role. For example, median incomes within the white, Hispanic and black populations have grown faster (in all three cases) than overall median incomes. This apparent contradiction can only be explained by the fact there has been a shift in composition towards lower income Hispanic and black households. Even so, it is not a complete explanation because income growth in each of the three groups has fallen well short of overall GDP growth for much of the last 30 years in the US.^[7]

The proportion of the workforce with different levels of skills has also changed over time. There is reason to believe this might have pulled down median earnings. However, even when looking just at college graduates, wage growth has been poor. In the past 35 years, median pay has risen slightly faster for college graduates than for those without degrees, but for the past 20 to 25 years median pay for males with a college degree has stagnated.^[8]

In the UK, the most likely culprit for significant compositional effects is immigration, particularly from the A8 accession countries. As we saw in Figure 2.10, these contributions have in fact been small, opening up a gap between median pay for all workers and for UK-born workers of around 1 per cent.

[6] See, for example, Landsburg, “The Numbers Racket”. [7] Median US household income among white non-Hispanic households grew from \$49,770 in 1984 to \$55,410 in 2011, an average annual growth rate of 0.4 per cent; among black households, median household income grew from \$27,770 to \$32,230 in the same period (a 0.6 per cent growth rate); and for Hispanic households from \$35,030 to \$38,620 (0.4 per cent). [8] Madrick, J. and Papanikolaou, N., (2007), *The Stagnation of Male Wages*, Schwartz Center for Economic Policy Analysis.

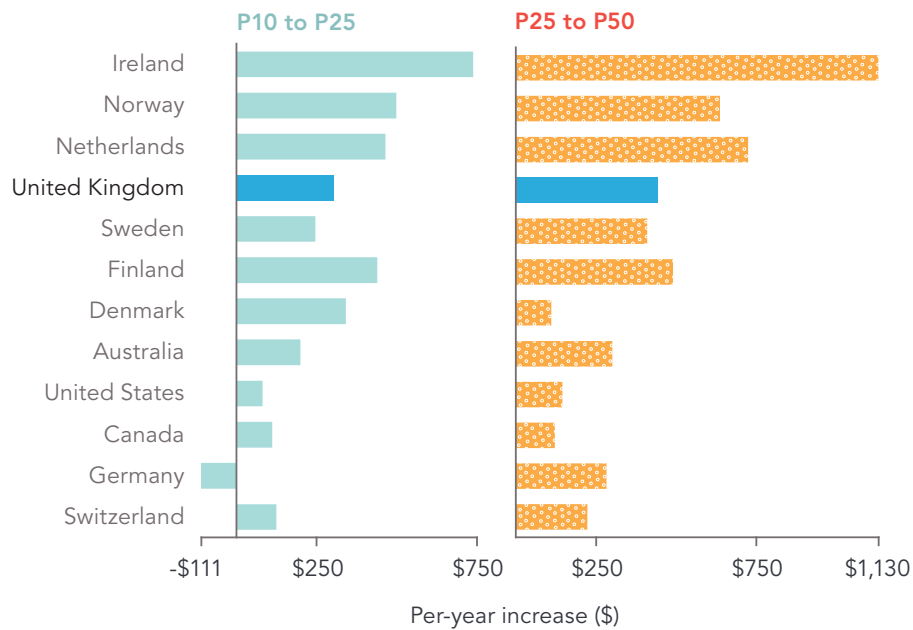
3b The international story

Although the duration of US stagnation of incomes has been exceptional, and has dominated debate about this issue in policy circles, it is not unique. The Commission has carried out a range of new analysis to deepen our understanding of how the relationship between economic growth and personal gains for low to middle income households in the UK measure up against other countries. It reveals that there have been similar trends in a number of countries, including economies as diverse as Canada and Germany, suggesting that more widespread forces may be at work.^[9] Looking at other countries beyond the US also helps us see how the UK measures up.

The shape of growth has mattered more than its level

When measuring the extent to which growth has reached low to middle income households over time the UK is a middling performer (Figure 3.2). From 1979 to 2005, income growth for low income households averaged \$180 each year and \$260 for households on modest income (expressed in dollars controlled for purchasing power). This was far above the US, in which annual growth for these two groups was \$50 and \$100 respectively, but far below the growth in the Scandinavian economies and the Netherlands (Ireland and Norway are exceptional stories).^[10]

Figure 3.2: Average annual growth in earnings in addition to net government transfers in P10 to P50 households, 1979–2005



Notes: The countries are ordered according to average yearly increase in income in P10 to P50 households. The actual years vary somewhat depending on the country. The data are averages for size-adjusted household earnings and net government transfers (cash and near-cash transfers received minus taxes paid). The amounts shown are for a household with four persons; for a one-person household, divide by two. Incomes are adjusted for inflation using the CPI and converted to US dollars using purchasing power parities (PPPs). Source: Resolution Foundation calculations from Kenworthy, L., *Why Do Low to Middle Income Households Get Better Off?*, calculations using income data from the Luxembourg Income Study Database and inflation and PPP data from the OECD

[9] German Institute for Economic Research, (2009), *Real Wages in Germany: Numerous years of decline*, German Institute for Economic Research Working Paper No. 28/2009; Sharpe, A., Arsenault, J.-F. and Harrison, P., (2008), *The Relationship Between Labour Productivity and Real Wage Growth in Canada and OECD countries, 1961–2006*, Centre for the Study of Living Standards, Ottawa. [10] Low income defined as households between the 10th and 25th percentile of the household income distribution. Modest income defined as households between the 25th and 50th percentile.

3c The importance of shared growth

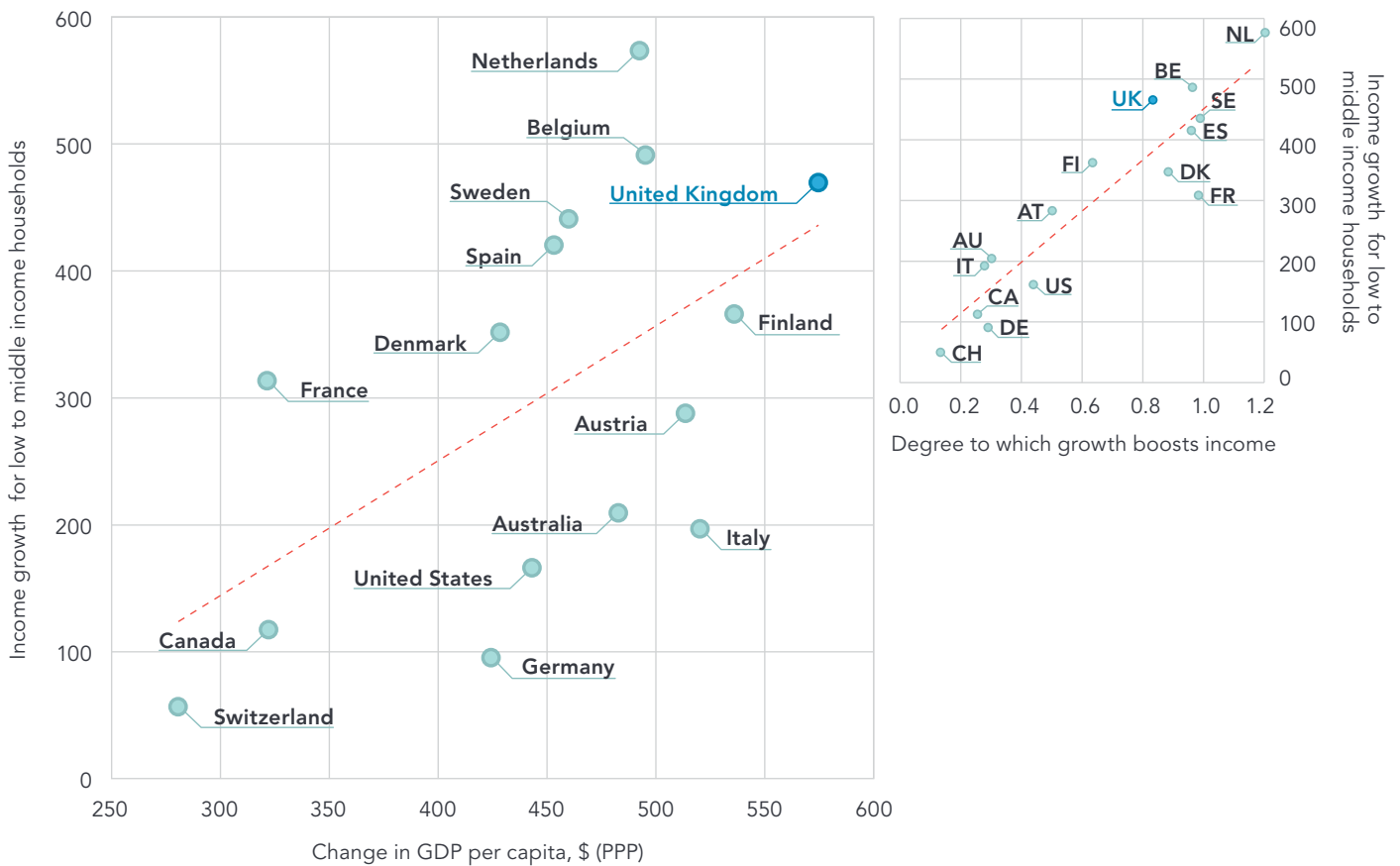
Importantly, these trends were explained more by the shape of growth than by its level.^[11] Figure 3.3 shows the relationship between GDP growth and income growth for low to middle income households. The fact that the line slopes upwards (as one would expect) that countries that grow faster also tend to see greater income growth for low to middle income households.

Yet the fit of the points around the line is relatively weak. This shows that while the overall level of growth clearly matters, it is not a particularly strong explanation for why low to middle income households get better off over time. Some countries grow fast and serve ordinary

working households quite badly, while others grow slowly but serve this group well. In this long period from the late 1970s to the early 2000s the UK performed well, particularly in its level of GDP growth.

Rather than the level of growth, it is the shape of GDP growth that matters most for low to middle income households. As one would expect, when we plot a measure that captures this (how much of each part of growth reaches low to middle income households) against income growth for the group, the fit of the points around the line is much tighter. Again, the UK performance looks relatively robust when averaged over this long period (stopping in the early 2000s).

Figure 3.3: Relationship between GDP per capita growth and income growth for low to middle income households (left) and a measure of the shape of growth (right), UK, US and other countries, 1979-2005



Notes: See Figure 6.2. “Shape of growth” relates to the extent to which growth raises incomes. In technical terms, it is represented by the slope from a regression of change in household income on change in GDP per capita. Ireland and Norway are excluded from data since both are extreme outliers in this period. Source: Calculations by Lane Kenworthy using income data from the Luxembourg Income Study Database and inflation and PPP data from the OECD

[11] This point is explained in greater detail in Kenworthy, L., (2011), *Why Do Low to Middle Income Households Get Better Off?*, Resolution Foundation, London.

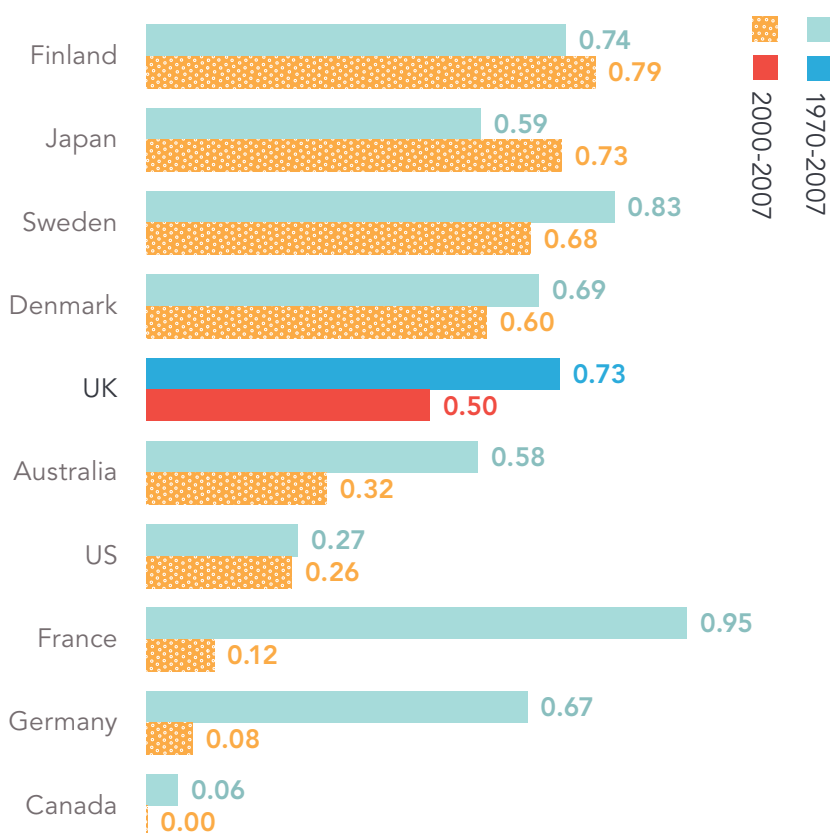
3d The central role of labour market outcomes

Before we go on to examine the UK in more detail in the next section, it is worth looking briefly at the more specific question of earnings growth (before taxes and benefits) to compare how labour markets in different countries affect the link from growth to personal gain.

One useful measure of the effectiveness with which economies share growth is the relationship between economic growth and growth in median wages. In the most recent decade, median wages grew less quickly

than economic output in all 10 countries we have studied^[12] (Figure 3.4). This fact is remarkable when we consider that for much of the 20th century earnings distributions compressed over time, with median wages outpacing overall growth. The magnitude of this decoupling in the UK has again been broadly in the middle of that for other countries, with median pay growing at about two-fifths of the rate of GDP per capita compared with four-fifths for Finland, and no growth at all for Canada.

Figure 3.4: Ratio of average annual growth in median pay to average annual growth in GDP per capita, UK, US and other countries, 1970–2007 and 2000–2007



Notes: Ratios below 1 indicate that wages have grown more slowly than output. 2007 is used as the end-point in order to remove the temporary effects of the recent recession. Exceptions are Germany and Finland, where 2008 is used because the recession did not start until the following year in those countries. Sources: OECD Stat; Statistics Sweden; French data provided by Laurence Rioux, INSEE. For more detail on data sources, see Whittaker, Painful Separation^[13]

[12] See Whittaker, M., (2011), *Painful Separation: An international study of the weakening relationship between economic growth and the pay of ordinary workers*, Resolution Foundation, London. [13] Ibid

Again we see big variations in the magnitude and persistence of the breakdown in the relationship between growth and gain. Looking back over the 37 years from 1970 to 2007, countries fall into three broad groups:

- Countries including the US, Australia and Canada, where there has been a pronounced and long-term divergence between economic growth and median wages;
- Countries such as the UK, France and Germany, where the breakdown between median wages and growth is more recent but still severe;
- Countries including Finland, Japan, Denmark and Sweden, where the breakdown in this relationship is recent and mild, in Japan's case because growth itself has been weak.

Most countries have a declining “wage share” and rising wage inequality

What explains these variations? Breaking down the relationship between economic output and median wages into three steps – the split between the labour and capital share, between wages and other non-wage compensation and, finally, the distribution of wages – we find that some patterns emerge:

- There has been a decline in the share of economic output going to labour in most countries, but this has been more severe and consistent over time in the US,

Australia and Canada, while the reverse has happened in countries with stronger performance. Until recently the labour share in the UK had held up well, so it has performed comparatively strongly in the long term.

- The share of employee rewards being paid as wages has fallen in all countries, associated in particular with rising employer contributions to pensions and social security programmes. Rising non-wage costs appear to be a fact of life in most advanced economies, including the UK.
- Inequality in the distribution of pay has increased in all countries. However, this inequality was higher and more likely to increase over the period as a whole in some countries, notably the US and the UK, although growth in inequality slowed markedly in the UK from the mid-1990s.

If we split out these trends in the UK into separate time periods we see how much these patterns have changed over time (Figure 3.5). From 1980 to 1989, the ratio between GDP growth and median wage growth was 0.95, with each 1 per cent increase in GDP associated with a 0.95 per cent increase in median pay. By 1990 to 1999, this figure had fallen to 0.91, and by the 2000 to 2007 period it had fallen to the 0.50.^[14] Almost all of the growth identified in the UK from 2000 to 2007 came in the first three years of the period.

Figure 3.5: The relationship between median wages and GDP growth in the UK, 1980-89, 1990-99 and 2000-07



Notes: Figures show the ratio of average annual growth in median pay to average annual growth in GDP per capita. Figures below 1 indicate that wages have grown more slowly than output. Source: Whittaker, *Painful Separation*^[15]

3e Conclusion

This chapter has put the UK's recent performance into international perspective. While in the closing two decades of the 20th century the UK appeared to be a strong performer, recently this performance has fallen down the rankings. The UK labour market is now particularly poor at distributing the proceeds of growth, leaving the tax and benefit system to do more work.

The next section of the report situates the warning signs of the 2003–2008 period in a longer-term context to explain in much more detail why low to middle

income households got better off over time up until 2003. There are three ways in which low to middle income households can get better off: their wages can grow, employment and/or working hours can go up, or the state can do more to boost their incomes (whether through tax cuts or cash transfers). We spend a chapter on each of these three drivers in turn, looking at the effect they have had in Britain. The analysis demonstrates that, although the UK seemed to perform well for a time, we have long been storing up trouble.

[14] Shorter time period chosen to pre-date effects of recession beginning in 2008. See Whittaker, *Painful Separation*, p. 10. [15] Whittaker, *Painful Separation*.

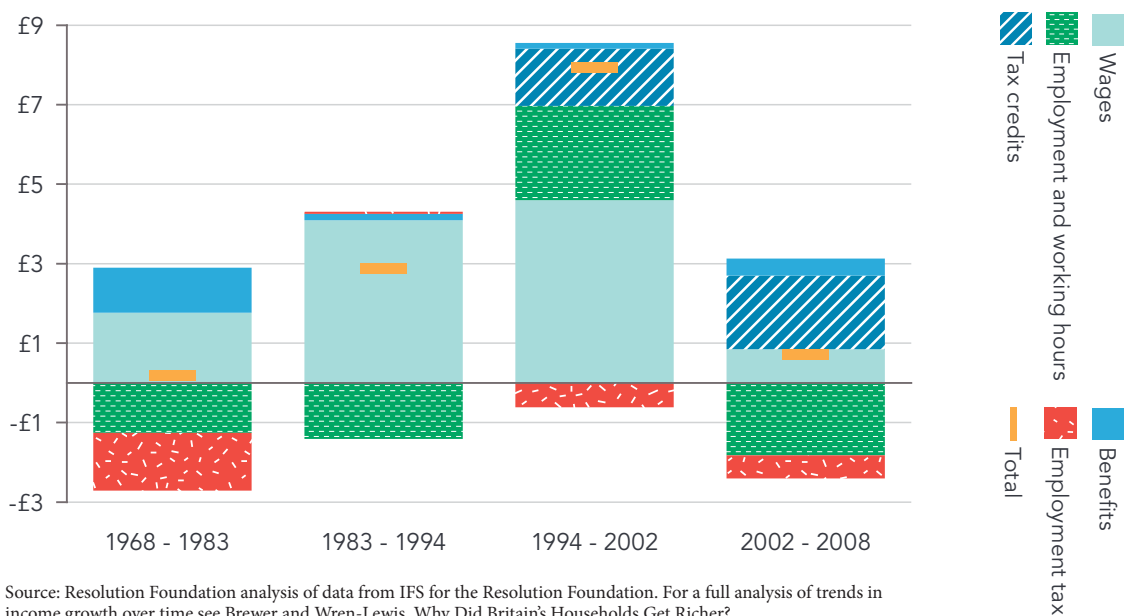
Why do low to middle income households get better off over time?

Before looking at each key driver of income growth in turn, we look briefly at how they line up next to each other. As we have said, incomes grow for three reasons: wages grow in real terms, employment or working hours rise or fall, and help from the state, in the form of tax credits, benefits and taxes, becomes more or less generous. Figure 4.1 shows how much each of the drivers of income growth has contributed over time.^[1]

As one would expect, Figure 4.1 confirms that by far the most important source of prosperity

for ordinary working households is rising hourly wages. When hourly wage growth is weak, as in the turbulent 1970s, household incomes struggle to grow. When wages rise strongly, as they did in the 1980s and late 1990s, prosperity rises on the back of that growth. Because around four-fifths (78 per cent) of workers in low to middle households are in the bottom half of the wage distribution, earning less than £26,200 a year before tax, it is wage growth in the bottom half of the workforce that is of paramount importance.^[2]

Figure 4.1: Growth in UK household income by source, £ per week, low to middle income households



Source: Resolution Foundation analysis of data from IFS for the Resolution Foundation. For a full analysis of trends in income growth over time see Brewer and Wren-Lewis, *Why Did Britain's Households Get Richer?*

Figure 4.1 also shows the importance of changes in overall employment levels and working hours. Dividing up the late 20th century as we have in Figure 4.1 employment and working hours were only a positive force for these households during the tight labour market of the late 1990s. In every other period they reduced incomes – employment levels or working hours fell on average. This shows the extent to which low to middle income households are on the front line of our labour market, among the first to suffer from job losses or reduced working hours when the economy goes through a weak patch. From 1994 to 2002, wage growth and employment worked together, delivering eight prosperous years.

Finally, state support has been vital. When put in this longer-term context the 2003 to 2008 period stands out starkly as a time when state support was the only source of income growth. Working people in low to middle

income households barely saw any growth in their hourly pay over this period. Meanwhile, employment in these households fell on average, dragging down incomes, leaving tax credits to assume centre stage. While in the late 1990s and the start of the 2000s tax credits had played a healthier role of augmenting income growth, turning good growth into even stronger growth, after 2003 they became the *only* major source of income growth. In fact, even with tax credits, incomes barely grew.

The plan for Section 2

We have seen that the long-term drivers of income growth in low to middle income Britain are wage growth in the bottom half of the wage distribution, employment and state support. We now look at each of these in turn to set the 2003 to 2008 period in a longer-term context

[1] Brewer and Wren-Lewis, *Why Did Britain's Households Get Richer?* [2] 2011 annualised gross median weekly earnings for full-time employees, *Annual Survey of Hours and Earnings*.

and to help us understand more clearly what lies behind these important sources of prosperity. We find worrying evidence that these three motors of living standards have faltered.

In **Chapter 4** we examine the falling share of GDP that is reaching wages in the bottom half of the wage distribution. We ask how much Britain's performance owes to structural changes over which policymakers have relatively little influence – such as technological change and globalisation – and how much it owes to a failure to shape these factors through domestic policy choices.

In **Chapter 5**, we look at the distribution of employment. Which groups have been most important for low to middle income households and look likely to

be most important in future? Have these groups now reached a natural plateau in employment in the UK or is there room for improvement? Are there particular groups that would like to work more but that face particular barriers?

Finally, in **Chapter 6** we consider the role that state transfers have played in supporting household income growth over time. As we have seen, state transfers were the principal source of income growth between 2003 and 2008. Now fiscal constraints mean that the government has much less freedom to compensate for weak earnings growth in the bottom half of the wage distribution through the tax and benefit system. We discuss some of the strategic questions this poses.

{Section 2}
**The long view: Tracking
the long term drivers of
living standards**

Chapter 4
**The decline of
broad-based wage
growth**

Chapter summary

- Growth in median wages has fallen behind growth in average productivity over time.
- More than half of this divergence is explained by wage inequality; just 12 pence of every £1 of GDP growth now goes to wages for the bottom half of the workforce.
- With top earners capturing an unusually large share of wages, the UK has to grow more than other countries to deliver the same gains for ordinary working people.
- The UK stands out for the large scale and poor quality of low wage work, with one in five workers paid below the Living Wage, hitting part-time workers and women in particular.
- Britain’s underperformance owes much to chronic skills shortages in the bottom half of the workforce, poor management and weak labour market institutions.
- Together these factors add up to an economic model that encourages low-paid business strategies, with a heavy cost to government of as much as £4 billion a year.

This chapter tells the bigger story of changes in the link between growth and wages. This relationship is the key to sustained growth in living standards. It has long been assumed that employees become more productive over time and that their pay rises automatically on the back of this productivity growth. Now, the link from productivity to pay has

weakened for several reasons, fundamentally eroding the benefits of growth for ordinary working people. As we will see, this is a tough trend to reverse, but not one beyond our control. It arises from key characteristics of Britain’s workforce and jobs market, and also from the fact that the UK economic model encourages low-skilled, low-paid business strategies.

4a Productivity and pay in the UK

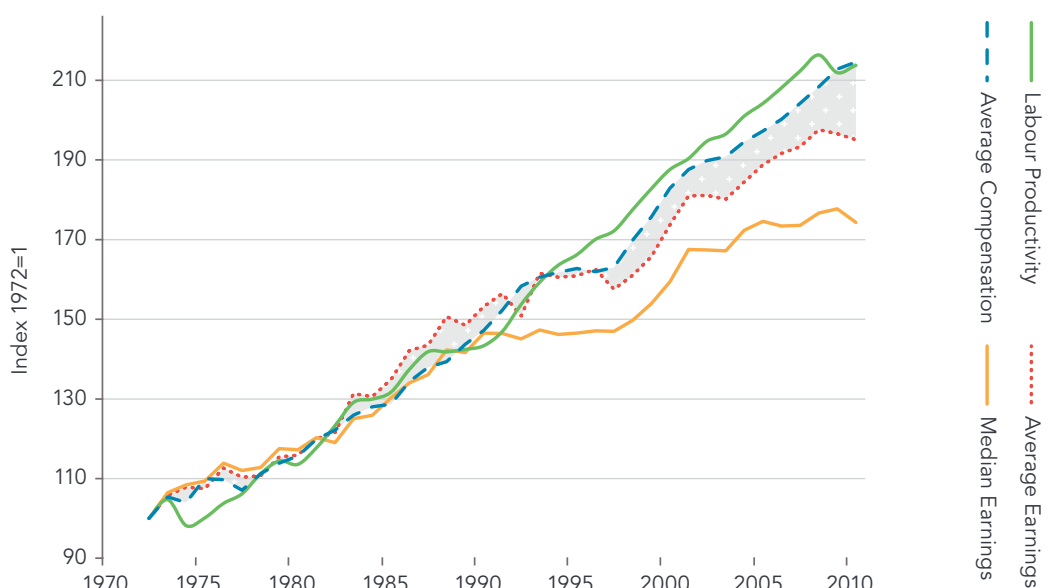
A number of wedges have driven apart productivity and median pay in recent decades^[1]

Research for the Commission by Professor John van Reenen gives new insights into the relationship between productivity and pay. We saw in Figure 2.3 that the gap between median wages and GDP had widened over time. Figure 4.1 confirms that stagnation during the 2003–2008 period is only part of this story. The data it displays also allows us to work through, step by step, the wedges that have driven productivity and pay apart. They help us to better understand one of the key reasons that growth no longer leads automatically to rising living standards.

The gap between productivity and pay reflects a longer-term fall in the “wage share”

The first two wedges between productivity and pay are familiar because they relate to our discussion of the labour share and wage share in Chapter 2. In Figure 4.2, the gap between labour productivity (the top line) and average compensation (the second line) reflects the part of productivity growth that doesn’t feed through to workers – in other words, changes in the share that is retained as profits. We have already seen that labour’s share of national income relative to profits declined in the early 2000s and

Figure 4.2: UK trends in hourly earnings and labour productivity, 1970–2010



Notes: UK data is controlled for the GDP deflator. Includes employees and self-employed. All data is hourly and it controlled for the GDP deflator. Source: Analysis from Pessoa and Van Reenen, Decoupling of Wage Growth and Productivity Growth?; ONS, GHS, LFS and ASHE

[1] As Lawrence Mishel has put it in reference to the US economy: “The conventional notion that increased productivity is the mechanism by which living standards increases are produced must be revised to this: Productivity growth establishes the potential for living standards improvements and economic policy must work to reconnect pay and productivity.” <http://www.epi.org/blog/understanding-wedge-productivity-median-compensation/> [Last accessed 3 October 2012]

that the 2008-09 recession brought the two back into line. Now we see that, before the crisis, changes in the labour share explained one-fifth of the gap that had opened up between productivity and pay since 1972.

Second, the dotted section of the chart shows the gap between average compensation (the second line) and average pay (the third line down). This is made

Wage inequality has been by far the biggest wedge between productivity and median pay

squeezing the amount left over for pay. Now we see that this gap is quite sizeable, opening widest in the late 1990s and early 2000s, and in 2008 accounting for over a quarter (27 per cent) of the gap between productivity and pay.^[2]

The skew of wages away from the bottom half of the wage distribution has had by far the biggest impact

The most striking lesson from this longer-term perspective is the size of the gap between average pay

(the third line) and median pay (the bottom line). Because median pay is the pay of the middle employee while mean pay is total pay divided by the number of employees, the latter is pulled up by rising pay at the top while the former is not. The growing gap between median pay and average pay is therefore explained by rising wage inequality, which has been by far the biggest wedge between productivity and median pay, growing substantially since the mid-1980s as wage growth has become more skewed towards the top. By 2008 it accounted for more than half (53 per cent) of the productivity and pay gap that had opened up since 1972.

The increase in inequality that occurred from the mid-1980s to the mid-1990s has made the UK economy less effective at sharing out the proceeds of growth. The gap between median and average pay widened from 14 per cent in 1975 to 20 per cent in 1985, to 27 per cent in 2010. The high level of inequality means that growth is hitched less tightly to pay in the bottom half of the wage distribution, making it harder to deliver on the basic promise that the earnings of those in ordinary working households should rise over time broadly in line with economic growth.

[2] It is also notable that from 2008 to 2010 it almost doubled in size, as wages proved far more sensitive to the downturn than overall compensation.

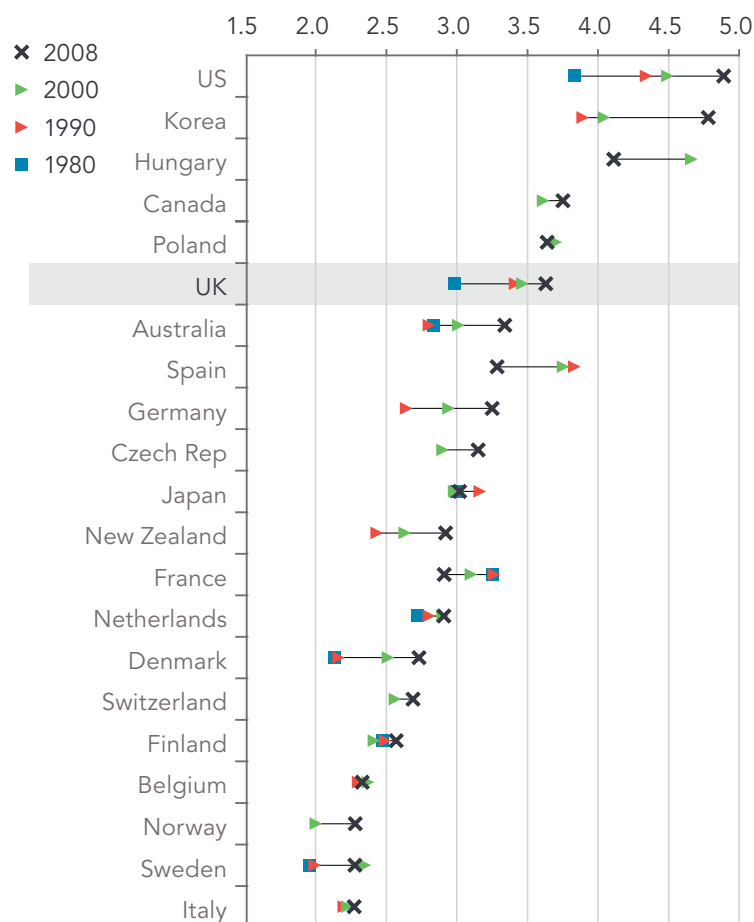
4b Inequality across advanced economies

Broad-based wage growth has declined across the OECD

Britain's economy now has to work harder than it used to – and, as we will see, harder than other countries – in order to deliver the same growth in living standards for ordinary working people. Of course strong productivity growth remains vital, but the UK must also do better than we have done recently at sharing the resulting growth broadly.

What lies behind the unusually large increases in wage inequality in the UK? Certainly the UK was not alone: the final quarter of the 20th century was a period of rising inequality across the developed world (Figure 4.3). The average Gini coefficient in the OECD – a measure that ranges from 0 at full equality to 1 when all earnings go to one person – rose from 0.29 in the mid-1980s to 0.316 by the late 2000s, rising in 17 out of 22 OECD countries.^[3]

Figure 4.3: International growth in wage inequality by decade, OECD; ratio between the top and bottom 10 per cent of the full-time weekly earnings distribution*



Notes: Wage dispersion: D9/D1 ratios of full-time earnings: the ratio of the wages of the 10 per cent best-paid workers to those of the 10 per cent least-paid workers. *Earnings data annual in some cases. Source: OECD earnings database

Wage inequality rose far faster and much earlier in some countries than in others but by now no country seems immune. Indeed, some of the largest increases in recent years have taken place in countries with historically very broad-based earnings growth, most notably Sweden and Denmark.

Some common factors underpin this widespread rise in wage inequality

It is also important to note that the rise in inequality changed shape over time. In the earlier period, inequality took the form of a fanning out of earnings across the whole of the distribution. Later, particularly in the UK but also on average across OECD economies, inequality stopped rising within the bottom half of the distribution but continued to rise in the top half. A general fanning out became a detachment of the top – and in particular the top 1 per cent or 0.1 per cent – from the rest, as the bottom half of the workforce (and low and middle income households) were left behind. This stark and widespread growth in wage inequality has led to a sophisticated academic and policy literature. It points to several global trends that have skewed wage growth towards the top across the developed world:^[4]

- New technologies have raised demand for higher skilled workers relative to workers with low or intermediate skills. This has increased pay gaps between different jobs and changed the type of jobs that are created. Lately, it has pushed advanced economies to create both more highly paid and more poorly paid jobs. Meanwhile, middle-skilled jobs, dominated by low to middle income households, have declined as a share of overall employment (see In depth 4.1).
- There has been an erosion of regulations and institutions that used to buttress the negotiating power of workers in the bottom half of the wage distribution, most centrally the declining coverage of collective union agreements. This has tilted the balance of power towards employers and has done so particularly in service sectors where union membership is lowest. These sectors now make up a large and growing share of employment, particularly in low to middle income households.
- The globalisation of trade has had a more complex effect. While upsides from increased financial openness have created more good jobs, for example through inward investment, these have been balanced by downsides, such as increased pressure on low-skilled (and increasingly middle-skilled) labour costs from emerging markets.
- There has been a widespread reduction in high marginal income tax rates. These have not just increased income inequality (by cutting tax bills for the highly paid) but have also boosted wage inequality by incentivising high earners to work longer hours. This is important because rising earnings inequality has been driven in large part by a

[3] OECD, *Divided we Stand*, p. 22. The Gini coefficient is calculated by plotting a cumulative contribution curve for earnings or income across a given population (this line is known as the Lorenz curve). Plotted in the same way, a straight line at 45 degrees would represent total equality (in which every additional person adds the same amount to total earnings or income). The Gini coefficient is the area between the Lorenz curve and the line of total equality divided by total area under the line of equality.

[4] See OECD, (2011), *Divided We Stand: Why inequality keeps rising*, Organisation for Economic Co-operation and Development, Paris, p. 112, for a detailed analysis of these different drivers. See also Atkinson, A. B., (2008), *The Changing Distribution of Earnings in OECD Countries*, Oxford University Press, New York.

[5] OECD, *Divided we Stand*, p. 178.

growing divide between long hours, well-paid jobs at the top and badly-paid, part-time jobs at the bottom.^[5]

All in all, these trends suggest a labour market in which workers in the middle, and not just at the bottom,

are increasingly vulnerable. The key question for our purposes is whether these trends have been ameliorated or magnified by the UK domestic policy and social environment.

In depth 4.1: Has the UK labour market really polarised?

A key concern among labour market economists is the shape of jobs growth over time. Are modern economies creating good jobs or bad jobs and what does this mean for the distribution of pay? Until the 1990s economists broadly agreed that the march of technological progress would simply create ever better jobs. New inventions would lead to lower skilled roles gradually being automated while new, higher skilled roles were created in their place.

This theory – a kind of race between skills and technology – rested on the view that technical change is “skill-biased”.^[6] Then, in the 1990s and 2000s, it turned out that patterns of job creation in the UK (and in most other developed economies) were proving more complex. Technology has certainly proven skill-biased in some ways, with millions of jobs created at the top in knowledge sectors like finance and consultancy. But employment has also grown at the bottom in low-paid sectors like retail and social care. Meanwhile, mid-level jobs in administration and skilled manufacturing have been in decline. Figure 4.4 shows the change in the proportion of UK employment in each job quality decile between 1979 and 2008.

This has led to a theory of labour market polarisation and the modern “hourglass labour market”, fat at the top and bottom and squeezed in the middle.^[7] The key realisation that lies behind this way of thinking is that new technologies are not skill-biased but ‘task biased’: they don’t replace the lowest paid or the lowest skilled but workers carrying out routine tasks that can be automated.^[8]

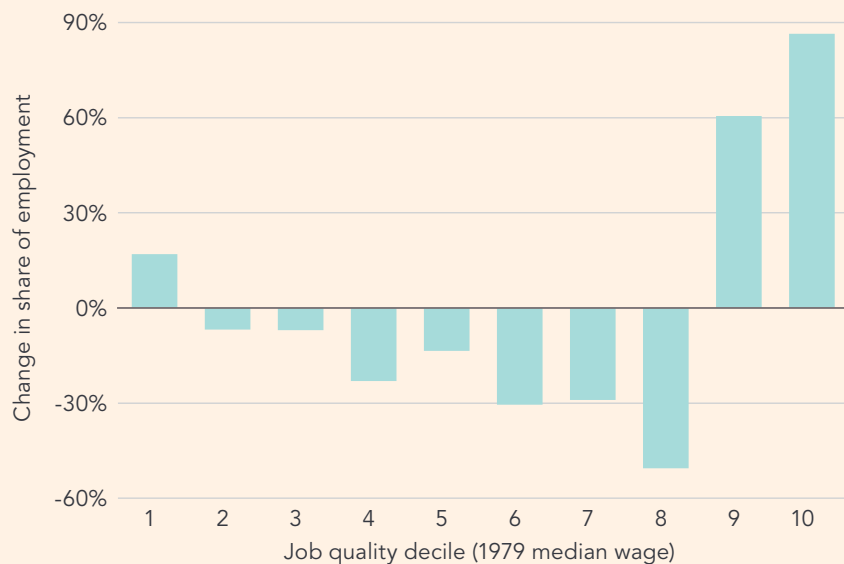
These are very different things, first because there are lots of low-paid people doing non-routine tasks like providing care for the elderly, and second because there are lots of fairly well-paid tasks – like cashing cheques – that are automatable when technology is sufficiently advanced.

The result is that, rather than facing a future of ever better, higher skilled jobs, the UK now faces a future of fewer jobs in the middle and more at the bottom and top. Research for the Commission confirms these findings but adds an important nuance: growth in some top jobs can be explained by job title inflation.^[10] For example, although the UK now has more retail managers, the proportion of these managers earning less than £400 a week is up from 37 to 58 per cent since 2000.

Some good jobs – particularly in knowledge sectors – still pay well. But other roles that sound like good jobs don’t pay as well as they used to (in relative terms).

What does this all mean for policy? The biggest implications are for skills. If new technologies create ever better jobs, then all government needs to do is deliver an ever more skilled workforce. But if good jobs don’t come naturally there may be a bigger role for government in encouraging their creation. It also becomes more important for people in the declining middle to be able to break into growing roles at the top. Meanwhile, new skills might not be enough for those in low-paid jobs. Public authorities may need to work more actively, or encourage work from others, to make bad jobs better, creating new career ladders or raising pressure on employers to invest in training and pay more when they can afford it.

Figure 4.4: Change in proportion of UK employment in each job quality decile, 1979–2008



Notes: Share changes are for the entire period. Job quality is measured via median wage within each occupation in 1979. Source: Mieske, “Low-skill Service Jobs and Technical Change”^[9]

[6] For an account of the 20th century as the “human capital century” see Goldin, C. and Katz, L., (2008), *The Race Between Education and Technology*, Belknap Press. [7] See for example Goos, M. and Manning, A., (2007), “Lousy and Lovely Jobs: The rising polarization of work in Britain”, *Review of Economics and Statistics*, 89 (1), pp. 118–133; Autor, D. et al., (2003), “The Skill Content of Recent Technological Change: An empirical exploration”, *Quarterly Journal of Economics*, 118 (4), pp. 1279–1333; Sissons, P., (2011), “The Hourglass and the Escalator”, Work Foundation, London. [8] For a more recent account of “task biased technical change” see Acemoglu, D. and Autor, D., (2010), “Skills, Tasks and Technologies: Implications for employment and earnings”, NBER Working Paper No. 16082, National Bureau of Economic Research. [9] Mieske, K., (2009), “Low-skill Service Jobs and Technical Change”, unpublished MSc dissertation, University College London. [10] Holmes, C. and Mayhew, K., (2011), *The Changing Shape of the UK Job Market and its Implications for the Bottom Half of Earners*, Resolution Foundation, London.

4c How the UK stands out – the high level of low pay

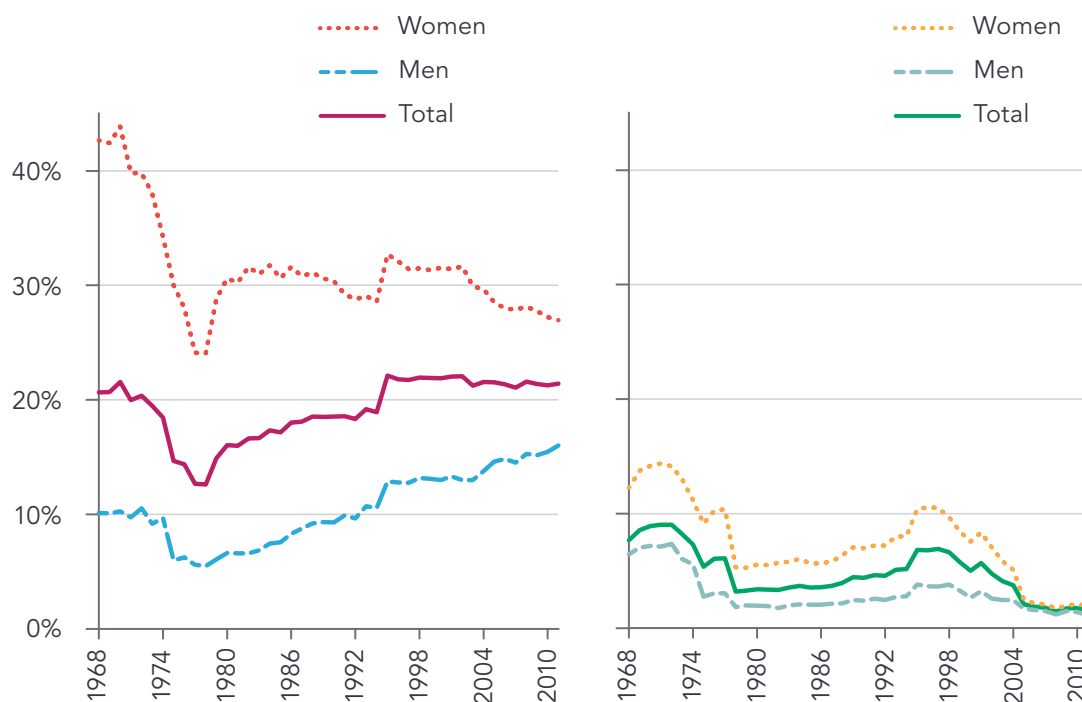
Low pay is key to understanding how the UK fits into broader labour market trends. The UK stands out not only for having had faster growth in inequality than most other countries, but also for the nature and quality of its low wage work. More than one in five UK employees earns less than two-thirds of median hourly pay, compared to fewer than one in 10 (8 per cent) in Denmark. The UK has the second highest level of low pay among advanced economies, behind the US.^[11]

Figure 4.5 puts the overall incidence of low wage work in the UK into historical perspective, showing the proportion of UK employees paid below two-thirds and below one-half of median pay between 1968 and 2010. It shows that the incidence of low wage work declined rapidly in the early 1970s, with women making particularly rapid progress.^[13] Then low pay grew steadily until the mid-1990s, rising more contin-

uously for men, from just above 5 per cent in 1978 to 16 per cent in 2011.^[14] Figure 4.5 also highlights the near abolition of pay below 50 per cent of median pay from 1997, as employers adapted to the forthcoming introduction of the National Minimum Wage in 1999.

The scale of low pay in the UK cannot be separated from the growth of work in service sectors. In the past 20 years low-paid personal service roles have expanded across the world's advanced economies, driven mainly by higher consumption but also by social and demographic shifts.^[15] The populations of ageing societies require more care while the rise of households in which all adults work has meant that some tasks formerly carried out in the home, from childcare to cooking, are now paid for (badly) in the market.^[16] These sectors, delivering hands-on services from retail to health to hotels and restaurants, now dominate the UK's large low wage labour market (Figure 4.6).

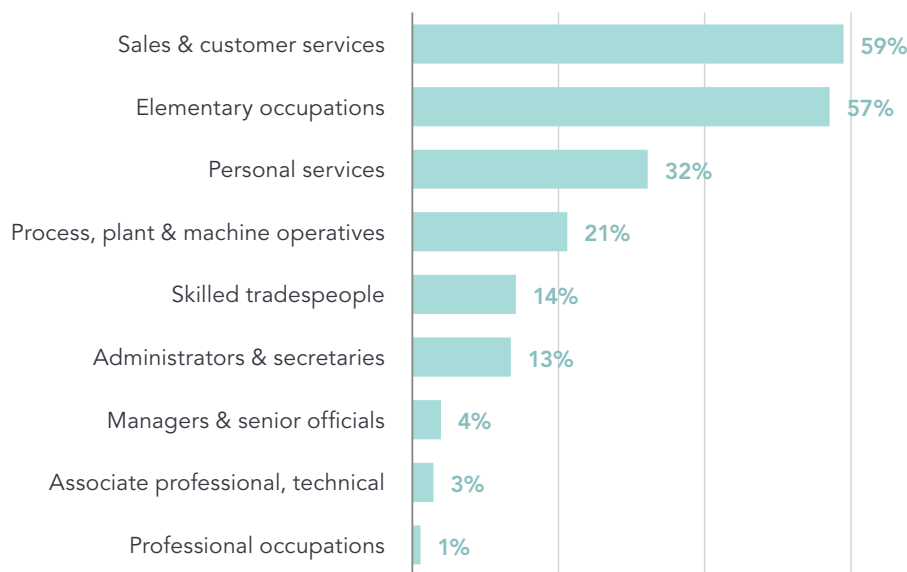
Figure 4.5: Percentage paid below two-thirds (left) and half (right) median pay, UK, 1968–2010



Notes: Hourly pay for all employees (including full- and part-time). Figures are drawn from three separate data sources. Where these sources overlap, differences exist in the proportions of employees reported to be below the various low pay thresholds. Figures before 1997 have been adjusted to account for the magnitude of difference recorded in these overlapping periods, in order to create a consistent time series. The original, unadjusted, data is presented in Pennycook and Whittaker, (2012) "Low Pay Britain 2012".^[12] Sources: Resolution Foundation analysis of DWP, FES (1968–1981); ONS, New Earnings Survey Panel Data (1975–2010); and ONS, ASHE (1997–2011)

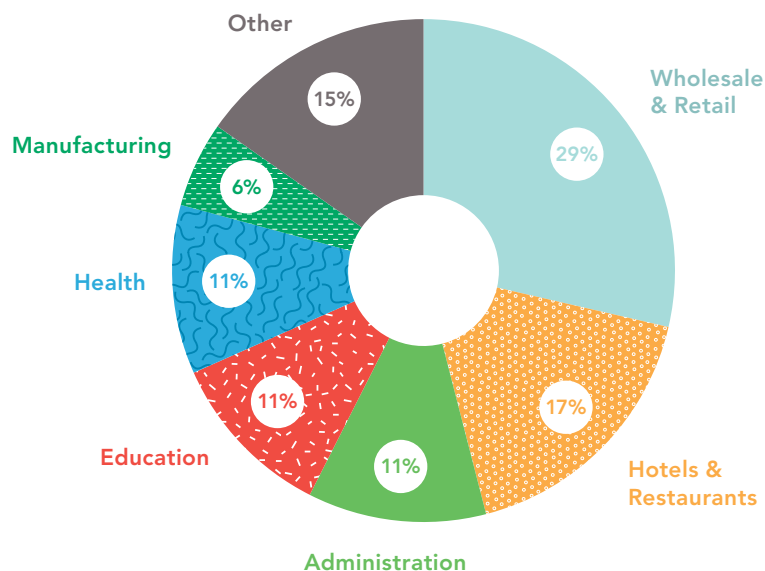
[11] Gautié, J. and Schmitt, J. (eds), (2009), *Low Wage Work in the Wealthy World*, Russell Sage. [12] Pennycook, M. and Whittaker, M., (2012) *Low Pay Britain 2012*, Resolution Foundation, London. [13] It is hard to determine precise causes for the precipitous fall in low pay among women in the 1970s but the impact of the Equal Pay Act of 1970 and the incomes policies of the 1974–1977 government, which had a positive effect on the earnings of the lowest paid (then, as now, predominantly women), are likely explanations. [14] The brief period of sharp growth in 1994 and 1995 is likely to be the result of the abolishment of the remaining wages councils in the Trade Union Reform and Employment Rights Act of 1993. [15] See the series of working papers from the DEMPATEM research project (2001–2004), Schettkatt, R. and Salverda, W. (2004), *Demand Patterns and Employment Growth, Consumption and Services in France, Germany, the Netherlands, Spain, the United Kingdom and the United States*, Amsterdam Institute for Advanced Labour Studies, Amsterdam, <http://bit.ly/UrFUZM> (accessed 1 October 2012). [16] *Ibid.*, p. 75

Figure 4.6(i): Low pay by sector in the UK: percentage of people paid below the Living Wage by occupation, 2011



Notes: Data covers all employees on adult rates of pay who have not had their pay affected by absence in the time covered. Industry categories correspond with SIC 2007 and occupation categories correspond with SOC 2000. Figures for 2011 are based on Living Wage rates of £8.30 in London and £7.20 in the rest of the country. Source: Resolution Foundation analysis of ONS, ASHE. See Pennycook and Whittaker, *Low Pay Britain 2012*

Figure 4.6(ii): Low pay by sector in the UK: percentage of people paid below the Living Wage by and sector, 2011



Notes: Data covers all employees on adult rates of pay who have not had their pay affected by absence in the time covered. Industry categories correspond with SIC 2007 and occupation categories correspond with SOC 2000. Figures for 2011 are based on Living Wage rates of £8.30 in London and £7.20 in the rest of the country. Source: Resolution Foundation analysis of ONS, ASHE. See Pennycook and Whittaker, *Low Pay Britain 2012*

The rise of low paid service roles is key to living standards in the bottom half of the UK labour market because although these occupations are generally of poor quality in all countries, they are much more strongly associated with low pay in the UK.^[17] International comparisons show

that jobs in these sectors in the UK are designed to be lower paid than they are in other countries.^[18] In addition, Britain's personal service employees are paid less than in other countries even for carrying out identical tasks, for example in fast food restaurants with consistent job design.^[19]

[17] See Mayhew, K. and Salverda, W., (2009), "Capitalist Economies and Wage Inequality", *Oxford Review of Economic Policy*, 25 (1), pp. 126–154. [18] For example, shop assistants in Germany are more likely to take responsibility for a section of the store through a combination of buying, layout and customer assistance, while in the UK these functions are more often broken down into specialised tasks, with checkout assistants performing a narrow function and being poorly paid as a result. [19] For the most detailed sectoral and international analysis of low wage work see the multi-volume Russell Sage Foundation series, *Low Wage Work in the Wealthy World* (2006). [20] Manning, A. and Petrongolo, B., (2004), "The Part-time Pay Penalty", London School of Economics and Centre for Economic Performance. See also Mayhew and Salverda, "Capitalist Economies and Wage Inequality", p. 133.

In part for this reason, the pay penalty for part-time work – which is dominated by these sectors – is far higher in the UK than in most other advanced economies.^[20] One other costly implication of these sectoral patterns is that the risk of low pay among women is higher in the UK than in any advanced economy aside from Germany, a fact that has become all the more important as women have come to make up a larger share of overall employment.^[21]

When jobs in these personal service sectors expand, the UK struggles more than other countries to provide people with decent, fulfilling work

Increasingly these non-traded portions of the labour market have become a barometer for the effect that a country's institutions have on job quality and pay. While pay has converged between traded goods sectors in advanced economies, the character of non-traded service roles varies substantially. These occupations, in sectors from social care to retail, are already dominated by households on low to middle incomes and are growing – extremely fast in the case of social care. As we will see in Chapter 7, by far the largest employment growth sector for this group in the next decade is set to be health and social care. When

jobs in these personal service sectors expand, the UK struggles more than other countries to achieve broad-based growth and to provide the majority of people with decent, fulfilling work.

The high cost of low pay

The scale of low wage work in the UK links directly to a model in which the state plays a big role in supporting living standards. Low pay results in substantial direct costs for government through in-work cash transfers and lost tax revenues. Estimating the scale of these costs is difficult. The best modelling to date focuses only on the direct, mechanical benefits and costs of raising the minimum wage to the Living Wage in 2010, (the least hourly pay that is needed to provide a minimum acceptable standard of living).^[22] Under this scenario government revenues would increase by between £6.8 and £7.3 billion as a result of reduced benefit and tax credit spending and increased income tax and National Insurance receipts. Some of these savings would be cancelled out by increased spending on public sector wages of between £3.2 and £3.4 billion. This leaves an overall gain in the region of £3.4 to £4.1 billion, though these costs depend heavily on the assumptions made and are likely to be at the upper end of the range.^[23]

[22] Institute for Fiscal Studies, (2010), *Untitled analysis into the fiscal costs of the living wage*, IFS, London. The Living Wage in 2011 is £8.30 in London and £7.20 across the UK. This analysis is based on the earlier 2010 values of the Living Wage at £7.85 and £7.60 respectively. This work will soon be complemented by new figures calculated in a joint project between the Institute for Public Policy Research and the Resolution Foundation. [23] This figure should be taken with significant caveats since it relates to the static impact of a nationally mandated Living Wage on tax and benefit receipts and so does not take into account lost tax revenues that would flow from likely impacts on employment. It is also not a comprehensive figure and does not include, for example, lost revenues from corporation tax as a result of reduced company profits. See IFS analysis, available on request (accessed 24 August 2012). [21] In the 14 countries for which we have data. See Mayhew and Salverda, 'Capitalist Economies and Wage Inequality', p. 134.

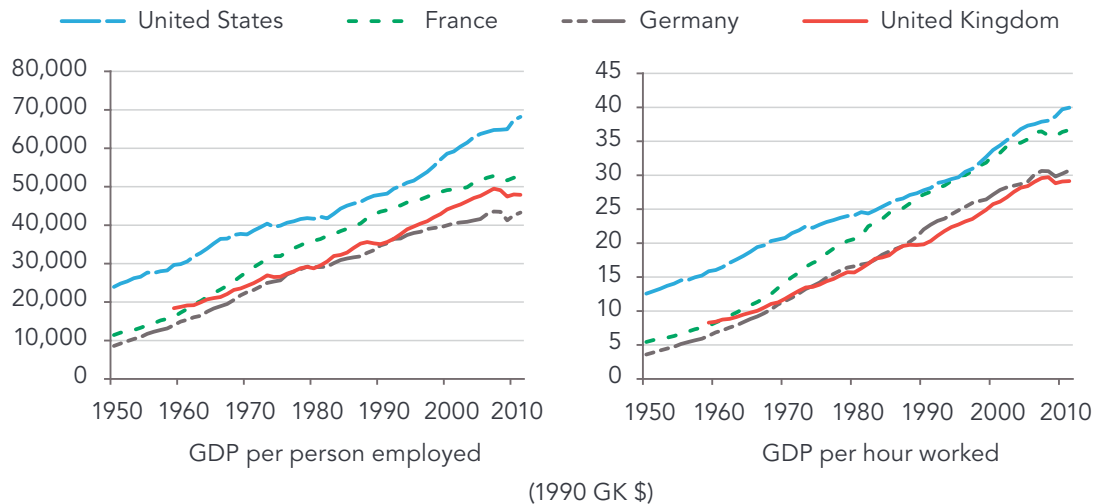
4d Understanding the UK's performance

Aggregate productivity cannot explain these characteristics of the UK jobs market

What is it about the UK social and policy environment that explains why wage growth is skewed toward the top and low pay is pervasive? One issue may be overall levels of labour productivity. Certainly the UK has a persistent productivity gap with our main compet-

itors^[24] (Figure 4.7). But although this gap remains sizeable, it has not widened noticeably in recent years. Indeed, UK productivity outperformed many of our competitors in the pre-crisis period, on the back of solid and broad-based improvements across a range of industries.^[25]

Figure 4.7: GDP per person employed and per hour employed, 1990 US\$ PPP, 1950–2010



Notes: Figures for Germany are not comparable over the full period owing to reunification. Units displayed are adjusted for PPP and displayed as 1990 Geary-Khamis dollars, a method of comparing purchasing power across countries. Source: EU KLEMS

While scoring well on some drivers of productivity, like fundamental research, the UK is poor at others, such as exploiting new ideas commercially.^[26] Business R&D has fallen from 1.6 per cent of GDP to 1.2 per cent since the mid-1980s while staying steady or rising in other countries.^[27] ICT intensity has surged in advanced economies but after rising

strongly in the 1990s it has plateaued in the UK. Finally, because of the varied quality of middle management, the UK wastes some of the productivity-enhancing potential of new technologies, many of which are only realised when employers make complementary investments, for example in skills or workplace reorganisation.^[28]

[24] This gap looks somewhat better when measured by GDP per capita. For a summary of trends in the productivity gap and their explanations see Griffith, R., (2007), "Technology, Productivity and Public Policy", *Fiscal Studies*, 28 (3), pp. 273–291. [25] Corry, D., Valero, A. and Van Reenen, J., (2011), *UK Economic Performance Since 1997: Growth, Productivity and Jobs*, Centre for Economic Performance Special Paper, London School of Economics and Political Science. [26] The UK ranks second only to the US in its academic citations and has a relatively high output of PhDs. See Griffith, "Technology, Productivity and Public Policy". [27] In the US business R&D fluctuates between 2.0 per cent and 1.8 per cent of GDP and in France it has risen from below 1.2 per cent to 1.4 per cent. OECD stat from Griffith, R., "Technology, Productivity and Public Policy". [28] Bloom, N. and Van Reenen, J., (2010), "Why Do Management Practices Differ across Firms and Countries?", *Journal of Economic Perspectives*, 24 (1), pp. 203–224.

4e The weakness of the bottom half

Some of the factors that undermine UK productivity are particularly problematic for the bottom half of the workforce. For example, as ICT intensity has grown, the UK's long tail of poor managers (Figure 4.8) has become more costly as poorly performing companies have wasted the potential of these new technologies.^[29] As a result, the variation in productivity between UK firms has increased.^[30] Because part of this variation in productivity feeds through into wages, this has been a factor in the growing dispersion of wages in the UK labour market – in this case skewing wages towards employees in high performing firms.^[31] Closing the productivity gap between firms would help to boost wages in the bottom half.

The role of unemployment and employment

However, other factors affecting the distribution of wage growth have been more important than the productivity gap. One of the most important of these is the link between unemployment and real wages. Evidence shows that high unemployment constrains wage growth while a tight jobs market tends to produce higher wage growth.^[33] This is partly because unemployment reduces workers' power to negotiate pay rises. It is also because people are more likely to hold onto an existing job when competition for new jobs is strong. Because job switching is the main way people boost their pay in good times, when people

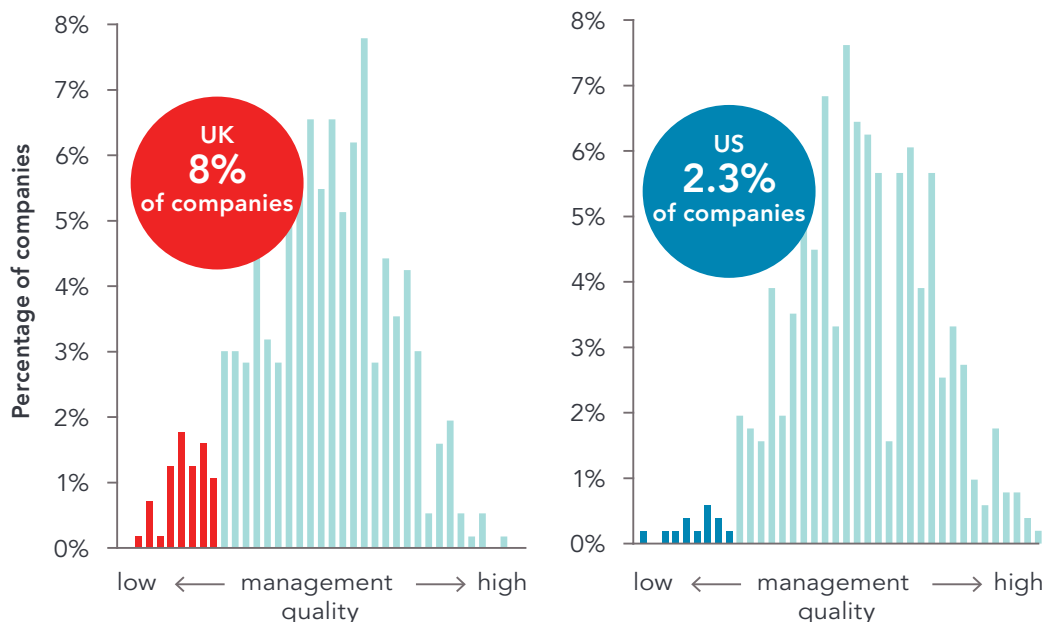
stay put this has a dampening effect on pay.^[34]

Yet as we have already seen, in the years from 2003 to 2008 weak wage growth coincided with the tightest labour market since the 1970s and stable economic growth. Similarly, one of the great puzzles of the 2008-09 and 2012 recessions has been the surprisingly strong performance of employment alongside particularly stark declines in wages. Both periods have given us reason to believe that the relationship between unemployment and real wages might have changed.

New research for the Commission by Professors Steve Machin and Paul Gregg suggests that this is the case.^[35] In the period from 2003 to 2010 real wages became more sensitive to unemployment. The effect of this change is significant. Under the relationship between wages and unemployment that occurred from 2003 to 2010, an increase in unemployment from 4.6 per cent to 8.3 per cent (the increase that occurred between 2005 and late 2011) was associated with a reduction in median earnings of £2,100 a year.^[36] In the earlier period, the same magnitude of growth in unemployment would have reduced median earnings by only £1,300 (in 2011 prices). This increased sensitivity of wages to unemployment therefore equates to around an extra £800 a year wage loss at the median.^[37]

This is an important development, and even more so for lower earners because the drag of unemployment on wage growth in the bottom half of the wage distribution is particularly strong. Wages are between 3 per

Figure 4.8: Distribution of firm-level management scores, UK (left) and US (right), 2010



Source: Firm-level management scores from the World Management Survey^[32]

[29] Faggio, G., Reenen, J. and Salvanes, K. G., (2007), *The Evolution of Inequality in Productivity and Wages: Panel data evidence*, CEP Discussion Paper No. 821, Centre for Economic Performance, London School of Economics and Political Science. [30] Ibid [31] For a discussion of the size of rents in employment relationships see Manning, A., (2010), *Imperfect Competition in the Labour Market*, CEP Discussion Paper No. 981, Centre for Economic Performance, London School of Economic and Political Science. [32] See Bloom, N., Genakos, C., Sadun, R. and van Reenen, J., (2012), "Management Practices Across Firms and Countries", *Academy of Management Perspectives*, 26 (1), pp. 12–33, for methodological details. [33] For the classic and more recent literature on the real wage-unemployment relationship see: Phillips, A., (1958), "The Relation Between Unemployment and the Rate of Change of Money Wages in the United Kingdom, 1861–1957", *Economica*, 25, pp. 283–299; Layard, R., Nickell, S. and Jackman, R., (1991), *Unemployment*, Oxford University Press, Oxford; Gali, J., (2011), "The Return of the Wage Phillips Curve", *Journal of the European Economic Association*, 9, pp. 436–61; Blanchflower, D. and Oswald, A., (1994), *The Wage Curve*, MIT Press; Blanchflower, D. and Oswald, A., (1995), "An Introduction to the Wage Curve", *Journal of Economic Perspectives*, 9, pp. 153–167. [34] Daly M., (2012), *Dissecting Aggregate Real Wage Fluctuations: Individual wage growth and the composition effect*, Working Paper Series, Federal Reserve Bank of San Francisco, www.frbsf.org/publications/economics/papers/2011/wp11-23bk.pdf. [35] Gregg and Machin, *What a Drag*. [36] Annual earnings of a full-time employee at median hourly pay. [37] More straightforwardly, a hypothetical doubling of unemployment would reduce median earnings by £1,600 a year in the earlier period and by £2,600 a year in the later one; the increased sensitivity would produce an additional annual loss of £1,000.

cent and 5 per cent more sensitive to unemployment for modestly paid workers (between the 20th to 50th percentiles) than for workers on higher pay.^[38] These trends could change quickly in a turbulent economy but if the impact of unemployment on real wages has indeed strengthened, this would have a number of implications.

Although higher paid workers would be likely to experience modest real wage growth in the recovery, there may be no significant real growth for low and middle earners until unemployment falls significantly, probably below the levels recorded from 1999 to 2007 (between 4 per cent and 6 per cent). One might also expect any economic recovery to boost jobs in the first instance, rather than wages. Over the medium term, policymakers may also have more leeway to keep interest rates lower than in the past at similar levels of unemployment without fear of an inflationary wage-price spiral.

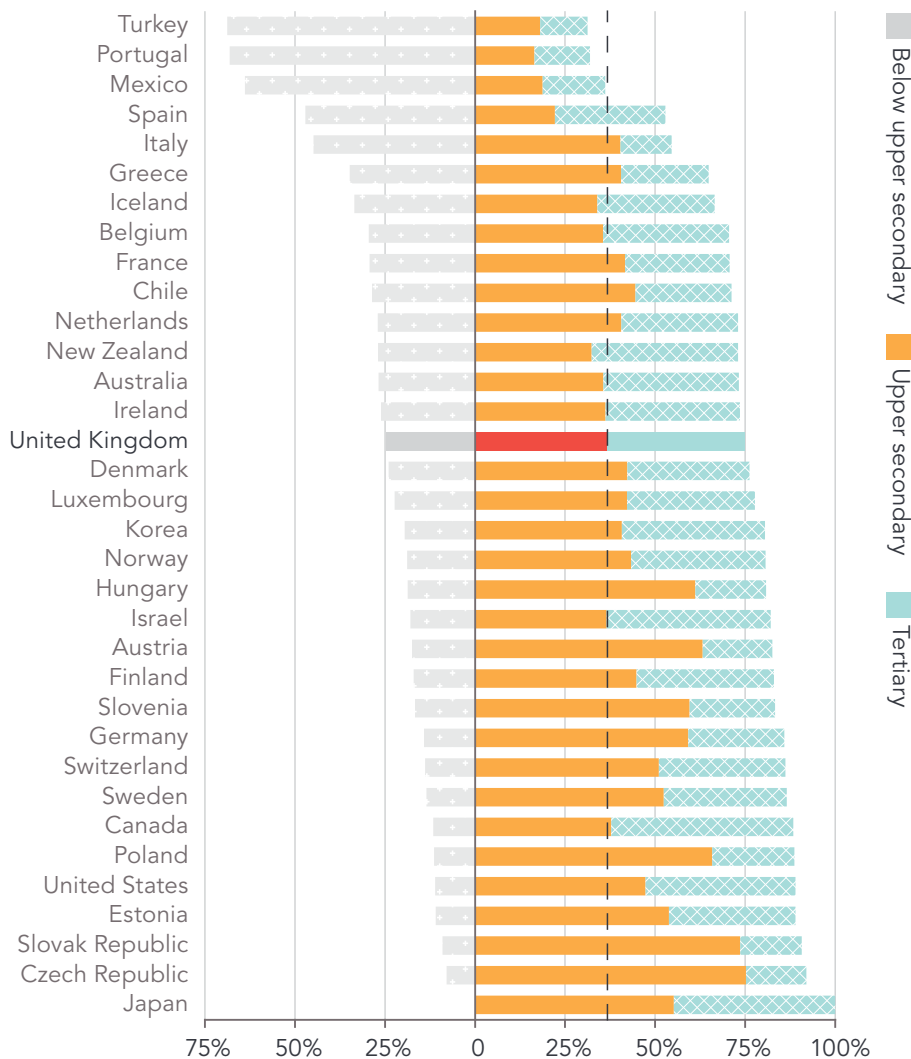
The role of skills

What of other factors more directly linked to workers' productivity? Reducing unemployment is a key part

of a strategy to boost pay, particularly low pay, but the distribution of skills across the UK workforce also stands out. Our relatively good overall performance on average skills hides unusual levels of variation. At the top, UK universities are world class, but performance lags badly in the bottom half of the workforce in a number of ways. This inhibits wages in the bottom half in a number of ways.

The UK has an unusually large proportion of unskilled people and far fewer people qualified to intermediate level than our main European competitors. As Figure 4.9 shows, the UK also suffers from a relatively low proportion of the adult workforce having upper secondary education. The UK ranks 15th on the proportion of the workforce with below upper secondary education, 7th on the proportion with tertiary education and 24th on the proportion with upper secondary education. These figures are likely to overstate the UK's comparative performance at intermediate level since the UK classifies A-C grades at GCSE as the completion of upper secondary education, a practice that has been criticised for inflating UK performance.^[39]

Figure 4.9: Highest level of education among adult population, several countries, 2010

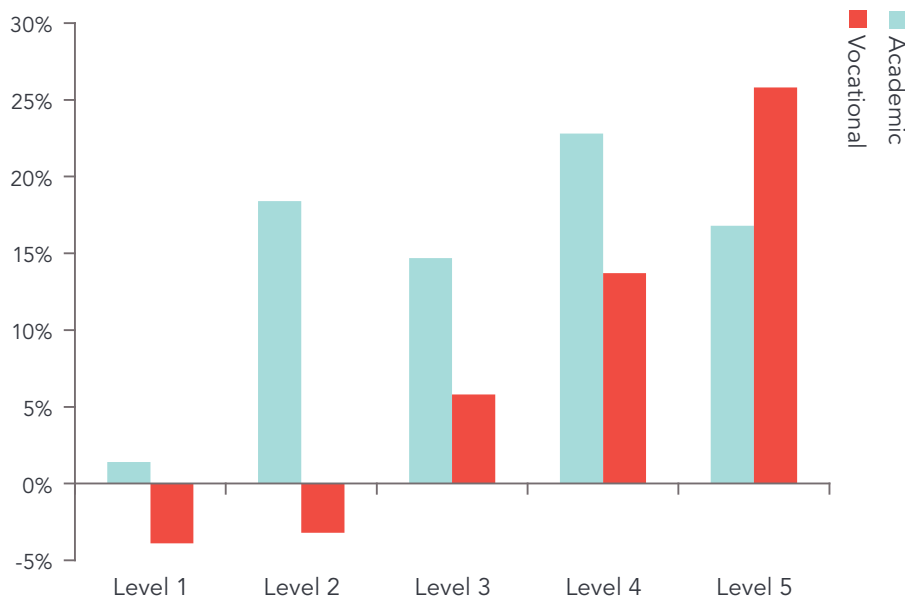


Notes: 25–64 year olds. Some data relates to different years where later data is not available. Sources: OECD, (2012), Education at a Glance. For detail source data see Annex 3, www.oecd.org/edu/eag2012.

[38] Gregg and Machin, *What a Drag*. [39] See Schneider, S., (2011), "The International Standard Classification of Education 2011 and its Application in Cross-national Surveys", University of Oxford, p. 20.

The UK also falls behind other countries in terms of the quality of intermediate skills. The UK is unusually in lacking a reliable, mass-scale, standardised system of intermediate skills that consistently delivers high wage returns. Wage returns to intermediate level, and particularly vocational qualifications, are relatively low and highly variable (Figure 4.10). This hinders people who do not go to university.

Figure 4.10: Rates of return to different qualifications by level and type, UK, 2000-04



Notes: For full definition of rates of return see a study on rates of return to investment in, Institute for Employment Studies, (2005), “Level 3 and Higher Qualifications”. For a fuller discussion of the importance of skills to low to middle income households see Vignoles, Upskilling the Middle.^[40]

These skills problems have become more important over time

The UK’s failure to provide marketable skills to many workers in the bottom half of the wage distribution is longstanding and well understood. But to see the impact it is having on living standards we also need to understand how the UK labour market is changing. In the past 20 years, there has been strong growth in jobs at the top and bottom of the labour market in advanced economies like Britain, as discussed earlier (see In depth 4.1).^[41] The decline in mid-level jobs has been sharpest in sectors that have had the greatest rise in ICT intensity, suggesting that technology has played a big role as it has become possible to automate tasks like administration.^[42]

Globalisation has amplified these trends, with trade becoming possible in new areas like back office tasks, putting new competitive pressure on workers in the middle. Even within the UK, these dynamics play out, as company structures split horizontally to take advantage of the fact that more tasks can now be carried out at a distance, boosting efficiency but squeezing the wages of outsourced workers in more narrowly defined roles.

These changes interact with the skills profile of the UK workforce in two important ways:

- When the bulk of good jobs being created are in

highly skilled, hi-tech sectors at the top, it becomes more important that intermediate skills can give people access to these top jobs. This is precisely the area in which the UK’s intermediate skills system has historically fallen short.

- When low-skilled service roles expand, it becomes more important to do whatever can be done to improve productivity in these roles. Skills are not the only way to do this; indeed, in uncompetitive low wage labour markets they may not even be the main way. But making bad jobs better partly requires qualifications that raise productivity, particularly in low-paid service sector roles. Basic transferable skills like literacy and numeracy are key to this.

Perhaps most challengingly, there is also reason to believe that skills supply and demand interact; that is, a workforce’s skills have an effect on the kinds of jobs an economy creates.^[43] The likely scale of this impact should not be overstated. So far, no advanced economy – including countries like Germany with intermediate skills systems that are far more successful than the UK’s – has avoided entirely the decline of middle-paying roles.^[44] But although changing the kinds of jobs our economy creates is likely to be slow, difficult and unpredictable work (and so not a panacea), theory suggests that the UK weaknesses on skills may be encouraging the creation of low quality jobs.^[45]

[40] Vignoles, A., (2012), *Upskilling the Middle*, Resolution Foundation, London. [41] Holmes and Mayhew, *The Changing Shape of the UK Job Market and its Implications for the Bottom Half of Earners*, pp. 4–5. [42] Michaels, G., (2010), *The Shrinking Middle: How new technologies are polarising the labour market*, CentrePiece, London School of Economics. [43] The long-run relationship between skills supply and skills demand is extremely difficult to test empirically. Theory suggests that such effects are likely to exist but cannot be definitive on their scale. For a recent update to the literature on skills demand and supply in advanced labour markets see Acemoglu, D. and Autor, D., (2011), “Skills, Tasks and Technologies: Implications for employment and earnings”, in *Handbook of Labor Economics*, Vol.4, pp.1043–1171. [44] Autor, D., (2010) “The Polarization of Job Opportunities in the U.S. Labor Market: Implications for employment and earnings”, Centre for American Progress, Washington DC. [45] For discussion of the way in which national institutions affect economics and political economy based on the “varieties of capitalism” approach, see Hall, P. and Soskice, D., (2001), “Varieties of Capitalism: the Institutional Foundations of Comparative Advantage”, Oxford University Press, Oxford.

The role of labour market institutions

In this context it is important to think about skills in the same breath as wider labour market institutions. We finish this chapter by considering this question briefly. It is particularly pertinent in the UK because the most distinguishing characteristic of the UK

The UK has seen a far deeper fall in collective bargaining coverage than any other OECD country except Australia and New Zealand

labour market in the past 40 years has been the scale of decline in labour market institutions. The coverage of collective bargaining agreements fell from 70 per cent of the UK workforce in

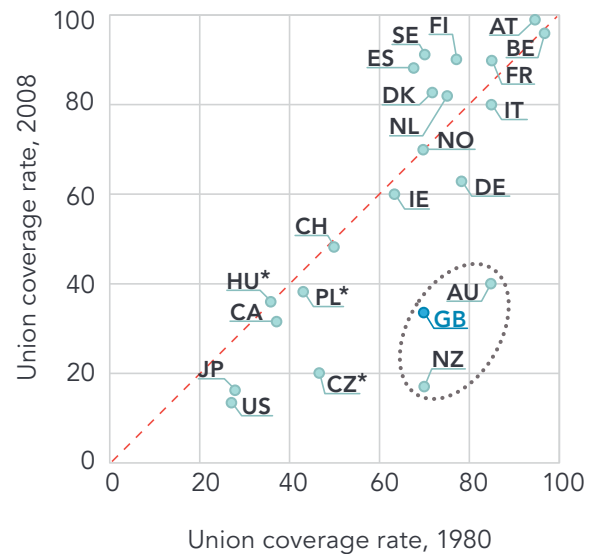
1980 to 34 per cent in 2008, a far deeper fall than in any other OECD country aside from Australia and New Zealand (Figure 4.11). This erosion slowed and even slightly reversed for a time from the late 1990s. [46] The long-term decline in protection for workers in the bottom half of the wage distribution was in part a conscious policy trade-off. In search of the benefits of a flexible labour market, the UK moved to lighter touch relationships between employees and employers. As well as benefits, this choice has costs, for example discouraging employer investment in training that may pay off over the longer term.

Aside from the demise of collective bargaining, the UK has weaker institutions in general. For example, far fewer employers are members of employer associations than in other countries, making them less capable of taking a strategic view on the long-term needs of their sector. [47] This weakness interacts with the UK's underperformance on skills, leaving UK employers peculiarly uninvolved in

planning and designing the training they need, and instead designing jobs for the low skilled workforce they have today, perpetuating underinvestment in training compared with other countries. [48]

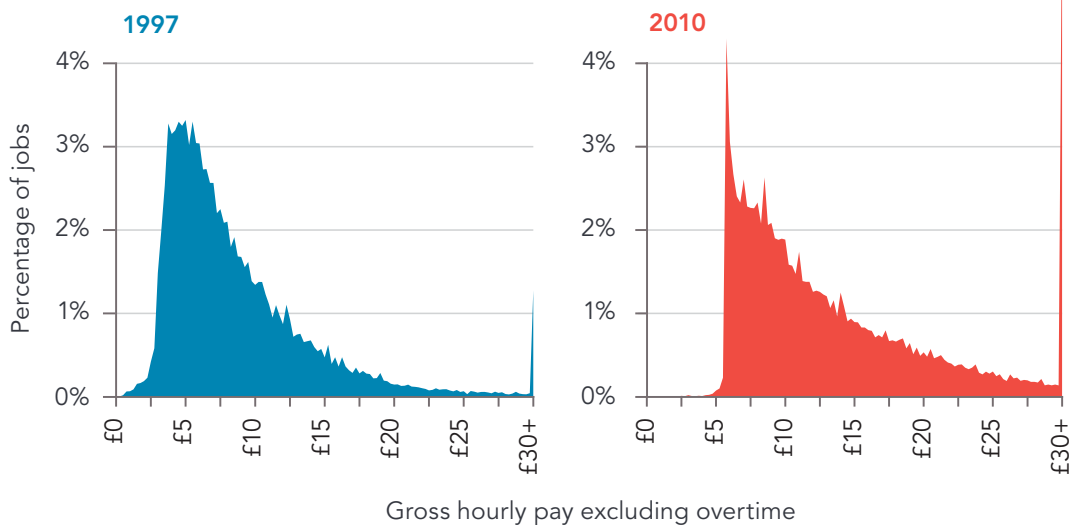
The combined result of these changes is that there is now less support for workers in the bottom half of the wage distribution than in most other developed countries, tilting the balance towards business strategies that are based on low workforce investment and low levels of pay.

Figure 4.11: Decline of collective bargaining coverage internationally between 1980 and 2008



Source: OECD

Figure 4.12: Gross hourly pay excluding overtime in the UK before (1997) and after the introduction of the National Minimum Wage (2010)



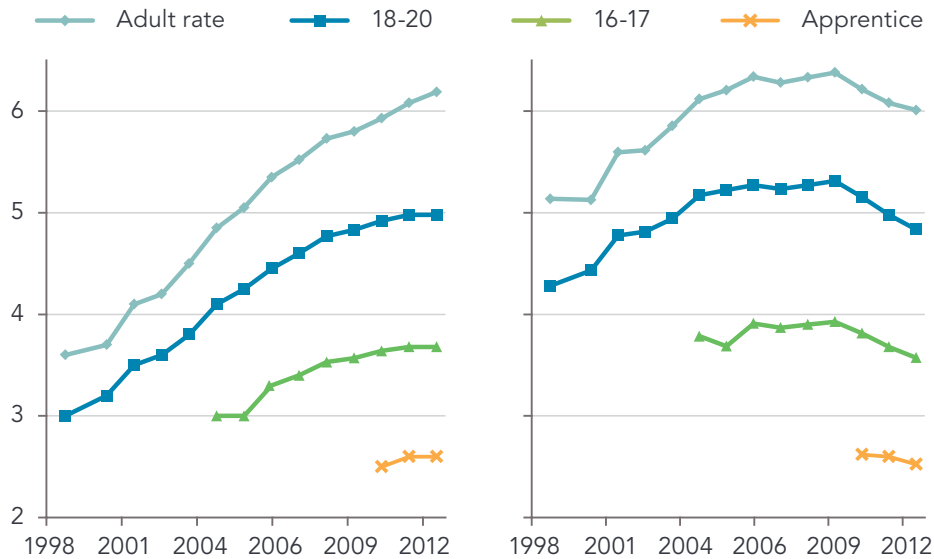
Note: Current prices. Source: Low Pay Commission, ASHE

[46] Blanden, J. and Machin, S. and Van Reenen, J. (2006) "Have Unions Turned the Corner? New evidence on recent trends in union recognition in UK firms", *British Journal of Industrial Relations*, 44 (2), pp. 169–190. [47] Mayhew and Salverda, "Capitalist Economies and Wage Inequality", p. 146. [48] Lanning, T. and Lawton, K., (2012), *No Train, No Gain*, Institute for Public Policy Research, London.

In response to the decline of labour market institutions, as in other advanced economies, the UK has forged a new regulatory framework to affect pay distributions: the National Minimum Wage. At the very bottom of our labour market, the National Minimum Wage protects people effectively. Although the UK has a lot of low-paid workers, countries like Germany without a statutory National Minimum Wage (and the US with a very low federal minimum

wage) have more people on extremely low pay.^[49] Figure 4.12 shows the direct and dramatic impact the National Minimum Wage has had on the UK wage distribution. Although the figures are expressed in current terms and so reflect nominal wage growth over time, the change in the shape of the wage distribution is also clearly visible. There is now a broad academic consensus that this effect has been achieved without causing unemployment.^[50]

Figure 4.13: Minimum wage in the UK, £ per hour, current value (left) and constant prices (right), adjusted for RPI



Source: Resolution Foundation analysis; Low Pay Commission

Yet as Figure 4.12 also indicates, the effects of the National Minimum Wage wage for workers on slightly higher pay have been positive but much more limited. The National Minimum Wage has not moved the entire pay distribution upwards, but has instead compressed the distribution at the bottom. Although some so-called ‘spillover’ effects are found, these have been limited in scale and run at most up to the 20th percentile. The National Minimum Wage has therefore been more a tool for putting a floor under

wages than for lifting wages for all low-paid workers. There is even some evidence that in response to the National Minimum Wage some large retailers have scrapped intermediate tiers of work, leaving a broader, flatter pay structure at the bottom.^[51]

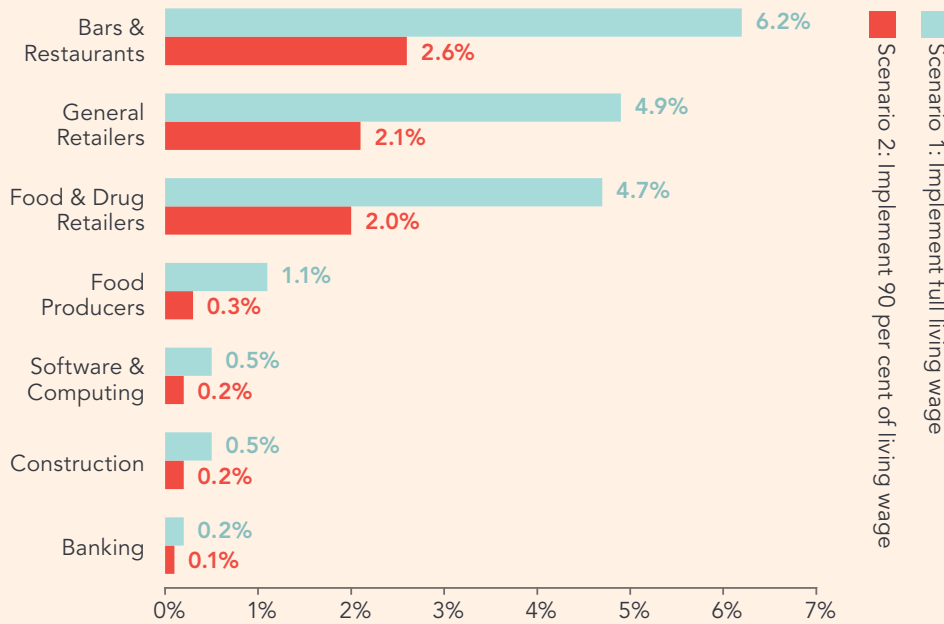
Now, held back – with sensible caution – by the Low Pay Commission’s concern for unemployment effects in vulnerable sectors, the minimum wage has fallen in real terms for the last three years and is now lower than its level in 2004 (Figure 4.13.).

[49] The US has a National Minimum Wage but it is far lower than the UK level. [50] For the latest summary of the evidence see Low Pay Commission, (2012), *National Minimum Wage*, LPC Annual Report. [51] Incomes Data Services, (2009), *Monitoring the Impact of the National Minimum Wage: A report for the Low Pay Commission*, Incomes Data Services, London.

In depth 4.2: Can UK employers afford to pay more?

There is evidence that employers in a range of sectors could afford to pay more. Analysis for the Commission has modelled the impact on wage bills across a range of different sectors of paying all employees the Living Wage (Figure 4.14).^[52] The impact in some large, low wage sectors, such as bars, restaurants and retail, is significant (though lower than we anticipated), causing between a 5 per cent and 6 per cent increase in the total wage bill. By contrast, for large companies in sectors such as banking, construction and software/computing – which employ over 1 million low wage workers – paying all workers the Living Wage would mean an increase of less than 0.5 per cent of the total wage bill.^[53] Progress is possible.

Figure 4.14: Average firm-level wage bill increase of implementing Living Wage in the UK, by industrial sector



Notes: Average firm-level wage bill increases were calculated using consolidated financial data for 82 large and medium-sized UK incorporated firms sampled from London Stock Exchange (LSE) listings in seven industrial sub-sectors. Ten firms were sampled from the bars & restaurants sub-sector, 28 from general retailers, seven from food & drug retailers, four from food producers, 13 from software & computing, 15 from construction and three from banking. Source: Resolution Foundation analysis

4f Conclusion

Drawing these threads together, the worry is that the 21st-century jobs market looks a lot like the late 20th century but more so on all of the above fronts. It will be even more high tech, as ICT-intensive sectors continue to grow as a share of employment, making the gap in returns between high level and intermediate skills all the more important. It will be even more competitive in the middle, particularly in those routine jobs that used to provide a good living for those with intermediate skills. It will be characterised by even bigger, employment-intensive, non-traded personal services sectors like social care, with low levels of union membership, roles that are, in the UK, designed to be low paid.

When combined, these factors explain why the UK has settled into an unsatisfactory equilibrium in which the overall distribution of wages is skewed towards the top and a very large number of UK firms operate business models based on low pay and weak investment in skills. Looking forward, a key test will be the UK's ability to equip workers without degrees better so that they can compete in the modern jobs market. This will require widespread

improvements to intermediate skills and more specific support to combat the skills dimension of low wage work.

More ambitiously it will require new and stronger institutions that can fill the gap between the National Minimum Wage and the majority of low-paid workers. Notably, the two other countries that come close to the UK's level of decline in collective bargaining coverage – Australia and New Zealand – have developed institutional responses to do just this. In New Zealand, this has been done through the National Minimum Wage itself, which was raised gradually over 10 years from 48 per cent of the median wage in 1999 to 59 per cent in 2009 (compared with 46 per cent in the UK). Australia, meanwhile, operates a system of sectoral minimum wages backed by “good faith bargaining” obligations.^[54]

The eroding link from productivity to pay – and particularly to pay in the bottom half – helps us to understand one of the key reasons that the link from growth to living standards has weakened. But hourly wages only tell us one half of the story. We turn to the second half next: changes in the distribution of employment.

[52] On the basis of 2011 levels. This would be a very large increase compared with the current National Minimum Wage; 18 per cent in the case of the National Living Wage and 37 per cent in the case of the higher London Living Wage [53] Ibid. [54] These figures are internationally comparable and differ from the more often quoted UK figure of 52 per cent because they include only full-time workers.

{Section 2}
**The long view: Tracking
the long term drivers of
living standards**

Chapter 5
**Faltering
economic
participation**

Chapter summary

- The UK labour market was transformed in the second half of the 20th century. Female employment rose, male employment declined and, more recently, the over 50s have come to make up a bigger share of the workforce.
- Women's work has driven more than a quarter of all income growth in low to middle income households since 1968 but now female employment growth has faltered, rising by only 1 percentage point in each of the last two decades.
- The UK ranks 15th in the OECD for female employment, with huge gaps for women in their early 30s and those over 50. Compared to better performing countries more than 1 million women are missing from UK workplaces.
- Among older workers the UK underperforms particularly badly among men, lagging better performing countries by 8 percentage points among 60–64 year olds.
- Both problems owe much to policy; for women, expensive and inflexible childcare and for older workers a lack of a reliable social care and weak financial incentives are barriers to work.

5a Long-run trends in employment and participation

If hourly wages tell us only half the story, the other half is employment and participation. In the long term, rising participation and a higher employment to population ratio are key to higher living standards. In the late 20th century substantial growth in work among women was a key driver of rising living standards. More recently, employment among older workers has become central. These trends are the focus of this chapter. Stepping back, the UK's failure to adapt to a labour market that has transformed in terms of its mix by gender and age has left us underperforming on some key fronts.

5b The rise of female employment

The rise of female employment has transformed and expanded the UK workforce

The defining trend in the UK labour market since the Second World War is the growth in female employment. Between 1951 and 1981 the proportion of women active in the UK labour market rose 18 percentage points. As a result of this surge in women's work, behind deep cyclical fluctuations, employment rose steadily, by the late 1970s reaching levels that had only previously occurred during the earlier fully mobilised war economy (Figure 5.1).

From the 1970s, rising female employment was accompanied by a steady decline in the male employment rate (Figure 5.2). This was focused among older male workers as employment shifted from manufacturing

to services. Female employment itself then slowed markedly in the 1990s and 2000s. For the first time in decades its positive force was struggling to outweigh declining work among men. Even so, the transformation in the gender make-up of the jobs market has been profound. In 1968, 86 per cent of employment income in low to middle income households came from men and 14 per cent from women; by 2008, these shares were 63 per cent and 37 per cent.

More recently, rising female employment has been accompanied by falling male employment, and as a result of female earnings now account for a much larger share of household income.

Figure 5.1: Employment to population ratio, UK, 1900–2000

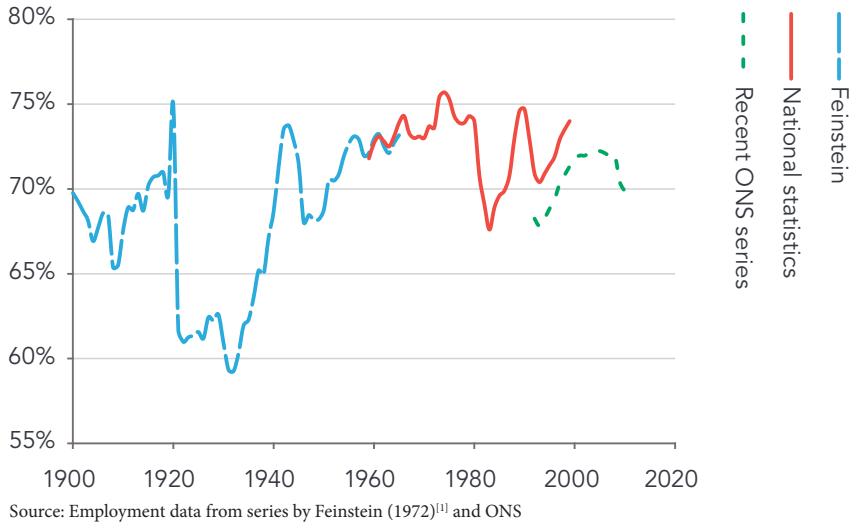
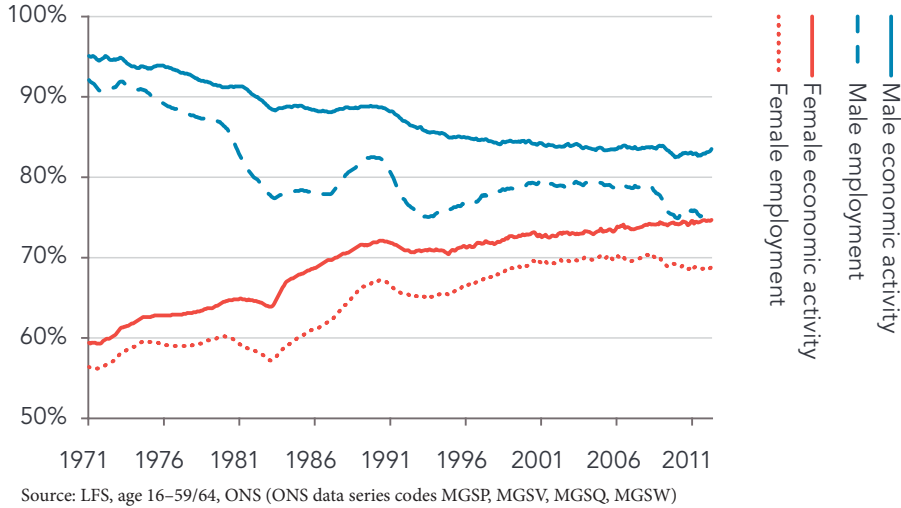


Figure 5.2: Employment rates for working-age individuals by gender



Behind changes in the gender make-up of our labour market lie big changes in the way that people work: 27 per cent of workers now work part time, up from 23 per cent 20 years ago. While the proportion of women in part-time roles has fallen marginally to around 44 per cent, the proportion of men working part time has nearly doubled from 7 per cent to 13 per cent, a trend only hastened by the 2008-09 recession. Even so, the dominance of women in part-time work remains a key explanation for the size of the gender pay gap.^[2]

[1] Feinstein, C. H., (1972), "National Income, Expenditure and Output of the United Kingdom 1855-1965", Cambridge University Press, Cambridge. [2] The full-time pay gap is now around 10 per cent. Full-time median gross hourly earnings excluding overtime in 2011 were £13.11 an hour for full-time men and £11.91 an hour for full-time women.

5c How the UK measures up on female employment

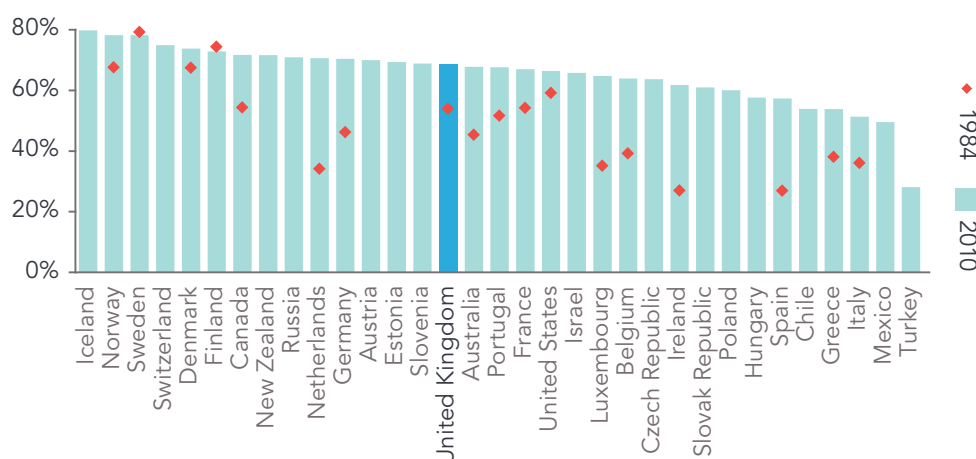
Broad-based wage growth has declined across the OECD

Women’s work and part-time work are now central to living standards. How does the UK measure up? While the gender employment gap is now far lower than it once was, UK female employment remains a full 10.5 percentage points lower than male employment.^[3] Even these statistics understate the full gap because the distribution of part-time employment remains highly unequal. The UK’s male–female employment gap rises from just over 10 to 27 percentage points for full-time equivalent work.^[4]

Moreover, UK female employment remains at a significantly lower level than many other advanced economies (Figure 5.3). The UK ranks 15th in the

OECD for employment among women aged 25–64. When adjusted for the scale of part-time work, this position falls to 24th. The scale of this underperformance is substantial; the average female employment rate among better performing countries is 73 per cent, or 4.3 percentage points higher than the UK. Among the five best performing countries it is 77 per cent, or 8.3 percentage points above the UK. Closing these gaps would result in between 700,000 and 1.4 million women moving into work.^[5] Survey evidence gives little reason to believe that women want to work less than men, though women are more likely to report a preference for part-time work, more so if they have young children.^[6]

Figure 5.3: Female employment rate by country, 1984 and 2010



Note: Best performing countries are those ranked in the top five on female employment rates among 25–64-year-old women in the OECD in 2010; better performing countries are those ranked above the UK (in the top 14). Source: Resolution Foundation analysis, OECD family database

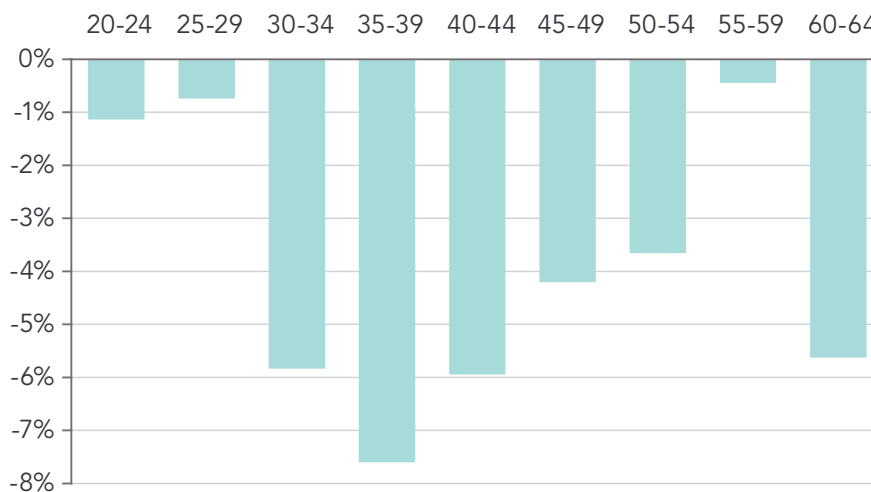
This underperformance is likely to reflect, in part, the UK policy environment

There is good reason to believe that policy plays a central role in this underperformance. The UK’s performance gap varies substantially by age and is far larger among two groups: women in their 30s and those over 55

(Figure 5.4). The gap also opens up wider for mothers than non-mothers and is even wider for those with more than one child. Perhaps surprisingly, it is wider for those with older children, with women in the UK less likely to re-enter the labour market than in better performing countries once their children start school.

[3] Employment rate among all aged 16–64, April–June 2012, ONS, *Labour Force Survey* (August 2012). [4] OECD, *Employment Outlook*, 2010. [5] Plunkett, J., (2011), *The Missing Million: The potential for female employment to raise living standards in low to middle income Britain*, Resolution Foundation, London. [6] Around one-third of men and women would prefer not to work at all, with no variation between genders. Roughly 22 per cent of men say they would prefer to work full time and 46 per cent part time. For women the figures are 12 per cent and 56 per cent (YouGov for the Centre for Policy Studies, 2009). The full question was: “If it is/were not essential for you to work for financial reasons would you... (a) work full-time, (b) work part-time, (c) not work at all, (d) don’t know.” For more details on working preferences see Jaumotte, F., (2003), *Female Labour Force Participation: Past trends and main determinants in OECD countries*, OECD Economics Department Working Papers, No. 376. On the difficulties of divorcing preferences from real restrictions see van Wanrooy, B. (2005), “Adapting to the Lifecourse? Evaluating men and women’s working-time preferences”, *Australian Journal of Labour Economics*, 8 (2); Kelley, S. M. C. and Kelley, C. G. E. (2009), *Women’s Work Preferences: The importance of home-based work*, International Survey Center Working Paper.

Figure 5.4: Percentage point gap between UK female employment rate and rate in better performing countries, by age group, 2010



Notes: Better performing countries are those ranked above the UK (in the top 14) on overall female employment rates among 25–64-year-old women in the OECD in 2010. Source: Resolution Foundation analysis, OECD family database

These international variations in the level of female employment reflect a complex mix of cultural, social and economic factors. In any case, it is important not to see employment as an end in itself; what matters is freedom of choice. But evidence suggests that the UK policy environment constrains parents' employment choices in a number of ways. Comparative studies point to several key policy areas for mothers in particular.

The importance of childcare

The key barrier to female employment seems to be the affordability and availability of childcare. Evidence shows that affordable and readily available childcare boosts female employment, particularly for mothers with low education, narrowing the gap between low and high income households.^[8] Public childcare subsidies have also been shown to increase women's share of pay within the household and to boost earnings over the long term by reducing the scarring effects of taking long career breaks to raise children.^[9]

In the past 15 years there has been a big expansion of childcare provision in the UK, driven by significant increases in direct subsidies from government. This was principally delivered through the introduction of 15 hours of free early education for all three and four year olds (extended by the current government to the most deprived 40 per cent of two year olds from September 2014)^[10] and through the intro-

duction of the childcare element of Working Tax Credits. This reimburses low income parents for 70 per cent of their childcare costs (down from 80 per cent since April 2011) up to a threshold. The latest plans for Universal Credit now look likely to maintain a roughly similar level of support, though increasing support for parents working under 16 hours week.^[11]

Yet childcare remains more expensive, less flexible, and less widely available in the UK than in countries with higher female employment rates. Full-time childcare costs for two young children, after state support, are among the highest in the OECD for a dual earning family earning 167 per cent of average earnings between them.

New analysis for the Commission shows that these impacts, along with their implications for work incentives, vary substantially by income (see In depth 5.1 for more detail).^[12] The largest barriers are faced by households on incomes that are modest but too high to qualify for substantial support through tax credits. To give one example, under today's system of childcare support, a second earner in a median income household who takes up a full-time job at £10 an hour takes home just £1,060 a year after tax, lost benefits and childcare costs – equivalent to £20 a week for 37.5 hours work.^[13] This is just 5 per cent of her pre-tax salary (£19,550) and does not account for other work-related costs like transport.^[14] Work simply does not pay.

[8] Chevalier and Viitanen find that in the UK women's employment followed increases in childcare but the relationship does not hold the other way around – see Chevalier, A. and Viitanen, T., (2002), "The Causality Between Female Labour Force Participation and the Availability of Childcare", in *Applied Economics Letters*, Vol. 9, pp. 915-918. See also Kögel, who questions the significance in the change in relationship: Kögel, T., (2004) "Did the Association Between Fertility and Female Employment within OECD Countries Really Change its Sign?", *Journal of Population Economics*, 17 (1). See also Del Boca, D. and Pasqua, S., (2005), *Social Policies and Employment of Married Women in Europe*, Child Working Papers wp19_05; Del Boca, D., Pasqua, S. and Pronzato, C., (2008), *Motherhood and Market Work Decisions in Institutional Context: A European perspective*, Dondena Working Paper No. 11. [9] Estévez-Abe, M. and Hethy, T., (2008), *How Policies Affect Women's Economic Position within the Family: Labor market institutions and wives' contribution to household income*, Luxembourg Income Study Working Paper Series see Misra, J., Budig, M. J. and Boeckmann, I., (2009), "A Cross-National Perspective on Gender, Parenthood, and Employment", University of Massachusetts, draft. [10] Department for Education, (2012), "Early Education for Two-year-olds", www.education.gov.uk/childrenandyoungpeople/earlylearningandchildcare/delivery/Free%20Entitlement%20to%20Early%20Education/b0070114/eefortwoyearolds (accessed 23 August 2012). [11] This is after the government made an additional £300 million available for childcare under Universal Credit in order to avoid planned reductions in support. [12] Resolution Foundation, (forthcoming), *Childcare Costs*. [13] Based on a couple in which the main earner works full time, earning £18.82 per hour (a salary of £705 per week or £36,700 per year) and the second earner earns £9.41 per hour and enters full-time work at 35 hours a week. [14] Based on a couple in which the main earner works full time, earning £18.82 per hour (a salary of £705 per week or £36,700 per year) and the second earner earns £9.41 per hour and enters full-time work at 35 hours a week. The £600 net income gain is rounded up from £573.

In depth 5.1: Who pays the price for high childcare costs?

Childcare is a major and rising cost for parents in the UK.^[15] New Resolution Foundation analysis shows that a middle income dual earner family, earning 167 per cent of the average wage between them, with two young children in full-time childcare, would spend more than one-fifth (23 per cent) of their net household income on childcare in 2012. This represents a significant fall since 2004, the most recent date for which the OECD has published complete comparative data on childcare costs (Figure 5.5), reflecting increased government support over this period. In 2004, a similar family would have spent one-third of their income on childcare – a fall of 30 per cent. Nonetheless, this still leaves the UK with some of the highest childcare costs in the OECD.^[16]

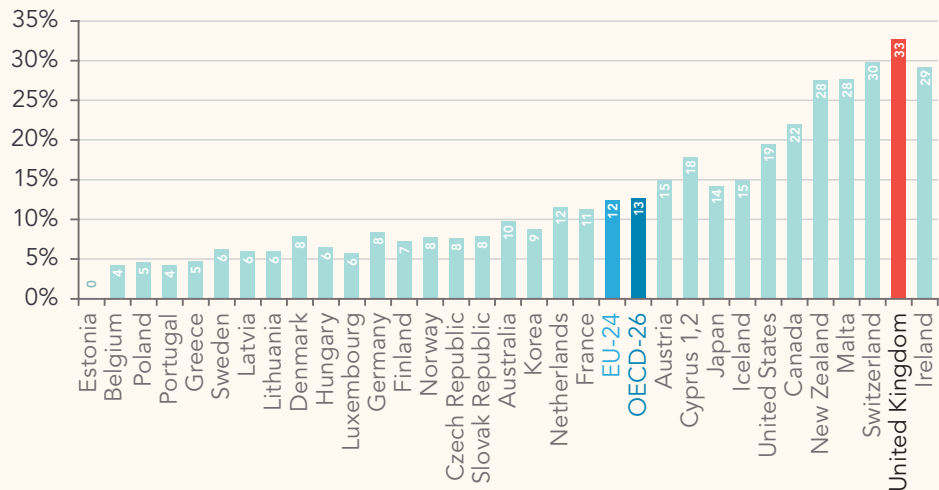
These figures hide substantial variation in the amount of support that different households receive. UK childcare support is highly targeted, so low income families fare better when measuring costs as a proportion of their income.

Resolution Foundation analysis has shown that while net out of pocket childcare costs (after state support for childcare) are 23 per cent of net income for a middle income family, for a low income household, receiving more support through tax credits, this figure is reduced to 7 per cent. Figure 5.6 illustrates the impact of this targeted support on three typical working households on low income (two earners on the minimum wage), middle income (at the median) and high income (around the 80th percentile) with two children before and after childcare costs, taxes and benefits. The middle income family starts with a gross income 87 per cent higher than the low income family, but finishes up with a final income only 17 per cent higher. Childcare costs all but erase their higher earnings.

The effects of these costs on work incentives are stark, particularly for second earners. Figure 5.7 focuses on a middle income couple with two children and shows how net household income increases as the second earner takes on more hours of work and pays for childcare. The incentive to work an extra hour is weak up to around 15 hours a week (when free public childcare is available) and negative after this point. The overall result is that the family's income is only £1,060 higher a year after the second earner works 37.5 hours a week.

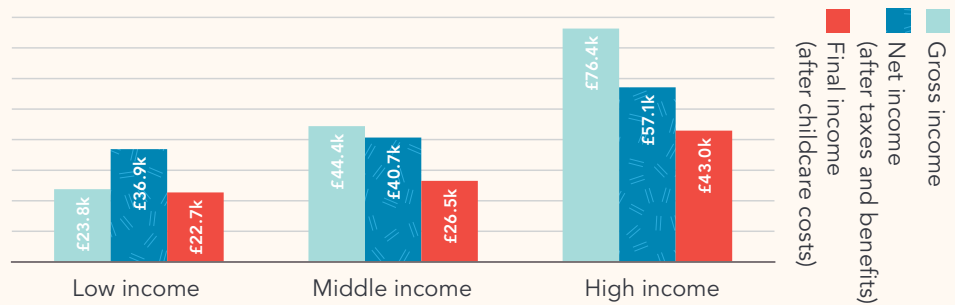
Incentives to work an extra hour are also weak for lower income families, despite receiving more support with the costs of childcare, because of the withdrawal of tax credits.

Figure 5.5: Net childcare costs for a dual earner family with full-time arrangements earning 167 per cent of the average wage, 2004, as percentage of net family income



Source: OECD Family Database

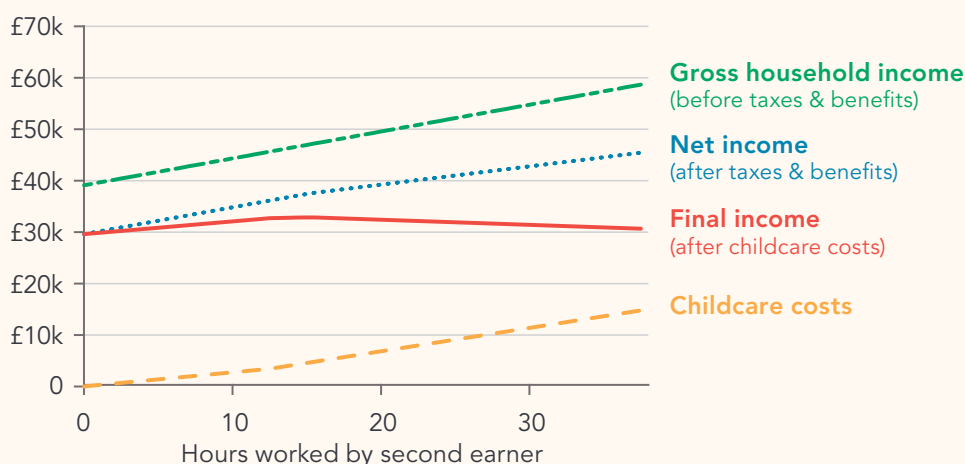
Figure 5.6: Gross, net and final income after childcare costs for three stylised families with two children in the UK, 2012



Notes: Low income family has two parents working full time at the 2012 minimum wage; middle income family has two parents working full time, one earning 100 per cent of average wage and the other earning 67 per cent of average wage; high income family has two parents working full time, one earning 172 per cent of the average wage and the other earning 115 per cent of the average wage. All families have two children: a two-year-old and a three-year-old. Source: Resolution Foundation Childcare Model.

[15] Daycare Trust, (2012), *Childcare Costs Survey 2012*, Daycare Trust, London. [16] OECD, Family Database, www.oecd.org/els/social/family/database (accessed 10 October 2012). While the OECD Family Database (see PF3.4 Childcare support) refers to data from 2004, the OECD has published a provisional update using data from 2008 in OECD, (2011), *Doing Better for Families*, OECD, Paris. This data confirms our key finding that net childcare costs in the UK have fallen significantly but remain amongst the highest in the OECD.

Figure 5.7: Annual household income and childcare costs for a typical middle income couple in the UK with two young children as second earner moves towards full-time work



Notes: Figures are for a couple with two children aged one and four years old around median income. The first earner works 37.5 hours a week and earns £20 per hour, earning £750 per week (£39.1k per year). The second earner earns half this rate, £10 per hour. The couple represent a typical middle income household in that, if the second earner works 10 hours a week, gross household income is £44.3, near to the median of the equivalised household income distribution. The model outlines the change in household income as the second earner enters work and moves towards full-time work. Source: Resolution Foundation Childcare Model.

Low quality part-time work in the UK holds back female earnings and employment

The heavy cost of childcare is one reason for the high level of part-time work among women in the UK. Many parents find that part-time work is an attractive way to balance their work and caring responsibilities. Yet the quality of part-time work in the UK is lower than in other advanced economies, with part-time workers paying a high penalty in pay, career progression and earnings mobility.^[17] Women in the UK are also more likely to work part time than in other countries, helping to explain the persistent gender pay gap.^[18] The two-fifths (39 per cent) of all employed women in the UK who work part time compares with less than one-quarter (24 per cent) across the OECD as a whole. In addition, the low quality of part-time work in the UK may deter some women from working at all.

We saw in Chapter 4 that the UK has the highest part-time pay penalty in the EU. This has severe implications for women's work, with many having to downgrade their roles and pay when they switch from full- to part-time employment after having children. The part-time pay penalty has also grown worse over time: hourly earnings of part-time women workers were about 10 per cent

below those of full-time women workers in 1975, falling to between 25 per cent and 30 per cent below in the 2000s.^[19] In some other countries, most notably the Netherlands, high levels of part-time work and female employment have worked together in a more virtuous circle, with high quality, flexible part-time work in part responsible for high female employment rates.

Unequal divisions of work between gender are key to these gaps. There is also evidence that the current system of maternity and paternity rights may entrench these gaps (not least because men, including fathers, are also more likely in the UK than elsewhere to work very long hours). Internationally, more generous leave entitlements are associated with higher female participation. But very long periods of leave – particularly if they are split very unequally between genders, as in the UK – have been shown to have a detrimental effect on the employment and earnings potential of mothers.^[20] Government plans to allow parental leave to be shared between parents would help to address this.

Taken together, these factors have limited the growth in female employment income in the UK by limiting overall participation levels and hours worked and by constraining women's hourly earnings potential.

[17] Savage, L., (2011), "Snakes and Ladders: Who climbs the rungs of the earnings ladder", Resolution Foundation, London; Manning, A. and Petrongolo, B., (2005), *The Part-time Pay Penalty*, CEP Discussion Paper No. 679, Centre for Economic Performance, London School of Economics. [18] While 55 per cent of UK mothers in couple families work fewer than 30 hours a week (the third highest rate in the OECD), 44 per cent of fathers couple families work more than 45 hours a week (the second highest rate in the OECD). See Plunkett, *The Missing Million*, p. 8. [19] Ibid. [20] Del Boca, D. et al., (2008), "Motherhood and Market Work Decisions in Institutional Context: A European perspective", Dondena Working Paper No. 11; Pronzato, C. D., (2007), "Return to Work After Childbirth: Does parental leave matter in Europe?", Dondena Working Paper No. 14.

5d Prospects for older workers

The defining employment trend of the next century will be the rise of older workers

Alongside the central role of female employment, the age profile of the labour force has also been transformed. As life expectancy increases, this will take centre stage as one of the most important trends for living standards. In the UK there have been increases in the employment rate among the over 50s since the end of the last recession in 1993: the overall employment rate for the over 50s rose 10 percentage points in this period (somewhat more for women than for men) to 65 per cent.^[21] This partially reverses a steep decline in older employment in the 1980s, particularly for men.

The combination of demographics and a rising employment rate means that the number of older people in employment in the UK increased from 5 million in 1992 to 7.5 million in 2012 – a rise of 50 per cent.^[22] With one in four people in the low to middle group already over 50, this is a strategically important trend for living standards. Earning potential late in life is even more important in light of low pension savings.

With two-thirds (65 per cent) of adults in low to middle income households in the UK not saving into a personal pension, the group faces a pension crisis.^[23]

The UK lags behind other advanced economies in employing older workers

Recent improvements in employment for the over 50s should not make us complacent. There is evidence to suggest that the UK could perform better still. The UK is a middling performer in its employment of older workers compared with other countries. Among men in the 60–64-year-old age group, for example, the UK lags the employment rate among better performing countries by nearly 8 percentage points (and far more after UK State Pension Age) (Figure 5.8). There is a similar scale of underperformance among women. Many older workers feel excluded from the labour market, as a result of specific barriers which we discuss in more detail below.

In depth 5.2: Won't older workers just displace younger ones?

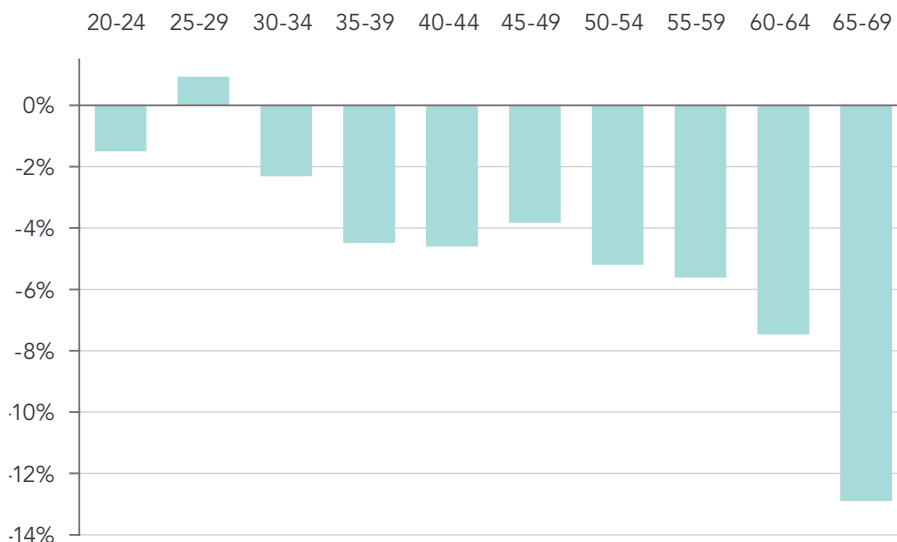
It is commonly believed that boosting employment among one group of workers, for example women or those over 50, reduces the employment of other groups. In the long run this doesn't hold, being based on the false assumption that there is a specific and finite amount of work to be done in an economy, when in reality modern labour markets like the UK's are complex, open and dynamic.

Employment is not "one in, one out". Expanding employment boosts demand by raising people's incomes, having a positive knock-on effect for overall employment. Among those in lower income households, who have a high propensity to spend, the positive effects for the wider economy are likely to be strong.

It is also important to remember that modern labour markets like the UK have large and diverse traded sectors. As we saw in our discussion of immigration, introducing new groups into the labour market is more likely to affect the kinds of goods and services produced than simply to displace other workers.

In the short term it is harder to know the extent of displacement effects. Immediate incentives, for example to hire one type of worker rather than another, may benefit some groups at the expense of others. However, fuller and broader employment are compatible medium- and long-term goals.

Figure 5.8: Percentage point gap between UK male employment rate and rate in better performing countries, by age group, 2010



Notes: Better performing countries are those ranked above the UK on overall male employment rates among 25–64-year-old men in the OECD in 2010. Source: Resolution Foundation analysis, OECD family database

[21] Resolution Foundation analysis, ONS. [22] Cory, G., (2012), *Unfinished Business: Barriers and opportunities for older workers*, Resolution Foundation, London. [23] Resolution Foundation analysis of DWP, *Family Resources Survey*, 2009-10.

This is likely to reflect discouragement rather than positive decisions to retire

The UK's poor performance among those over 55 is largely an effect of inactivity rather than unemployment, with unemployment among 55–64-year-olds only around 5 per cent.^[24] Evidence suggests this is because a significant proportion of older workers move into inactivity despite wanting to work.^[25] The reasons for this vary substantially. Among more affluent workers, economic inactivity is often to be celebrated, reflecting high disposable income and early retirement.^[26] Among those over the age of 55, particularly women, the need to care for elderly relatives is a key factor, while among men in this age group, poor health or injury is a common obstacle to work.^[27] Age discrimination remains commonplace.^[28]

International evidence suggests that the policy environment can play an important role

The policy environment is critical to how a country performs in each of these areas. Caring responsibilities

restrict employment and hours of work, suggesting that an accessible system of social care for the elderly can boost employment among those in their 50s or 60s, who may need to care for a partner or elderly relative.^[29] Other studies show the importance of well-designed active labour market policies, investment in training, industry-specific programmes and partnerships with unions.^[30]

A particularly important factor is financial incentives and specifically the balance between in-work support and out of work benefits, including pensions. This balance matters for all workers, but evidence shows that it has an even greater effect when the decision to work becomes more marginal. This applies to older workers who become more responsive to financial incentives as they near retirement.^[31] While those in their 30s and 40s are likely to work anyway if they are able, small changes to incentives can make all the difference for those over 55. This suggests that it is worth thinking about the design of the tax system for the over 50s.

5e Conclusion

In the short to medium term, achieving the macro-economic conditions for full employment is perhaps the most important route to higher living standards. Longer term, the UK's stark performance gap among women and older workers suggests that we face problems well beyond the immediate challenge of a lack of demand. The UK has not reached a limit on employment rates among these groups that is common

to advanced economies; we have hit our own glass ceiling. This owes something to culture and demography but much to the policy environment. Other countries do a better job of reconciling motherhood and older age with employment. As employment amongst these groups continues to grow in importance, the costs of this underperformance for living standards will only become harder to bear.

[24] OECD statistics database. [25] Humphrey, A., Costigan, P., Pickering, K., Stratford, N. and Barnes, M., (2003), *Factors Affecting the Labour Market Participation of Older Workers*, National Centre for Social Research with Institute for Fiscal Studies. [26] Lissenburgh, S. and Smeaton, D., (2003), *Employment Transitions of Older Workers: The role of flexible employment in maintaining labour market participation and promoting job quality*, Joseph Rowntree Foundation, York. [27] Cory, *Unfinished Business*. On the prominence of ill health and injury as obstacle to work among older men see Humphrey et al., *Factors Affecting the Labour Market Participation of Older Workers*. [28] DWP, (2012), *Attitudes to Age in Britain 2010/11*, Department for Work and Pensions, London. [29] OECD, (2011), *Help Wanted? Providing and Paying for Long-Term Care*, Organisation for Economic Co-operation and Development, Paris. [30] See for example, DWP, (2007), *What Works for Whom? A review of evidence and meta-analysis for the Department for Work and Pensions*, Department for Work and Pensions, London; Welsh Assembly Government Department for Children, Education, Lifelong Learning and Skills, (2008), *Evaluation of ReAct: Final report*; Winkelmann-Gleed, A. (2011), *Demographic Change and Implications for Workforce Ageing in Europe: Raising awareness and improving practice*. [31] IFS, (2010), *Dimensions of Tax Design*, Mirrlees Review, Institute for Fiscal Studies, London.

{Section 2}
**The long view: Tracking
the long term drivers of
living standards**

Chapter 6
**The receding tide
of state support**

Chapter summary

- State support was the only source of rising incomes among low to middle income households in the run up to the 2008 crisis, principally through tax credits.
- Now fiscal pressures mean that past growth in tax credit spending – 4.9 per cent a year in real terms from 2003 to 2008 – cannot be repeated.
- Tax credits have an inevitable downside, with millions now facing marginal tax rates above 70 per cent, rising further under Universal Credit.
- These factors necessitate a shift in the balance of growth away from state support towards employment income.
- This all has particularly tough implications for households with children, who have already been hit twice as hard by cuts to public spending as households without children and more than three times as hard as pensioner households.
- A minimum standard of living for those with children cannot be guaranteed through mechanisms like tax cuts or the National Minimum Wage or Living Wage, which target individuals rather than families.

As we saw in Section 1, the UK tax and benefit system has come to play an increasingly important role in determining household incomes. Between 2003 and 2008, total spending on tax credits grew at 4.9 per cent a year in real terms and tax credits were the only major source of household income growth for low to middle income households. This accelerated a longer-term trend whereby the state came to play a more important role

in supporting living standards. Over the period 1968 to 2008-09, benefits and tax credits accounted for more than one-third (17 per cent each) of the *growth* in net household income for low to middle income households, compared with 27 per cent from female employment income (Figure 6.1). As a result, benefits and tax credits accounted for about 18 per cent of total household income in 2008-09, up from just 8 per cent in 1968.

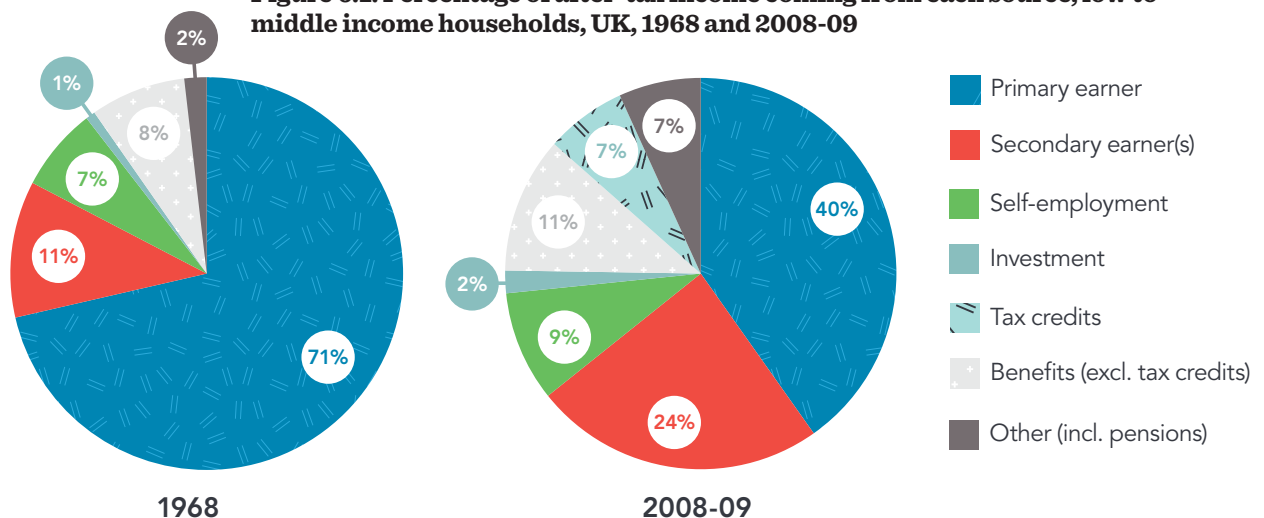
6a The need to shift away from growing state support

In the current fiscal climate it is highly unlikely that any government would seek to emulate the growth in tax credits that occurred in the early 2000s. Continuing the growth rate of the 2002-03 to 2007-08 period would have seen spending rise to £37 billion a year by 2015-16. Instead, under current spending plans, total tax credit expenditure is set to decline. This reflects several decisions made in the 2010 spending review, including a tighter means-test to withdraw support from middle income households and, most importantly, the decision to switch the indexation of benefits and tax credits from the RPI to the CPI measure of inflation. As attention turns to the next spending review, the

government has already indicated that it will look for substantial additional savings from the welfare budget, potentially including tax credits.^[1] Indeed, as we will see in Section 3, under current plans state transfers are now set to decline steeply as a proportion of income in low to middle income households.

The existence of a system like tax credits is likely to be an essential ingredient for shared growth (see In depth 6.1). But such systems also have inevitable downsides. We consider both issues in this chapter, while also discussing the specific roles the tax and benefit system plays that wages simply cannot, particularly supporting households with children.

Figure 6.1: Percentage of after-tax income coming from each source, low to middle income households, UK, 1968 and 2008-09



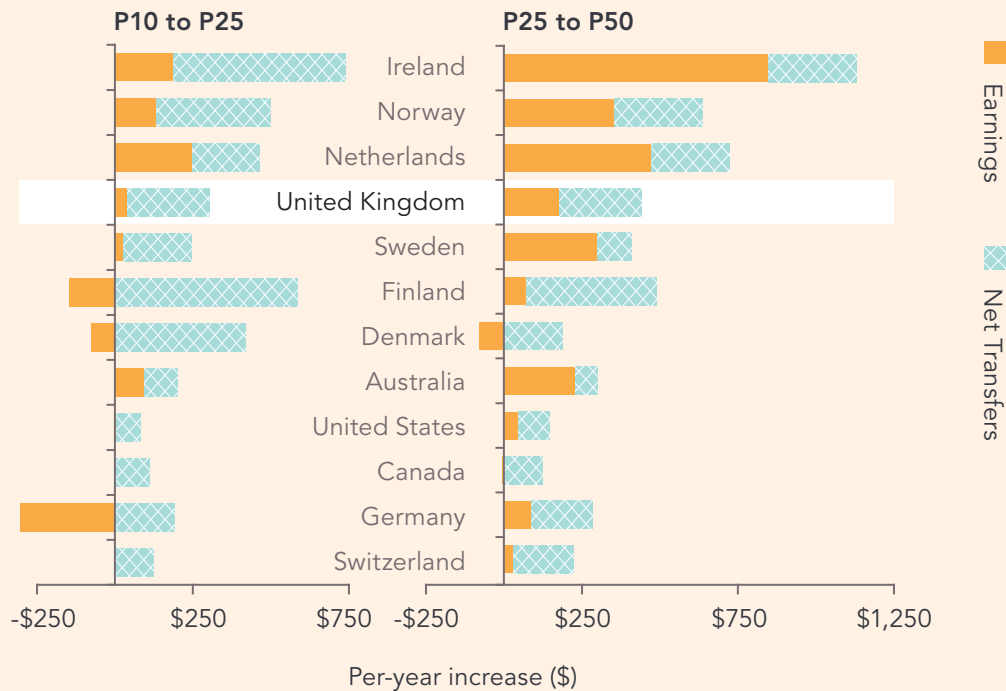
Note: Share of total net household income (household incomes are equivalised for the purpose of defining the low to middle income group).
Source: Brewer and Wren-Lewis, Why Did Britain's Households Get Richer?

[1] Budget 2012 statement by the Chancellor of the Exchequer, the Rt Hon George Osborne MP, www.hm-treasury.gov.uk/budget2012_statement.htm (accessed 23 August 2012).

In depth 6.1: How important has redistribution been in sharing the proceeds of growth?

For households on lower incomes, an established system of cash transfers is extremely important. Research for the Commission by Professor Lane Kenworthy^[2] looks at the sources of income growth for “low income” and “modest income” households (defined as deciles 10–25 and 25–50, respectively) from 1979 to 2005 (Figure 6.2). Where net transfers increased (Norway, the UK, Sweden, Finland, and Denmark), the incomes of low and modest income households tended to grow in concert with economic growth. Where net transfers were stagnant, incomes were decoupled from growth, a trend observed in the US, Canada and Switzerland.

Figure 6.2 Average yearly increase in earnings and in net government transfers in P10 to P50 households, various countries, 1979–2005



Note: The countries are ordered according to average yearly increase in income in P10 to P50 households. The actual years vary somewhat depending on the country. The data is averages for size-adjusted household earnings and net government transfers (cash and near-cash transfers received minus taxes paid). The amounts shown are for a household with four persons; for a one-person household, divide by two. Incomes are adjusted for inflation using the CPI and converted to US dollars using PPPs. Source: Kenworthy, Why Do Low to Middle Income Households Get Better Off?; calculations using income data from the Luxembourg Income Study Database and inflation and PPP data from the OECD

These findings suggest that, as a general rule, growth does not trickle down to the lowest income households through wages or employment. The UK is not alone in having relied on a system like tax credits. Advanced economies as different as the US and Sweden have now realised that it is necessary to have some form of cash transfer for low (or low to middle) income working households. While we have been clear that past growth in state support cannot be repeated, these findings show how important it will be to protect the role of tax credits in supporting working families.

[2] Kenworthy, Why Do Low to Middle Income Households Get Better Off?

6b The inevitable downsides of direct state support

Broad-based wage growth has declined across the OECD

While significant growth in spending may have been necessary to establish tax credits as an important new system of support, no one envisaged permanent growth at such a high rate. Indeed, there are many reasons that the UK should now actively shift from state support to employment income as the principal source of rising living standards.

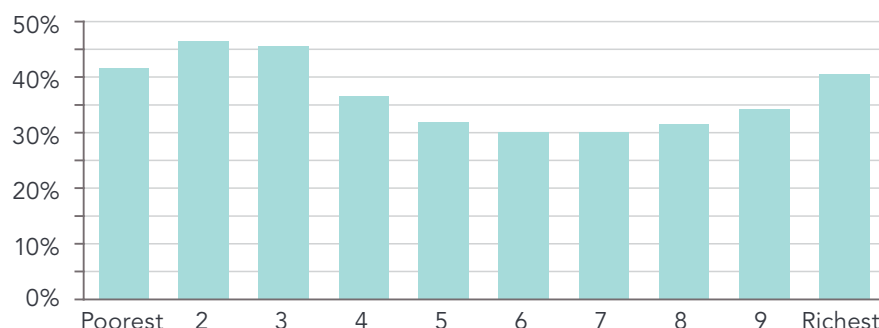
We saw in Chapter 2 that it is unlikely that tax credits significantly pushed down wages. Even so, other criticisms have more weight. One is that people are not neutral between different sources of income and significantly prefer earned income to income provided by the state.^[3] The design of tax credits sought in part to surmount this problem by presenting tax credits, in a sense, as a negative tax. Yet the continuing and strong preference for earned income as well as the relative ease with which the tax credit budget has been reduced is revealing.

The effect of tax credits on work incentives has also been stark. While the Working Tax Credit has substantially improved the incentive to move into work for some groups, tax credits in general have weakened the

incentive for people who already work to earn more. Any individual paying the basic rate of income tax (20 per cent), employee NICs (12 per cent) and receiving tax credits (which are withdrawn at a rate of 41 per cent) now pays an effective tax rate of 73 per cent.^[4] This means they keep 27 pence of every additional pound they earn. This is an inevitable drawback of any means-tested system of redistribution and needs to be traded off against the advantages of directing support towards the households that need it most.

Stepping back, the overall effect of these high effective tax rates on households is significant. Figure 6.3 shows that even by 2020 marginal deduction rates are expected to be high for low income households. The highest rates – higher even than for the richest households – are paid by households in deciles 2 and 3 who are most likely to both pay employment taxes and receive tax credits or benefits which are withdrawn when their incomes rise. As a result, it will be harder for employment income to raise incomes in these households. Those in the bottom half of the wage distribution will find this rebalancing period an uphill struggle.

Figure 6.3: Average marginal effective tax rate (%) on earned income among workers in the UK, by household income decile group, 2020-21



Notes: Assumes full take-up of benefits. Definitions of earnings and net household income as in Figures 5.1 to 5.6.
Sources: IER & IFS calculations for the Resolution Foundation, Family Resources Survey 2008-09, IFS TAXBEN model.

[3] See for example Tu, T. and Ginnis, S., (2012), *Work and the Welfare System: A survey of benefits and tax credits recipients*, Ipsos MORI for the Department for Work and Pensions; Dean, H., (2007), "Poor parents? The realities of work-life balance in a low-income neighbourhood", *Benefits: A journal of poverty and social justice*, 15 (3), pp. 271-282. [4] Other households face higher withdrawal rates under the current system, particularly those receiving Housing Benefit. Universal Credit is likely to reduce many of these very high withdrawal rates, depending on how local authorities choose to administer Council Tax Benefit (which will be localised under the new system).

6c The essential role played by tax credits

Tax credits target support according to family need – a function the labour market cannot simply replace

While tax credits had downsides, it is important to remember that the tax and benefit system plays a role that wages cannot. Whereas wages are paid to individuals, only the tax and benefit system accounts for the wider needs of families and in particular the presence of children. Earlier in the 20th century, the tax system could in theory have been used to target support at low income households, but now it functionally cannot. This is because, while the state has always recognised the presence of children to some degree, over time there has been a shift from the tax to the benefits system as the principal way of doing so.

Only the tax and benefit system accounts for the wider needs of families and in particular the presence of children

This started with the move to individual taxation. The Child Tax Allowance (which meant that families with children paid less tax) was phased out in 1977 (being replaced by Child Benefit), while the Married Man's Allowance lost value over time. In 1990 income tax moved to individual assessment rather than family assessment. As a result, taxes now redistribute between individuals rather than families, with a parent of four children, for example, paying the same rate of tax, and receiving the same tax allowances, as a single person.

To compensate for the move to an individualised tax system, the benefit system has increasingly come to take family composition into account, most recently through the introduction of Child Tax Credit in 2003.^[5] As this transition took place, some key elements of the tax system, like the Personal Tax Allowance, fell in real terms.

These long-term changes in taxes and benefits have big implications for policy and for living standards. For example, the last government's ambition to reduce child poverty had to be carried out by increasing benefits or tax credits rather than by reducing taxes for the low paid. Today, the brunt of fiscal consolidation, having come from working-age benefits, has been borne by households with children, as we saw in Chapter 5.^[6] A further implication is that a strategy focused on the Personal Tax Allowance rather than household-based support like tax credits (assuming it is not coupled with a reversal of the above tax reforms) will disadvantage households with children.

Wages can never guarantee families a minimum standard of living

A similar limitation applies to policies like the National Minimum Wage, which boost wages but clearly don't acknowledge the number of children in a family.^[7] In fact, this is explicitly recognised in the design of the Living Wage, the value of which is premised on a family fully taking up tax credits and other means-tested benefits; the Living Wage is the wage that delivers a minimum standard of living once you add on tax credits. Without these entitlements, the appropriate rates would be far higher. For example, the Greater London Authority (GLA) estimates that an hourly London Living Wage rate of £10.40 would be required if means-tested benefits were excluded from the calculations, rather than the current rate of £8.30.^[8] The implication is that, even if the UK achieves growth in the minimum wage to this level over the very long term, a system like tax credits will still be essential if low and modest incomes households are to share in the proceeds of growth.

6d Conclusion

The main source of rising incomes for much of the last decade now looks likely to go into reverse. Income from employment – whether rising hourly wages or rising employment levels – will have to take more of the strain in boosting household incomes. This is no mean feat. As mentioned above (In depth 6.1), only in excep-

tional circumstances has any advanced economy achieved strong growth in living standards for the lowest income households directly through the market, rather than through cash transfers.

High marginal tax rates will make this an uphill struggle. For those with children in particular, it will be crucial that tax credits don't fall substantially in value.

[5] Gregg, P., Hurrell, A. and Whittaker, M., (2012), Creditworthy: Assessing the impact of tax credits in the last decade and considering what this means for Universal Credit, Resolution Foundation. [6] Analysis at the time of the 2012 Budget showed that by 2014 households with children will have had a 4.7 per cent decline in annual net income (£1,781 in cash terms) as a result of the current government's tax-benefit reforms, compared with 2.3 per cent (£751) for working-age households without children and 1.4 per cent (£316) for pensioner households. See Joyce, R., (2012), Tax and Benefit Changes, Excluding Those Affecting Mainly the Very Rich, Institute for Fiscal Studies, www.ifs.org.uk/budgets/budget2012/budget2012robjoyce.pdf (accessed 1 October 2012). [7] This argument is made well in the relation to the Living Wage in Bennett, F. and Lister, R., (2010), The Living Wage: The right answer to low pay?, Fabian society briefing paper, London. [8] Defined as tax credits, housing benefits and council tax benefits. See GLA Economics, (2011), A Fairer London: The 2011 Living Wage in London, GLA Economics, Living Wage Unit, p. 17

Six lessons for living standards

This second section of the report has presented analysis across a broad domain, drawing on a wide range of original research submitted to the Commission. What do the findings tell us about the future prospects for living standards when we draw them together?

At the highest level, they confirm that the link between growth and rising material wellbeing is neither stable nor automatic. The mechanisms through which growth has reached ordinary working households have changed over time and cannot be taken for granted. As things stand, it is far from clear – in particular for low income working families with children – where the next significant and sustained period of growth in household income will come from, even when GDP growth returns. Economic recovery will be necessary for a recovery in living standards but it is by no means sufficient.

More specifically, six key lessons for living standards emerge from the evidence that we have presented above. They set out starkly the scale and nature of the challenge that the UK now faces:

1 There is a clear imperative to rebalance income growth away from state support towards employment income. Repeating the growth of state support that took place in the 2000s seems neither financially sustainable nor necessarily desirable. Under current plans, government cash transfers are set to fall over the long term and to do so in an environment that is otherwise extremely difficult for living standards. If we are to avoid an unprecedented decline in real and relative incomes for a broad swath of the country, public authorities will need to be far more ambitious and targeted than they have ever been before in supporting employment income in low income households. This can be done by boosting hourly wages, hours worked or employment in the bottom half of the wage distribution. There is no other way. Nor will this be easy. Only in exceptional circumstances has any other advanced economy achieved this in the past 30 years.

2 The UK economy pays a heavy price for the unusually high incidence and severity of our low wage work. Our low paying sectors are larger than in other advanced economies and the people who work in them are paid worse, even when doing the same jobs. Companies find it easy – indeed they feel encouraged by our institutional environment – to adopt low paying strategies even when there are equally competitive alternatives. Meanwhile UK workers have little power to improve their situation, particularly those who are paid badly but above the National Minimum Wage in our large and largely non-traded personal service sectors with low rates of unionisation. The cost of these individual employer decisions – through the direct fiscal costs of in-work transfers, the long-term economic costs of underinvestment in skills, and the social and economic costs of wasted potential and limited mobility – is vast.

3 A very large proportion of our workforce simply is not equipped with the skills as they need to compete for good jobs, and in particular to get a share of the very high wage returns that graduates still attract. This problem owes much to the UK's unusually

long tail of people without basic skills, the high percentage without intermediate skills, and the variable quality of our intermediate qualifications. The UK's underperformance on skills is longstanding but its consequences are now greater than ever. It is holding back our overall economic performance and skewing wage growth away from those in the bottom half of the wage distribution.

4 Large numbers of people who could work and who want to work – and who would probably work in many other countries – do not do so in the UK. This problem exists among demographic groups that are already essential to prosperity and that are becoming more so, most notably parents and older workers. This is not a cyclical problem but a structural underperformance that arises in large part from our policy and institutional infrastructure. The result is that the UK wastes vast amounts of potential productive capacity, because work too often simply doesn't pay.

5 Low income households are extremely vulnerable to the soaring prices of essential goods and policy-makers have no adequate way to respond. The prices of some essential goods like food are largely beyond our control. But in other areas such as energy or the costs of financial services the design of UK markets may have more of a role. Other areas, not least work-related costs like childcare and transport, may be even more tractable.

6 Low income working families with children face particularly bleak prospects in achieving real income growth and in terms of their relationship to the overall health of our economy. Without action, their relative income growth will be extremely poor as state support looks set to recede over the long term. This owes something to our collective failure to secure a systematic and politically sustainable way of recognising children in our tax and benefit system, a point all too often glossed over in public debate.

These lessons sharpen our understanding of the challenge facing living standards. The remainder of this report does two things.

Section 3 looks forward to 2020, sketching out some likely scenarios for living standards in the next decade. First Chapter 7 gives a more detailed account of where low to middle income Britain is headed on our current path. Then Chapter 8 sets out how much difference could be made with concerted action.

Section 4 then turns to policy. In the course of three chapters, on the role of wages (Chapter 9), employment (Chapter 10), and the tax and benefit system (Chapter 11), it sets out the choices that will need to be made to respond to the living standards crisis. Its focus, as with of all our work as a Commission, is long term. But it also sets out some practical, incremental and funded steps that could be taken now.

{Section 3}
Looking forward:
Living standards to 2020

This section of the report sets out the prospects for low to middle income households in the next decade. First we look at how incomes will fare on Britain's current path, forecasting the kind of jobs likely to be created in the recovery and how these will impact on wage growth. We then look at how these wages translate into household incomes after the effect of taxes and benefits. When growth returns, who will gain? Second, we look at the difference that can be made to these outcomes. What would happen if wage growth was more (or less) equal? And how much difference can be made to living standards by putting some key ingredients for shared growth in place?

At various moments internationally and in UK history, countries have struck upon recipes for shared growth. In the late 1990s the US labour market delivered, albeit briefly, strong and broadly shared earnings growth as high employment both drove and complemented high real wage growth. A similar path has been taken by Norway in the past several decades, leading to strong earnings growth in the bottom half of the wage distribution. By contrast the Dutch economy in the 1990s delivered shared growth through a rapid expansion of

employment levels, including among women, disproportionately raising employment income in households in the bottom half of the wage distribution.

The economies of Denmark, Sweden and Finland have taken a slightly different approach, raising living standards through generous cash transfers and high female employment rates. They have delivered some of the most broadly shared income growth in the developed world. The UK in the late 1990s and early 2000s combined different approaches, mixing a strong labour market with a strongly rising minimum wage and growing cash transfers to ensure that households in the bottom half of the wage distribution shared in prosperity.

These past strategies remind us that without growth and a strong labour market we are nowhere. But they also show that it is when countries achieve growth *and* put in place the conditions to ensure that the bottom half of the wage distribution also benefits, that ordinary working households see strong growth in living standards. This helps to avoid fatalism. As this section of the report will show, the prospects for living standards on our current path don't look good, but there are things that can be done to improve them.

{Section 3}
Looking forward:
Living standards to 2020

Chapter 7
Our current path

Chapter summary

- Even on optimistic growth assumptions, low income households in 2020 now look likely to have incomes 15 percent below those in 2008, a level last seen in 1993.
- Middle income households in 2020 look likely to have incomes around 3 percent lower than in 2008, a level last seen in 2001.
- These lost years for living standards, ranging from 27 to 19 years across low to middle income households, would be unprecedented in modern times.
- Growth is set to be skewed towards higher income households as jobs are created at the top and bottom while declining in the middle.
- Existing plans for cuts to state support will accentuate the squeeze on lower income households, while middle income households with children will see their incomes grow at less than one-third of the pace of those without children from 2011-2020.
- Doing what we can to constrain the prices of essential goods will be crucial if lower income households are to avoid long-running declines in their real incomes.

A key question for the Commission has been how we expect household incomes to develop over the coming decade, assuming the economy returns to growth. Clearly if there is no or very low growth living standards are likely to further deteriorate. But if there is growth, can it be expected to raise low to middle income households above their pre-crisis income levels? Or will economic growth be skewed towards the top, leaving state support struggling to compensate households in the bottom half of the wage distribution, leading to stagnation or decline?

This chapter starts by sketching out how, on

our current path, the balance between different occupations, sectors and skills is likely to affect household incomes. We are particularly interested in whether changes in the kinds of jobs being created and the polarisation of employment are set to continue, and what this means for household earnings and incomes.^[1] The findings build on a major piece of work funded by the Joseph Rowntree Foundation (JRF) and the UK Commission for Employment and Skills (UKCES), combining the most sophisticated economic modelling yet undertaken of the future of the labour market with expected changes in UK tax and benefit policy and household composition.^[2]

7a Household incomes to 2020 – our approach

We give a brief overview of our methodology on page 77. The projections and scenarios set out in this section are of course stylised. While they allow us to sketch out the likely shape of growth and to get a sense of scale, they should not be seen as predicting the precise levels of income in 2020 to the nearest pound.

What we set out in this chapter

This chapter sketches out possible paths for household incomes up to 2020 on the basis of research for the Commission conducted by the Institute for Employment Research (IER) and the IFS that builds on work funded by the JRF and the UKCES. It combines forecast changes in the UK labour market, with expected changes in tax and benefit policy and household composition.

On pages 77-80 we present the baseline scenario, forecasting the UK labour market to 2020. This illustrates how the changes in the UK labour market look set to impact on household incomes. It assumes, rather optimistically, that wages grow at the same rate for all jobs. (See Note 7.1 for a full account of the underlying assumptions of the work.)

On pages 84-85 we then look at the impact of rising or falling wage inequality. This discussion presents two scenarios that modify the baseline scenario by assuming that pay grows faster at the top than at the bottom, and vice versa. This gives a sense of the impact of changes to wage inequality on household incomes. Specifically, we look at how:

- a repeat of the rapid *increase* in wage inequality observed in the period 1975 to 1985 would affect household incomes
- a modest fall in wage inequality (based on a level that seems viable in a decade) would affect household incomes

Finally, on pages 86-87 we look at what changes could make a difference to household incomes. On the basis of international examples and historical experience in the UK, we model the impact of:

- *higher female employment*: raising UK female employment to the average level among OECD countries that outperform us on female employment
- *improved skills*: modeling ambitious improvements in skills in the bottom half of the workforce; specifically, this model reduces the share of people with no skills, increases the share with intermediate skills, and raises the wage return to intermediate skills
- *boosting low wages*: illustrating the possible impact of a concerted strategy to address low pay. This scenario repeats the pattern of wage growth that was seen in the decade around the time the UK minimum wage was introduced.

We conclude by examining a combined scenario in which the impact of improvements in female employment, skills and low wages are combined.

[1] Institute for Employment Research and Institute for Fiscal Studies, (2012), *The Impact of the UK's Changing Employment Structure on Low to Middle Income Households in 2020*, Resolution Foundation, London. [2] For the full report of these findings see Institute for Employment Studies and Institute for Fiscal Studies, (2012), *The Prospects for Low to Middle Income Households in the Next Decade*, Resolution Foundation, London.

7b Where the UK is headed on our current path

Our baseline scenario predicts a difficult decade for low to middle income households

According to our baseline scenario, the decade to 2020 looks set to be unprecedentedly hard for low to middle income households. Figure 7.1 summarises the results from our baseline scenario. It shows the annual average growth rates for household income between 2011-12 and 2020-21 at

different points in the household income distribution. Two things stand out:

- *In 2020, incomes across the entire bottom half of the distribution will be lower than they were in 2011-12.*
- *The pattern of income growth over the decade is set to be skewed towards the top.*

Note 7.1: Projecting living standards to 2020 – assumptions and methodology

The underlying methodology used by the IER and the IFS in these scenarios is set out in detail in an accompanying full report for the Resolution Foundation.^[3] While the final output of the economic model is a projection of working-age household incomes to 2020, it is important to understand the building blocks that underpin the projection:^[4]

First, the macroeconomic picture underpinning the projections is generated by a model of the macro economy run by Cambridge Econometrics. The central GDP projections in this model, generated around a year ago, were an average of 1.9 per cent growth between now and 2011 (more optimistic than today's forecasts), rising to a long-run average of 2.5 per cent from 2015 to 2020. This model is used to forecast for 2020 employment in different sectors, occupations, skill levels and regions, whether these jobs will be undertaken by men or women, and whether they will be full or part time.

Second, the IER uses detailed earnings data to assign wages to each of these jobs. The baseline scenario assumes a constant rate of wage growth across all job types on the basis of earnings projections from the OBR's November 2011 forecasts.^[5] This means that the baseline scenario holds constant the relative pay gaps between different jobs. Put another way, it focuses on whether the UK labour market is creating more bankers, cleaners or care workers rather than on whether the pay gaps between these jobs are changing. (We then test the impact of changing pay differentials separately in scenarios that look at rising and falling wage inequality.)

Third, this pattern of wages is fed through a model of the UK tax and benefit system run by the IFS. To do this, the model projects how workers are spread between households across the distribution. Once these household earnings are run through the tax and benefit system, this creates forecasts for household income after state redistribution. This takes account of all planned cuts announced by the time of the Chancellor's 2011 Autumn Statement. Importantly, it assumes no further cuts (and does not therefore include the mooted additional £10 billion reduction in welfare spending).

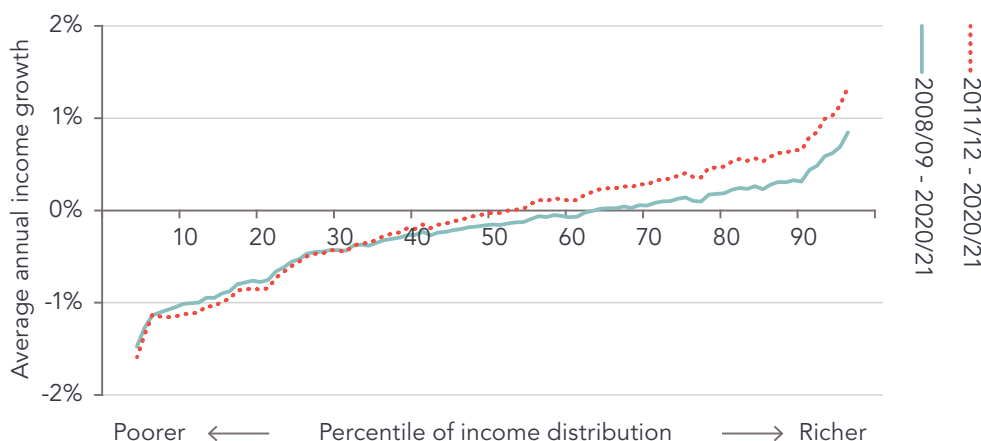
In general, the assumptions underlying the model and the "baseline scenario" – on GDP, the distribution of wage growth and the tax and benefit system – are optimistic. Given uncertainty about medium-term growth forecasts, our intention was to err on the side of optimism, stress testing the view that once the overall economic picture improves, steady growth in living standards will resume.

[3] Institute for Employment Research and Institute for Fiscal Studies, The Impact of the UK's Changing Employment Structure on Low to Middle Income Households in 2020. [4] For a full description of the assumption used in this work see Wilson, R. A. and Homenidou, K., (2012), Working Futures 2010–2020: Main Report, Institute for Employment Research, Coventry; and similar forecasts sketching out the implications for poverty see Wilson, R. A. et al., (2012), The Impact of Employment Changes on Poverty in 2020, Joseph Rowntree Foundation, York. [5] Job types are defined by the combination of occupation, industry, full time/part time, gender, region and qualifications level. The model increases wages across all job types at a constant rate which, when combined with changes in the relative numbers of people in each of these different job types, result is 3.6 per cent nominal growth in average earnings (in real terms this equates to about 0.2 per cent over the period as a whole).

Figure 7.1 also shows how the results look if we include the immediate post-crisis 2008-09 to 2020-21 period (the dashed line). The effect is not as dramatic as one might expect. Including these years makes the picture worse

overall and reduces incomes particularly significantly in the top half. This is because initially in the post-crisis period lower income households were protected by state support.

Figure 7.1: Average annual real growth in net household income among non-pensioner population in the UK, 2011-12 to 2020-21



Notes: The top and bottom 3 percentile points are not shown owing to high levels of uncertainty from sampling and measurement error. Net household income is measured after taxes, inclusive of benefits, before the deduction of housing costs, at the household level, and equivalised using the modified OECD equivalence scale. Data includes workless households. Sources: IER and IFS calculations for the Resolution Foundation, using Family Resources Survey 2008-09, TAXBEN, and assumptions specified in the text

What does this mean for households?

To understand what these forecasts mean for typical households we can translate them into cash terms.^[6] A low income household in 2008-09 (at the 10th percentile) had an income of £10,600 a year.^[7] By 2020-21, the forecasts predict that a similar household will have an income of just £9,000 a year (in 2008-09 prices), a real-terms decline of 15 per cent. A decline of this depth and duration would be unprecedented in modern times and would return income at the 10th percentile to a level last seen in 1993, nearly three decades earlier.

The picture is slightly better when we look at a typical middle income household (at the 50th percentile). This reflects the fact that higher income households tend to receive less of their income from the state, and as a result

will be relatively insulated from the significant decline in state support that is forecast to take place over this period. Even so, median income falls from £22,900 per year in 2008-09 to £22,100 in 2020-21, a real-terms fall of 3 per cent. This would return median income to a level last seen in 2001, two decades earlier, again an unprecedented period of no income gain.

These projections give a sense of the likely strength and shape of income growth in the coming decade, bearing in mind that the macroeconomic assumptions underlying the results can be considered optimistic. They confirm the findings of earlier work, which suggest that relative poverty is set to rise in the 10 years to 2020, along with child poverty and other measures of relative earnings and income inequality.^[8]

[6] We rely on data for the 2008-09 to 2020-21 period rather than starting in 2011-12, although as we see from the above results, the situation would not be significantly different had we started in 2011-12. [7] For a couple with no children. [8] Brewer, M. et al., (2012), Poverty and Inequality in 2020: The impact of changes in the structure of employment, Joseph Rowntree Foundation, York.

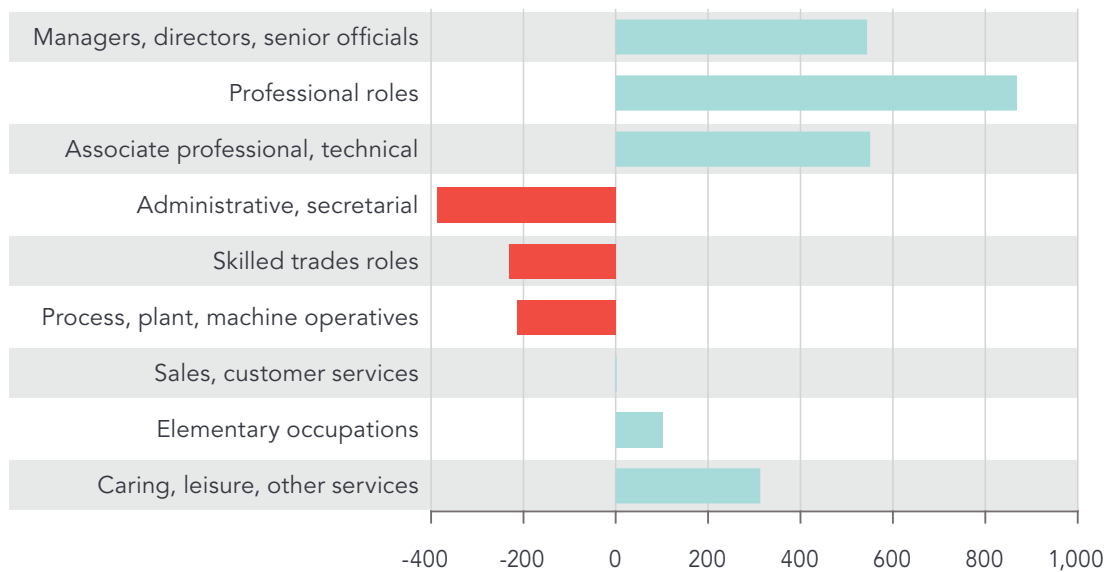
7c Ongoing polarisation in the UK labour market

The polarisation of the labour market is set to continue

How much are these outcomes being driven by changes in the structure of the jobs market? Figure 7.2 shows what happens to employment in different occupations under the baseline scenario. The story is one of a jobs market moving towards service roles that are, as currently designed, relatively low paid, and away from mid-level jobs that helped to drive past periods of prosperity. Employment growth is

set to be strong in top professional occupations and also moderately strong in poorly paid service roles in caring and leisure. There will be growth in the retail and distribution sector while white collar roles in public administration are likely to decline. Mid-level occupations in administration and skilled trades are also set for further declines. These trends will accentuate the patterns seen in the last 10 to 20 years.

Figure 7.2: Net change in employment by occupation, UK, 2010–2020, thousands of jobs

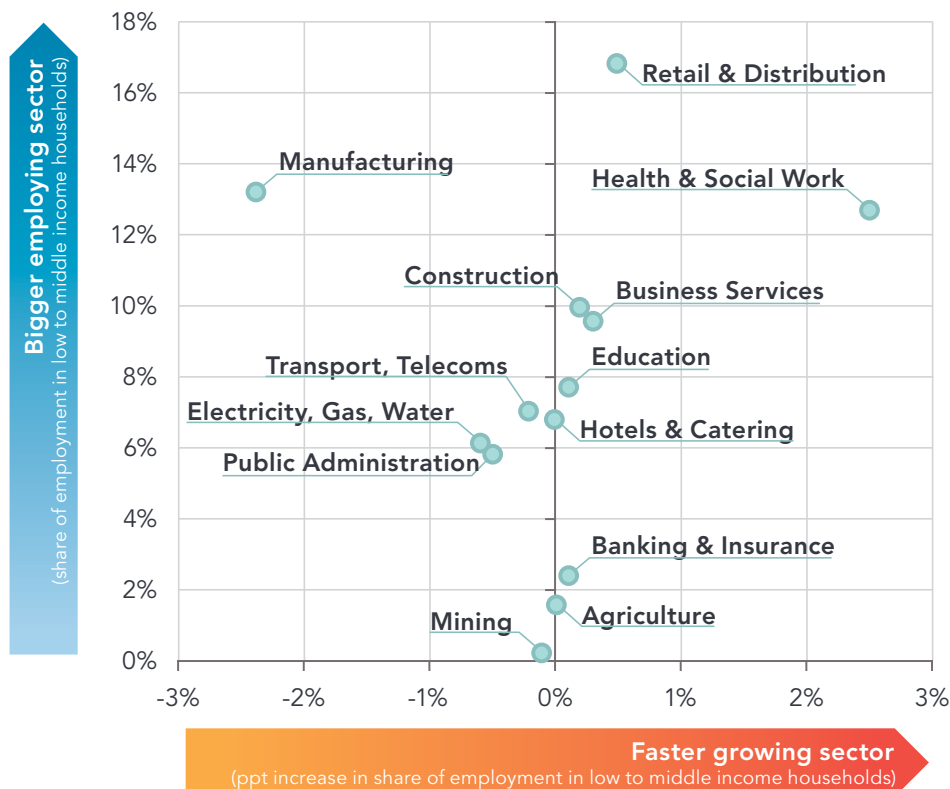


Source: IER and IFS, The Impact of the UK's Changing Employment Structure on Low to Middle Income Households in 2020, based on central projections from Wilson, R. A. and Homenidou, K., (2012), Working Futures 2010–2020: Main Report

Figure 7.3 demonstrates how this will impact on the sectors that are important for low to middle income households. From top to bottom it shows which industries are the biggest employers of people in low to middle income households. From left to right it shows which industries are growing fastest in terms of their share of employment in low to middle income

households. Industries in the top right quadrant – in particular retail and social care – are large and of growing importance. These are both generally low paying sectors. Meanwhile manufacturing is set for ongoing declines. While business services is set to grow quickly overall, relatively few of these jobs are set to be captured by low to middle income households.

Figure 7.3: Share of employment in low to middle income households in 2008-09 against growth in employment in that sector, UK, 2008-09 to 2020-21



Source: Resolution Foundation analysis; data from IER and IFS

The projections also show that the overall skills profile of the workforce is set to improve, but that large gaps will persist between the low to middle income group and those on higher incomes. In our baseline scenario, of those in employment in the low to middle income group in 2020, 30 per cent will have a degree level qualification or better compared with 59 per cent of those in higher income households. For adults living on low to middle incomes, low and intermediate skills will continue to dominate, with 42 per cent set to have a Level 1 or 2 qualification and 15 per cent a Level 3 qualification. Given the wide gaps in wage returns between these different qualification levels, this will have an important impact on the distribution of earnings and, therefore, income growth in the coming years.

Structural changes in the labour market will raise incomes but also inequality

How far does the changing structure of employment explain the patterns we see? While the forecast pattern of job creation is good for most households, it is also set to significantly increase inequality, boosting incomes at the top far more than lower down. Thus most people are benefiting to some degree from the good jobs being created in our economy but higher income households capture far more of the gains, widening the gap between themselves and those on lower incomes. Unlike in the 1990s and 2000s, state support is accentuating this weak and unequal growth in incomes. The average share of income that low to middle income households receive from the state falls from just over 20 per cent in 2008-09 to just over 16 per cent in 2020-21.

7d Future trends in the cost of living

The discussion above gives a sense of the likely scale and shape of income growth over the next decade. Throughout, incomes are controlled for inflation and so show real changes over time. Yet we also learned in Chapter 3 that inflation matters greatly, not just in terms of its headline rate (CPI or RPI) but also its profile between different categories of goods and services. When the balance of inflation is tilted towards essential goods, even a benign environment for average inflation can hurt lower income households whose members spend a bigger share of their income on essentials.

Trends in prices will be crucial for living standards in the coming years

Such changes have had significant impacts in recent years as the cost of essentials has soared. These trends are potentially important since they are the most direct way that people notice weak income growth. When slow nominal income growth pushes people up against spiking prices, it is the spikes they notice first. This is why public discussion about living standards plays out through concern about the prices of essentials like fuel, childcare and transport more than through concern about incomes or earnings. Demand for action to control prices in all of these areas is likely to rise to new heights as the squeeze on incomes enters its second decade.

If recent trends continue, low to middle income households will fall further behind

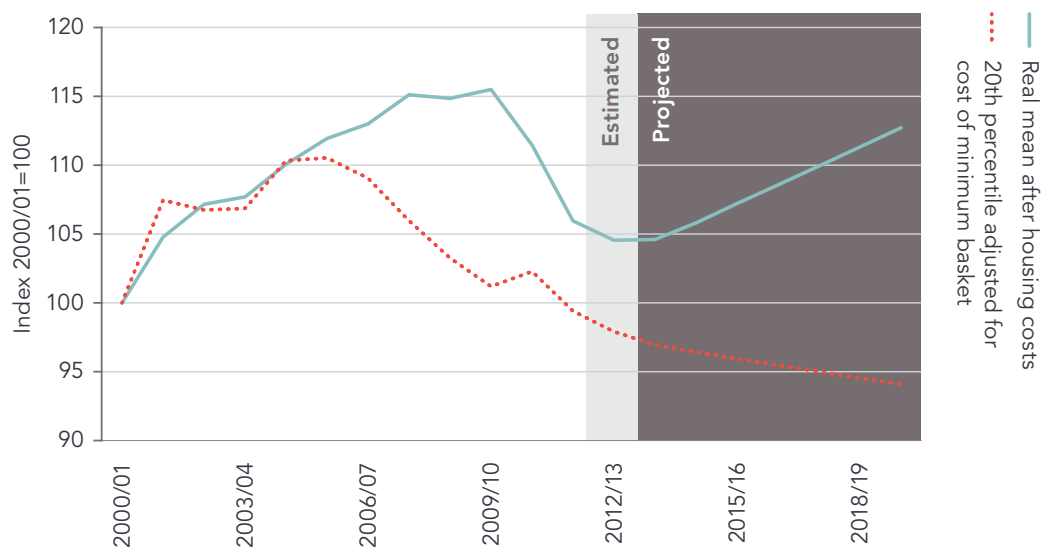
Projecting inflation is one of the most treacherous areas of economic forecasting and we can do no more than give a rough sense of the scale of the impact if recent price dynamics continued. In Figure 7.3, the solid line shows likely trends in average household income adjusted for CPI, with projections forward on the basis of forecasts from the OBR. (See Note 7.2 for detail on underlying assumptions.) The dotted line shows real household income at the 20th percentile adjusted by a measure based on the price of a basket of essential goods. These projections are purely stylistic; they put to one side all changes in the labour market discussed above and assume a relatively benign labour market.

The result of taking the rising cost of essentials into account is that income at the 20th percentile erodes in value over the next decade, ending lower in 2020 than it was in 2000. If strong growth in the price of essentials became the norm, low income households would be less able to afford a basic basket of goods in 2020 than they were 20 years earlier. This scenario is not comparable with the forecasts above but it gives us a different take on the squeeze in the coming decade, showing the great importance of relative prices.

Note 7.2: Assumptions behind the inflation modelling

The striking results set out in Figure 7.3 are based on a number of highly uncertain but not improbable assumptions.^[9] We assume that the cost of essential goods continues to outpace general inflation by the same amount it has in the past five years and that incomes grow at the rate projected for earnings by the OBR in November 2011. This is an optimistic assumption given that cuts in state support mean incomes will grow significantly slower than earnings and inflation, and appears even more optimistic now that OBR projections have been downgraded. Finally, income growth for households at the 20th percentile is weighted to account for the fact that their benefit and tax credit income will only grow at the rate of CPI inflation.

Figure 7.3: Inflation adjusted incomes under a scenario in which the price of essential goods continues to outpace average inflation; average income adjusted for average CPI inflation (solid line) and incomes at the 20th percentile adjusted for changes in the price of a basket of essential goods (dashed line)



Notes: Assumes cost of essential goods outpaces general inflation by the same amount as from 2005 to 2010; income growth at rate of OBR projections, weighted for households at the 20th percentile to account for slower CPI growth in benefit income. Basket of essentials is the Minimum Income Standard basket as defined in Hirsch, Plunkett and Beckhelling, Priced Out. Source: Hirsch, Plunkett and Beckhelling, Priced Out.

[9] For full details of this work see Hirsch, Plunkett and Beckhelling, Priced Out.

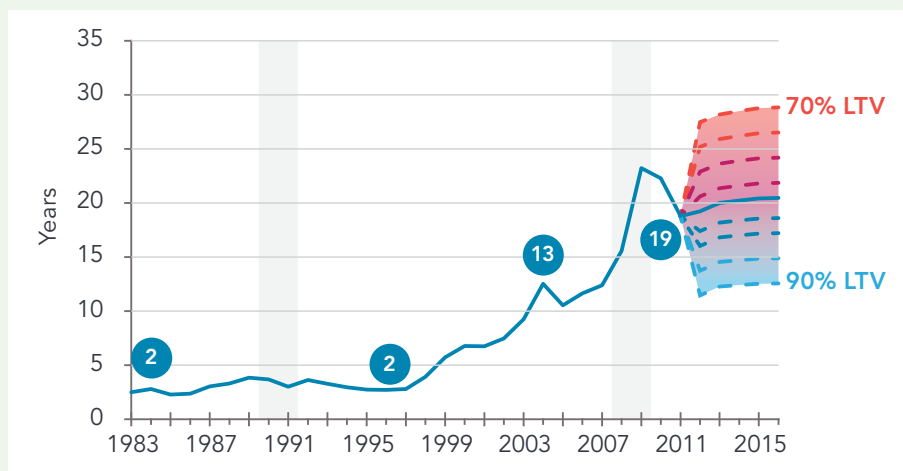
Price rises in some of these key goods have already eased in the past year relative to average inflation. Nonetheless, this analysis reminds us not to neglect the composition of inflation, which can have big distributional effects even when headline figures appear to be benign. If we consider

the forces that sit behind recent price dynamics – from the growing spending power of China’s vast middle class to the growing extraction costs of natural resources – it is not implausible that pressure on the cost of essential goods will continue into the medium term.^[10]

In depth 7.1: Is the dream of home ownership over?

An income squeeze of the duration and intensity suggested by our projections will have an impact across a broad range of domains. From the ability to pay energy bills to pressures from transport or childcare costs, life on a low to middle income in Britain is set to get much harder. One of the most salient effects is likely to take place in our housing market, as weak income growth pushes home ownership beyond the reach of those on low to middle incomes, and particularly younger first-time buyers. Already the number of years it takes to save for a deposit has soared to historic highs.

Figure 7.4: Number of years required to save typical first-time buyer deposit by the average low-to-middle income household: UK 1983-2016



Notes: Deposit costs are calculated by applying median first-time buyer LTVs recorded in each year to mix-adjusted average (mean) first-time buyer house prices. An appropriate stamp duty charge is then added to the deposit requirement. Savings are assumed to be equivalent to either 5 per cent or 10 per cent of average annual LMI disposable incomes. These savings receive a rate of return equivalent to three-quarters of the base rate (taken as a five-year average). The lines show the number of years' saving required to meet the deposit and stamp duty requirements. Bands show projections on basis of future LTVs in the range 70%-90%. Average low-to-middle income household disposable income based on ONS definition: see Chapter 7. House price projections for 2011-2015 are based on UK level projections from the OBR. Low-to-middle income household income projections follow the same methodology as those presented in Chart 6.4. Future deposit rates are based on Bank of England projections for the base rate. Sources: RF analysis of ONS, The effect of taxes and benefits on household incomes; Lloyds Banking Group, Halifax House Price Index, Historical data FTB (ANN); CML, Table ML2; OBR, Economic and fiscal outlook, November 2011; Bank of England, Inflation Report, November 2011

New research for the Commission has examined how the tenure mix in the UK housing market is likely to change as a result of different strengths of economic recovery.^[11] It shows that the path to home ownership for the low to middle income group is fragile. Under a stagnant growth scenario (in which moderate real income growth only takes hold by 2018, alongside improvements in the availability of mortgage finance and in the development of new housing), 18 per cent of households in England will live in the private rented sector by 2025 and 33 per cent will own with a mortgage. Under an even weaker economic scenario in which strong real income growth does not return until 2025, private renting will reach 22 per cent by 2025. Mortgaged home ownership among low to middle income families will fall consistently over the next decade as more and more families are forced into the private rented sector.

Given the importance of housing to labour mobility, ensuring that supply can respond to projected patterns of demand will be very important not just to living standards but also to economic growth. Even so, it seems likely that under any reasonable scenario many more low to middle income households will find themselves raising children in rented accommodation. This will necessitate a change in the quality and security that the rented sector is able to offer.

7e Conclusion

The UK now faces an extremely challenging decade for living standards, even on positive assumptions about growth and recovery. Incomes are set to decline, on average, for low to middle income households by between 3 per cent (for households at the top of the group) and 15 per cent (for households at the bottom). The picture is somewhat better for higher income households with the result that income inequality is set to increase. The outlook for employment income growth is

bleak, with earnings declining across much of the distribution over this period. Patterns of inflation will have a heavy bearing on whether these overall trends are even worse, or slightly better, for lower income households.

These are stark conclusions, but they *are* avoidable. In the next chapter we test the sensitivity of these results, looking at different trends in wage inequality. We then look more specifically at the difference that specific changes could make.

[10] See, for example, OECD and FAO, (2012), *Agricultural Outlook 2012-2021*, OECD and FAO, Paris. See also Bain & Company, Inc., (2011), *The Great Eight: Trillion-dollar growth trends to 2020*, which forecasts that “volatility and commodity price inflation will intensify as... key inputs are increasingly linked by new uses and as demand rises”. [11] Whitehead, C. et al., (2012), *Housing in Transition: Understanding the dynamics of tenure change*, Resolution Foundation and Shelter, London.

{Section 3}
Looking forward:
Living standards to 2020

Chapter 8
Making a difference

Chapter summary

- Higher or lower wage inequality would significantly worsen or improve the prospects for low to middle income households. Yet income inequality is set to increase even if wage inequality falls.
- Ambitious action to raise female employment, improve skills in the bottom half of the workforce and reduce low pay make a difference but the effect of each is modest.
- However, if such changes are achieved together, outcomes materially improve, with a middle income household better off by £1,600 in 2020 compared with the baseline results set out in Chapter 7.
- For the lowest income households, it is possible to mitigate income declines but achieving income growth looks extremely difficult without direct state support.

The projections set out in the previous chapter suggest a bleak decade for households in the bottom half of the workforce, but they should not foster fatalism. Other countries – and Britain in the past – have struck upon recipes for shared growth.

With the aid of modelling, we can be more specific about the potential scale of impact that plausible interventions could make in the UK. First, we look briefly at how sensitive the outcomes in Chapter 7 are to changes

in earnings inequality. Then we look at three additional scenarios for the UK labour market in 2020 which we would expect to deliver stronger earnings and income growth for low to middle income households:

- *increasing the female employment rate;*
- *boosting the quantity and quality of skills in the bottom half;*
- *achieving stronger wage growth at the bottom (see Note 8.1 for further detail on scenarios).*

8a Testing the forecasts – good and bad worlds

Our discussion in Chapter 7 focused on how changes in the structure of the labour market are likely to feed through into living standards. As discussed, these results are based on the assumption that wage growth will be the same across different occupations. This is optimistic. In this section we look at two extreme scenarios for wage growth to understand the range of outcomes we could see over the next decade.

First, we look at what would happen if wage growth were highly skewed towards the top. To do so, we calculate the impact of a repeat in the kind of uneven wage growth seen in the UK from 1975 to 1985, the decade in recent UK history in which there was the single greatest rise in inequality.^[1] Next, we look a scenario of very broad-based wage growth in which those in the bottom half do best. For this scenario, there is no benchmark in recent history because no recent period (for which there is detailed data) has seen big falls in inequality, although there were small falls in parts of the distribution in the last decade. We have therefore applied a fall in inequality of a scale that, though not

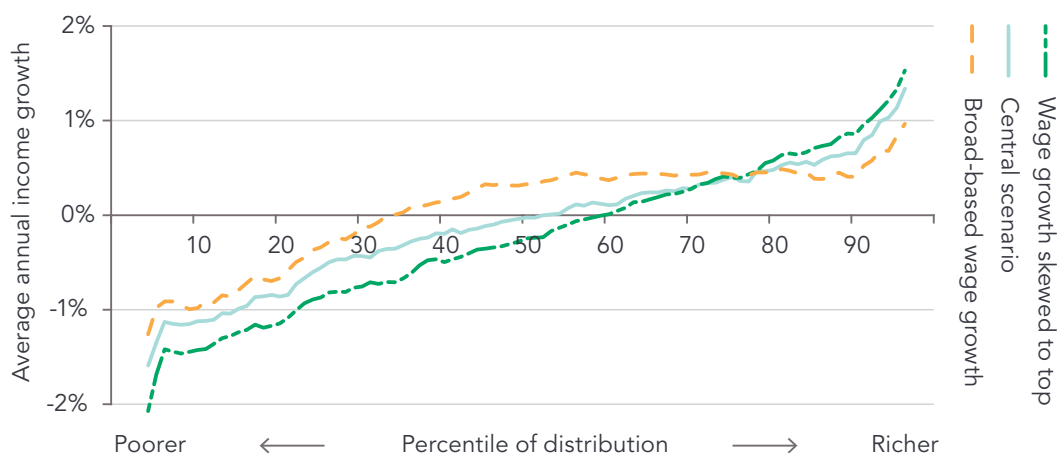
based on historical experience, is the most that seems plausible in the space of a decade.^[2]

As would be expected, increasing inequality in earnings feeds through into incomes, with a greater share of income growth going to the top. Stronger earnings growth in the bottom half of the workforce has the opposite effect. Under the scenario of falling earnings inequality, declines among low to middle income households roughly halve compared with the baseline, with average annual income growth going from -0.4 per cent to -0.2 per cent.

However, an important lesson from these results is that even an egalitarian pattern of wage growth struggles to counteract income inequality: even if the pay of cleaners or hotel attendants rises faster than the pay of managers and consultants over a sustained period of time, something that has not occurred in the UK for almost half a century, inequality in household incomes still rises. Figure 8.1 shows the impact of less or more equal wage growth in net household income for the decade from 2011-12.

[1] It is important to be clear that this is a static model and that does not tell us about any dynamic effects that some have claimed flow from inequality, from sharpened incentives to instability. [2] In practice, we have taken a decade in which there was modest growth in inequality (the 1990s) and have reversed this growth to create a fall in inequality on the same scale.

Figure 8.1: Average annual real growth in net household income among non-pensioner population in the UK between 2011-12 and 2020-21 under baseline scenario and rising and falling wage inequality, real terms (2008-09 prices)



Notes: The top and bottom 3 percentile points are not shown owing to high levels of uncertainty from sampling and measurement error. Net household income is measured after taxes, inclusive of benefits, before the deduction of housing costs, at the household level, and equivalised using the modified OECD equivalence scale. Data includes workless households. Sources: IER and IFS calculations for the Resolution Foundation, using Family Resources Survey 2008-09, TAXBEN, and assumptions specified in the text

Even with broad-based wage growth, most low to middle income households will be worse off in 2020 than in 2010.

This is partly because of the strength of the underlying dynamics that are driving inequality in household incomes, particularly structural changes in the UK jobs market. It also reflects the fact that changes in the earnings distribution do not translate directly into changes in household incomes. Households on the lowest incomes are more likely to be workless, and so see no upside from changes in earnings, while lower income households in general are more likely to have only one person in work rather than two in higher income households.

State support also explains these outcomes in two important ways. Because state support is due to rise much more slowly than earnings, households that receive more support from the state are set to fall behind *even if their earnings rise just as quickly as those above them*. In addition, as we saw in Chapter 6, households in the bottom half face high withdrawal rates. This means that they receive relatively little – on average around 55 per cent to 65 per cent – of any increase in earnings. This poses a major challenge to households on low and modest incomes as Britain moves to a world in which most gains in living standards need to come from employment income; households across the bottom half will be running uphill.

8b Changing path – skills, female employment and low pay

Next we look at whether there could be a better path for living standards, quantifying the impact that major improvements in a number of areas could have on household incomes from now to 2020.

First, we look at the effect on earnings and incomes of raising the quantity of basic skills and the quality and quantity of intermediate skills among the UK workforce. This gives a sense of the impact that might be achieved by enabling workers in the bottom half to get a better share of the new, good jobs that the UK economy is creating. This scenario reduces the proportion of workers with no qualifications, improves forecast progress on Level 3 qualifications and increases wage returns by comparison to the baseline scenario. (See Note 8.1 for further details on the scenarios.)

Second, we raise the level of female employment, lifting the performance of the UK to leading international benchmarks. Third, we imitate what might happen if the

floor under wages were successfully raised, modelling very strong wage growth in the bottom 10 per cent of pay, rippling through to smaller improvements for those on modest pay. This hints at the outcome that might be expected from a successful strategy to combat low pay and enable a higher minimum wage. All three scenarios show how these changes would play out across the household income distribution between now and 2020.

In all cases, the scenarios are extremely broad brush. Nor do they capture dynamic effects. Raising skills and boosting female employment are both likely to have substantial positive knock-on effects and it is likely that we are therefore understating the results. The purpose of the scenarios is to give a sense of the scale of impact that ambitious changes can deliver and to help us understand how better pay or higher employment feed through into household income growth. This informs our later policy discussion.

Note 8.1: Further detail on the scenarios

The scenarios in this chapter draw lessons from other countries and from UK history about the conditions that can deliver shared growth. In each case we have tried to settle on a level of change that is highly ambitious but plausible over the course of a decade. The scenarios model:

- *Higher female employment*: This scenario raises the UK female employment rate to the average level among better performing countries in the OECD. This equates to an overall female employment to population ratio that is 4.8 per cent higher in 2020 than under the baseline.
- *Improved skills*: This scenario models a 50 per cent faster reduction in the proportion of people with no qualifications (compared with the baseline). It also increases by around 4 percentage points the share of people moving from Level 2 to Level 3 qualifications. It maintains current wage returns among Level 1 and 2 qualifications relative to mean earnings (returns which are expected to fall under the baseline).
- *Boosting low wages*: This scenario repeats the pattern of wage growth that was seen in the strongest decade for the UK minimum wage – the 10 years around the introduction of the National Minimum Wage from 1996 to 2006.^[3]

The final combined scenario runs these scenarios together, including any multiplying effects that they may have (for example, by increasing female employment and increasing the pay of low-paid female employees).

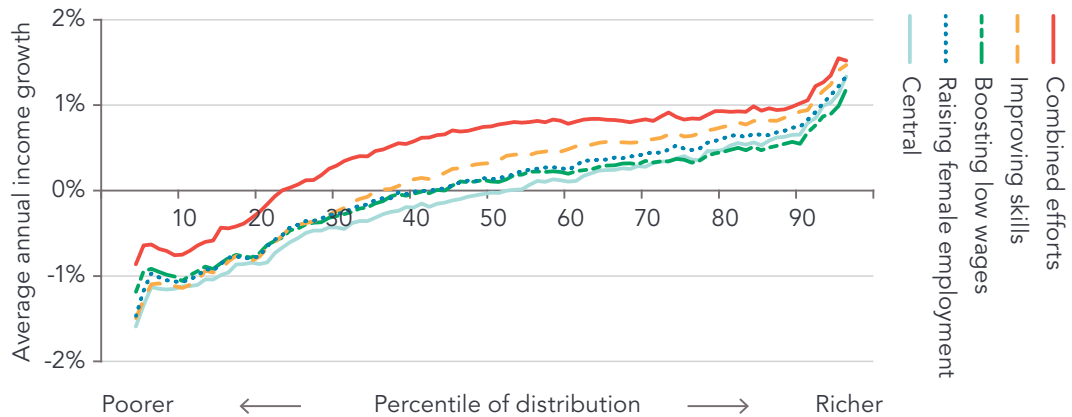
Ambitious action in individual areas only makes a modest difference

As Figure 8.2 shows, even fairly ambitious action in an individual area struggles to boost the incomes of ordinary working households significantly. In part this is because the changes tested in these scenarios are relatively broad in scope rather than targeted. For example we have improved intermediate skills universally rather than focusing support solely on those on low incomes. In practice, targeting is

quite hard to achieve through policies aimed at boosting earnings. Policies focused on low earners or the low skilled are always likely to have a diffuse impact across the distribution of household income because many low-earning or low-skilled people live in middle or higher income households. In the absence of government cash transfers – which can be tightly targeted at certain income groups – it is much harder to boost incomes in the bottom half through employment income.

[3] Growth in pay at the bottom of the distribution was seen before the NMW was introduced in 1999.

Figure 8.2: Average annual growth in net household income among non-pensioner population in the UK between 2011-12 and 2020-21 under baseline scenario and successful interventions, real terms (2008-09 prices)



Notes: The top and bottom 3 percentile points are not shown owing to high levels of uncertainty from sampling and measurement error. Net household income is measured after taxes, inclusive of benefits, before the deduction of housing costs, at the household level, and equivalised using the modified OECD equivalence scale. Data includes workless households. Sources: IER and IFS calculations for the Resolution Foundation, using Family Resources Survey 2008-09, TAXBEN, and assumptions specified in the text

But combined action across a number of fronts can have a big impact

There is a more optimistic reading of Figure 8.2. By combining the three scenarios together we see that simultaneous action in a range of areas can have a big effect. The overall difference between the “combined” scenario and our baseline scenario is around 0.8 percentage points higher average annual income growth for the low to middle income group. Importantly, these figures relate to an annual average for every year from 2011-12 to 2020-21 and so have

large cumulative effects. By 2020, this would translate into roughly an extra £1,600 a year for a typical middle income household.

The scale of this effect is partly explained by the fact that some of these changes interact with each other: they are more than the sum of their parts. For example, strong growth in wages at the bottom disproportionately helps female workers and therefore has a bigger impact when female employment is also strong. Again, it is likely that by missing the more dynamic aspects of these interactions we are understating the overall effect.

Ingredients for shared growth

The first three sections of this report described the nature of the squeeze on living standards, explaining how we got here and where we are heading

Even on fairly optimistic assumptions, the long-term prospects for the real incomes of ordinary working households are unprecedentedly poor. This trajectory is unlikely to change without bold action on a number of fronts. Even when money was available for new direct support from government, shifting the income distribution was very hard work. Changing the growth and distribution of employment income will be far harder and the impact of policy interventions more diffuse.

But we have also seen that alternative paths are possible. Some countries have done much better than the UK in making sure their labour market raises the standard of living of ordinary working households. The UK has also performed better in this respect at other times. These variations are explained in part by favourable social and cultural circumstances such as the changing role of women in society. But policy also matters. Faltering prosperity for the low to middle income group is not a universal 21st-century malaise; it depends in large part on the decisions that public authorities, individuals and business make.

Summing up what we have learned, we can identify some important ingredients for shared growth. Pursuing higher productivity through research and business investment, better quality management and a smarter planning system is vital. But productivity growth only creates the potential for steady and widespread growth in living standards. The following additional mechanisms are needed to ensure this potential is realised:

1 *A skills system that gives people in the bottom half of the UK workforce a fighting chance to secure good jobs, backed by labour market institutions that encourage employers to share their proceeds broadly.* In many countries this means that sector-based skills bodies work alongside broad collective bargaining coverage and strong employer bodies. But this is not the only answer. Some countries have innovated, building new institutions like Australia's system of sectoral minimum wages and fair

negotiation clauses. Accepting that the UK needs new institutions as well as improvements in skills supply is a big change. Improved skills are vital, but they are not enough.

2 *Not just low unemployment but broad employment in which a greater portion of the UK population is economically active.* Although it is vital to reduce unemployment through macroeconomic policy and strong demand, to reach new levels of prosperity over the medium to long term the UK also need groups with historically low levels of activity – including mothers and older workers – to find that work is rewarding, financially worthwhile and compatible with other commitments. This will depend on new, pro-employment public services, most notably affordable, accessible childcare and reliable social care. Developing services of this kind should be one of the great projects of the early 21st century.

3 *Not just a welfare safety net but a well-established system of in-work cash transfers to support low income working households – particularly for low income working families with children.* Although recent growth in state support is unlikely to be repeated, tax credits – and their replacement Universal Credit – cannot be eroded without destroying a prerequisite for shared growth. These systems are not symptoms of a dysfunctional labour market, but a fact of life in advanced economies, acknowledged to be essential in countries as diverse as the US and Sweden. Only in exceptional cases has any country delivered steady growth in living standards for low income households without some form of government cash transfer playing an important role.

These are not universal or timeless conditions for shared growth. Some countries have found different paths open to them. But from our starting point in Britain today, it is hard to see how broad-based income growth can be achieved without a mix of all of these factors. The next section of the report turns to what this means in practice.

{Section 4}

What can be done?

Creating the conditions for shared growth in an era of fiscal constraints is the great policy challenge of our generation. Our success will help to decide what Britain looks like in a decade's time and beyond. Come 2020, will the broad swath of ordinary working households be no better off than they were 20 years ago despite years of solid growth – or will a strong link between national growth and personal gain have been restored?

Addressing this question will force some big arguments to a head. There are debates to be had about the extent of direct redistribution, the breadth and balance of our tax base, and the role of the state in shaping the structure of the UK economy. Many of these arguments are ultimately political, coming down to views about the proper roles and responsibilities of the state, differing ideas about the moral weight of inequality, and about the balance between individual and collective goals.

But our research shows that countries also make vital choices that are less inherently political and yet change the trajectory of living standards. Some countries just do better than others at boosting wages and employment among key parts of the population or in certain sectors. Some of these successes involve tough trade-offs, but the simple view that shared growth leads to lower growth has no grounding in the evidence. Some priorities

The following three chapters focus on the key ingredients of shared growth, corresponding to the areas we pointed to in Section 3. They are guided by our view that the balance of income growth now needs to shift away from rising state support towards increasing employment income. This unavoidable conclusion has radical implications for politics and policy because it means that avoiding a generation-long stagnation for low to middle income households now requires a level of growth in employment income in the bottom half of our workforce that few countries have achieved in recent decades.

To do this the ongoing pursuit of overall productivity growth and high employment will need to be complemented with aggressive and targeted attempts to boost wages and employment in certain parts of the UK economy and among certain groups. Our focus is on how to do this.

just become more important for living standards as an economy matures. It is critical that policymakers identify what these are in Britain today and find ways to support them.

As a diverse Commission our focus has been on practical truths like these. This final section of the report sets out our broad judgements about priority areas for long-term policy and some practical and fully funded first steps.^[1] We have tried to be hard-headed throughout, avoiding loose and familiar promises like “rebalancing the economy” to focus on tangible opportunities to boost the three main sources of household income: hourly wages, employment levels and the effectiveness of state support. In each case – skills, labour market institutions, pro-employment public services – new ways of thinking are needed and we are acutely aware that the specific steps we point to are only a start.

Finally, it is important to say that we have funded all of our proposals in full not because we have a shared position on the deficit or a settled view on the prospects for the public finances. Enormous uncertainties remain about UK public spending, the outturn of which depends heavily on the pace and strength of recovery. Instead, our view has been that *whatever your views on the deficit* there is no excuse for inaction. Even within today's broad stance on spending and tax, it is possible to start to change the trajectory of living standards.

In **Chapter 9**, we argue that government will need to be much more active in using public policy to encourage broader-based wage growth in the labour market, including through skills policy and the creation of new labour market institutions.

In **Chapter 10**, we turn to employment and participation, arguing for a new drive to broaden employment, reducing the number of people in the UK who would like to work but are economically inactive.

In **Chapter 11**, we consider the role of the tax and benefit system. While we have divergent views on the need for greater redistribution, we agree that the tax and benefit system could do much more to boost employment incomes while spending similar levels, reprioritising current spending and tax reliefs into more productive forms of support.

[1] Some areas of government responsibility extend across England, Northern Ireland, Scotland and Wales while others are devolved, in differing settlements, to the administrations in Northern Ireland, Scotland and Wales. While the broad arguments of this section are likely to apply across the UK, we would anticipate that the Devolved Administrations would tailor their approaches to meet the specific needs of their countries.

{Section 4}
What can be done?

Chapter 9
**A strategy for
stronger wage growth
in the bottom half**

Chapter summary

- Economic growth and rising productivity are a necessary but not sufficient condition for rising hourly wages.
- Boosting wages in the bottom half will mean strengthening the distribution of skills, which are chronically poor in the bottom half of the UK workforce, and labour market institutions whose relative weakness encourages low pay.
- Improving skills requires two main things, both entailing a new focus on educational outcomes at age 18 in order to make the most of the raising of the participation age:
 - Require all students to study English and Maths to 18; and, in time:
 - Introduce a new, high quality standard leaving exam at 18.
 - Skills supply, though, is no longer enough. Trends in our jobs market require a stronger effort to more actively raise demand for skills with powerful new sector-based institutions and more structured transitions for young people into work.
 - These must be backed by direct labour market policy. The Low Pay Commission needs a stronger, broader remit to combat low pay, including taking a view on which sectors of the UK economy could pay an “affordable wage” higher than the legal minimum.
 - This must be part of a broader strategy including new transparency requirements on large employers to report the proportion of their staff on low pay and new efforts to encourage innovative ways to help employers reduce their reliance on low pay.

9a Swimming against the tide

The key task the UK now faces on hourly wage growth is how to ensure that, as the economy recovers, the gains flow through into strong wage growth across the bottom half of the workforce. Leaving aside weak prospects for aggregate wage growth, we have seen that several trends push against strong wage growth in the bottom half. Pressures from non-wage aspects of compensation are rising as we meet the costs of an ageing society, structural changes in our labour market look

likely to skew growth towards the top and unemployment is exerting a stronger downward pull on real wage growth.

The key will be, first, to make the most of this new world, ensuring that Britain’s workforce is productive in today’s jobs and that the benefits of the good jobs being created are broadly shared and, second, to gradually push the UK towards creating better jobs, becoming slowly less dependent on an employment model that encourages low pay.

9b Growth and productivity – preconditions for prosperity

Growth and rising productivity are prerequisites for rising wages in the bottom half

A precondition for progress is a quick return to economic growth and longer-term steps to boost productivity. As a Commission we have not sought a shared view on fiscal stimulus or the pace of deficit reduction. However, there is now a broad consensus that immediate and bold action to boost demand in specific areas would be merited. It is important to think about living standards as part of these discussions because some pro-growth policies are also particularly beneficial for low to middle income households. Large-scale house building programmes and radical action to reduce youth unemployment are good examples of these.

Beyond emergency steps like these, a sustained agenda to raise productivity will be an essential part of any strategy to boost living standards. This means addressing the UK’s particular productivity shortfalls, including a low level of business investment as a share of GDP and a slowness in commercialising new technologies and diffusing

them throughout the economy. There is strong evidence about the kind of policy environment that supports productivity growth. This suggests the need for major investment in fundamental science, R&D incentives, and institutions that nurture and disseminate innovation.^[1]

Again, concerns about living standards should be a key part of these discussions. Some longer term efforts to boost productivity could be particularly beneficial for low to middle income households. Easing supply-side constraints in our planning system could encourage new house building, enticing large-scale private investment into low cost rental homes. Raising the quality of UK middle management could help employers to make better use of their workforce, narrowing the gap between high and low performing firms, thereby particularly helping workers in the bottom half. Channelling credit to small- and medium-sized enterprises, in which many people on low to middle incomes work, could also help.

[1] For a summary of key evidence see Griffith, “Technology, Productivity and Public Policy”. On institutions that support innovation, see the work of the Big Innovation Centre, a joint initiative of the Work Foundation and Lancaster University.

9c Skills in the bottom half

Broad-based wage growth also needs action on skills and labour market institutions

The missing part of this debate, though, is how to strengthen the mechanisms that feed productivity growth through to the bottom half of the workforce. The UK skills system lies at the heart of this. While it performs well on average, this obscures chronic underperformance among the bottom half of our workforce. We have seen that this manifests itself in two main ways. The UK workforce contains a long tail of people without basic skills including literacy and numeracy, many of whom work in low paid roles in which they are relatively unproductive and from which they struggle to escape. Meanwhile, those with intermediate skills find their wage returns to be highly variable and struggle to compete against people with degrees for well paid, professional jobs.

These failures are long established but, as we have seen throughout this report, they gain new urgency from recent trends in our jobs market. Our economy – like most advanced economies – is not creating better jobs across the board in the way economists once thought

The missing part of this debate is how to strengthen the mechanisms that feed productivity growth through to the bottom half

it would. Personal service roles are growing as a share of employment, leaving unqualified workers to languish in unproductive roles that rarely provide on the job training, marking the end of the road for skill acquisition. Middle-skilled roles are shrinking, removing old routes to security and progression for people with intermediate skills. Knowledge sectors increasingly dominate good jobs, moving prosperity out of reach for people without degrees.

A key implication of these trends is that successive governments have only been partially right about the role that skills can play in boosting wages. Addressing skills supply shortages can help, but increased supply alone is not enough. In key sectors of our economy demand for skills is slack and the government needs to work actively to boost it.^[1] Low demand for skills arises from fundamental economic forces: rising consumption has boosted demand for low skilled services, the rise of single parent and dual earning families has shifted more caring work out of the home, new technologies are competing against intermediate skills in ways they had not in the past. But the UK suffers from a much more acute version of the low-skill, low-pay problem than most of our European competitors, in part because of the failures of skills policy.

The role of supply

The first half of the response must be increasing supply. First, the proportion of people who lack basic core skills like literacy and numeracy must be reduced. This can help to eke out productivity gains in the UK's expanding, low paid service sectors and enable people to progress out of these roles, not least by ensuring they have a stable

foundation on which to build intermediate skills. Second, many more people must be equipped to compete with graduates for good jobs in knowledge sectors. This is now more important than ever. Improving on existing levels of participation in higher education is a vital part of this, both for overall economic performance and to limit further growth in the graduate premium. But it is not enough.

It is imperative that the UK's performance on intermediate skills is improved so that the broad swath of young people who do not go to university have access to good jobs. Over the medium and long term this is the main way to support hourly pay among the bottom half of earners. Meeting this challenge while also addressing the workforce's lack of basic skills requires no less than changing the priorities of formal education. The UK education system focuses overwhelmingly on what children achieve by 16, but what matters most internationally and for the UK's standing in 2030 will be outcomes by 18. The key test is whether the education system gives basic skills to all young people and high-quality intermediate (Level 3) skills to the vast majority before adulthood.^[3]

The UK is about to miss a major opportunity to boost intermediate skills

The UK risks missing a major opportunity to rise to this challenge. The compulsory participation age for education rises to 18 in 2015, potentially a big structural change that could shape the skills profile of the future workforce. Raising the participation age should be seen as a rare chance to raise the attainment of those who currently leave at 16 and (more so, because the vast majority already stay on to 18) to shift our focus and increase our ambition for what is delivered for all young people by 18.

In the short term, the government should take some simple, practical steps. For example, raising the participation age should be bolstered by new requirements that anyone who has not achieved basic core skills by age 16 – such as achieving grades A*–C in English and maths GCSE – should be required to progress towards these qualifications as part of their post-16 education.^[4]

The long-term goal should be a new standard leaving exam at age 18, backed by a clear, new national objective to raise the proportion of children who leave school with high-quality, intermediate skills.^[5] The UK is unusual as a country in having the key school leaving examination (GCSEs) – and the main metric against which schools are judged – at age 16. Most advanced economies focus on outcomes at 18, often through a graduation certificate. As the participation age rises to 18, the current UK approach will become even more anomalous.

A new standard leaving exam should be thought of in a similar vein to the goal of improving the proportion of young people achieving five A*–C grades at GCSE, including in English and maths, a key metric in our school performance system.^[6] The

[2] Sissons, P. and Wright, J., (2012), *The Skills Dilemma Skills Under-Utilisation and Low-Wage Work*, Work Foundation, London. [3] Based on the Ambition 2020 skills targets. [4] This was a key recommendation of the Wolf Report, see Wolf, A., (2011), *Review of Vocational Education – The Wolf Report*, Department for Education, London. [5] OECD, *Education at a Glance*. [6] BIS, (2012), *Participation Rates in Higher Education: Academic Years 2006/2007 to 2010/2011 (Provisional)*, Department for Business, Innovation and Skills.

unerring focus should be on giving young people the skills they need to secure a footing in the jobs market and for larger numbers to compete with graduates in a modern, hi-tech jobs market as well as university-readiness for the growing number who proceed to higher education.

The importance of skills demand

Taking action on the supply of skills is only half the answer. The other half is to raise quality and boost demand for skills. This applies mainly to the UK's large and growing low wage labour markets. Much more

For young people the transition from education into work is vital

designing good jobs that rather than short-term routes to profit via low paying business strategies that rely on a reservoir of cheap, unqualified labour.

This is a gravely underdeveloped policy area in the UK but we know that other countries do much more than the UK and that there are some simple, practical lessons about how labour market policy can boost demand for skills. For example, one of the key explanations for higher employer investment in training in continental Europe is that more occupations require licences.^[7] In Britain these apply to a small minority of occupations where they help to ensure higher wage returns, such as for apprentices who become certified gas engineers.^[8]

Creating institutions is hard, long-term work that should be started now

Raising the demand for skills comes down ultimately to employers and wider institutions and structures. For young people the transition from education into work is vital. As we saw in Chapter 2, even with better skills, if young people flow straight into the jobs market unsupported, they too often simply become a reservoir of low cost, flexible labour, facing poor prospects and little on-the-job training. Young people need structured transitions through high-quality apprenticeships with good educational content, long hours of training and clear links to progression opportunities.

This will not happen unless employer behaviour is changed through institutional innovation. The details of these institutions are beyond the scope of this Commission but we are clear that public policy will have to play a central role. In an economy with weak skills-demand in large parts of the labour market and weak employer coordination, the long-term goal is to have sector-based

skills institutions, backed by significant funding and equipped with substantive powers such as the power to issue occupational licences. Employers must be able to agree collectively on the skills needs of their sector and the training responsibilities that they should face.

The UK has particular skills shortages among our adult workforce

These institutions are particularly important for our adult workforce. More than 80 per cent of the UK's 2020 workforce is already in adulthood today. This means that any effort to raise the supply of and demand for skills requires substantial improvements for adults. As things stand, people who did not gain intermediate qualifications at school rely on either employer-provided training or adult further education for a second chance. Yet as we have seen, employer-provided training overwhelmingly goes to people who already have a good education, simply widening skills gaps, while further education is highly variable in its effects.

Successive attempts to address the problem of supply in our adult workforce without addressing demand have led to government simply bribing or cajoling employers to train more, for example through expensive programmes like Train to Gain. While some employers have responded well to these interventions, too much of this money has been wasted. It has displaced existing activity or led to existing programmes simply being renamed (for example as apprenticeships). Often, existing skills have been accredited rather than substantive new skills provided. At their worst, these low quality Level 2 and 3 vocational qualifications have *negative* wage returns, meaning that people who attain them earn *less* as a result.

This is not to say that there are no risks on skills supply for adults; far from it. The adult further education system is currently navigating a 25 per cent cut in funding over the life of this spending review. As things stand this is being carried out largely through a blanket approach according to qualification levels.^[9] This is a blunt way to proceed when we know that wage returns within certain qualification levels are so variable.

It would be better to sharpen adult entitlements to cover courses and skills that have supply shortages and thus strong potential wage returns or where there is a clear economic need due to forecast jobs growth. Currently this would include science, technology, engineering and maths Level 2 and 3 qualifications and many apprenticeships, but also socially important areas like childcare and social care. Such judgements are difficult but an evidence-based approach should not be beyond the wit of public institutions. For example, a similar approach has had some success in the case of the Migration Advisory Council.

A dual approach to skills supply and demand is an essential part of a strategy for broader-based wage growth. In the short term, it will help to create more productive and better paying versions of today's jobs, will help to ensure that people do not get stuck in low paid work and will give more people access to the good jobs the UK jobs market is creating. Longer term, research suggests that better skills can encourage – albeit gradually – the creation of better jobs, affecting the mix between sectors and occupations.^[10]

[7] p. 4, Lanning and Lawton, No Train, No Gain. [8] A sophisticated account of what such a system could look is set out in the recent IPPR report by Lanning and Lawton, No Train, No Gain; there is also recent evidence that youth unemployment has risen less quickly in countries with better developed and more inclusive labour market institutions. See Lanning, T. and Rudiger, K., (2012), Youth Unemployment in Europe: Lessons for the UK, Institute for Public Policy Research, Chartered Institute of Personnel and Development and Trades Union Congress. [9] For example, co-funding (in which the government pays 50 percent of fees) for Level 3 and 4 qualifications for those over 24 is to be replaced by income contingent loans. [10] For a recent update to the literature on changes in relative supply and demand for workers of different levels of skills see Acemoglu, D. and Autor, D., (2011), "Skills, Tasks and Technologies: Implications for employment and earnings".

9d A new approach to address low pay

We must not think about these new efforts on skills without also considering the role of more direct labour market policy. Our work has shown us that the bottom half of the UK workforce will not gain a substantially greater share of wage growth without new approaches to the problem of low pay. Over the last three decades, there has been a steeper decline in the reach of collective bargaining coverage in the UK than in any country except Australia and New Zealand. Yet policymakers have struggled to respond with innovations that either support existing institutions or create new ones for those who are low paid but not on the minimum wage.

One of the key questions that must be confronted is this: what institutions can be built in a flexible, open, 21st-century economy like the UK's to put pressure on employers to pay more where they can afford to without risking employment? Are there ways to run with the thrust of growing public concern over pay while also encouraging evidence-based and rational debate about the issues that matter most to living standards?

High levels of low pay come at a large direct cost to government

As we saw in Chapter 2, the National Minimum Wage has increased wages for the lowest paid and played an important role in helping those at the bottom (5th percentile and below) to recover some ground with these in the middle over the past 10 to 15 years. The National Minimum Wage has achieved this while confounding expectations by having no significant impact on employment. We have seen that the costs of low pay for individuals and our wider economy are substantial. The introduction of the National Minimum Wage and the Low Pay Commission in 1999 has been the single most important policy for limiting the costs of low pay to the Exchequer and supporting the lowest paid.

The role of the minimum wage and Low Pay Commission

At first sight this success story might suggest that significantly raising the National Minimum Wage would be a valid response to the problem of low pay. This has some appeal. We have seen that the National Minimum Wage declined in real terms in 2010, 2011 and 2012, and is now lower after inflation than it was in 2004. The National Minimum Wage in the UK is around the middle of the international league table in relation to median earnings, suggesting that there may be room for further increases. International evidence from countries with much higher minimum wages does not support alarmist fears that higher rates inevitably lead to mass unemployment.

There is also, though, good reason for caution.^[11] Although economists continue to find no evidence of an employment effect from the National Minimum Wage, past experience can never give us full confidence about any possible future impact, especially in such an uncertain economic climate. At some point, a higher National Minimum Wage would risk employment loss; we simply do not know where that point is. On balance, when the labour market recovers, it seems likely that the National Minimum Wage will be able to recover lost ground without undue risk. Going far beyond past levels is more precarious.

Just as importantly, one of the great strengths of the National Minimum Wage, and a reason for its widespread support, is the process through which it is set. The Low Pay Commission gives independent and careful advice on the level of the National Minimum Wage on the basis of a consensus between the social partners and the latest labour market research. We see no reason to change this process nor indeed to undercut it by proposing a new and different level for the National Minimum Wage. The UK has very few successful institutions overseeing our labour market. The Low Pay Commission is one such institution and it should be bolstered not undermined.

A broader approach than a minimum wage

However, a minimum wage is simply not the same thing as a strategy to reduce low pay. For all its importance, our existing approach to the National Minimum Wage has two notable shortcomings.

First, while there remains a strong case for protecting the principle of a single national rate, pressure for higher pay is also needed in sectors of the UK economy that can afford it. As we have seen, this is a particular problem in the UK, where given the scale of the decline in private sector collective bargaining coverage, there is now relatively little upward pressure on many firms in the large service sectors that account for the bulk of low pay. There is even some evidence that large retail firms have abolished intermediate tiers of pay, essentially levelling down to the National Minimum Wage.^[12] As it is structured today the National Minimum Wage simply cannot help solve these problems.

Second, we need a much broader understanding of the causes and drivers of low pay. The Low Pay Commission has done a commendable job advising the government on the annual increment in the National Minimum Wage. But only around 4 per cent of adult workers are paid at or around the National Minimum Wage. Meanwhile around 20 per cent of the UK workforce – 5 million employees – are paid below the Living Wage, a problem that is different in scale and in kind. The Low Pay Commission might be more accurately characterised as a Minimum Wage Commission.^[13] There is far too little understanding of what is holding back the minimum wage and what could be done to enable it to increase over time. With government footing the bill for low pay through in-work cash transfers, this is a major fiscal problem.

The question is: what institutions can be built in a flexible, open, economy to put pressure on employers to pay more where they can afford to?

[11] Manning, A., (2012), *Minimum Wage: Maximum Impact*, Resolution Foundation, London. [12] IDS, (2009), "Monitoring the Impact of the National Minimum Wage: A report for the Low Pay Commission", Incomes Data Services, London [13] Manning, *Minimum Wage: Maximum Impact*.

An “affordable wage”

We have already seen that some sectors of the UK economy could afford a significantly higher pay floor than the current national rate.^[14] In setting a national wage floor, the Low Pay Commission inevitably has to set a rate lower than that which many sectors could bear. Given that the simple design of the National Minimum Wage as a single, national wage floor is key to its success, the question is how to complement this approach with a new mechanism that puts upward pressure on wages above the statutory minimum in sectors that could bear it.

As a first step the government should ask the Low Pay Commission to take a view on whether different sectors of the UK economy could sustain an “affordable wage” higher than the national minimum. This would be a non-mandatory rate, useful as information for employees, social partners and campaigners in wage negotiations to apply upwards pressure to pay norms. The affordable wage would also provide a focal point in each sector for efforts and ideas on how to lift pay. It would also function as a diagnostic tool, helping to clarify which parts of our economy are holding back the mandatory national rate. It would not carry the risks of levelling down that would arise from varying the national rate by age or region.

The Low Pay Commission should take a view on whether different sectors of the UK economy could sustain an “affordable wage” higher than the national minimum

Government needs a better understanding of the drivers of low pay

A genuine low pay strategy requires more than an assessment of the employment effect of past increases in the National Minimum Wage. It needs a forward looking account of the challenges and consequences of reducing the incidence of low pay more generally. For example, are skill shortfalls acting as bottlenecks in some sectors or regions? What could government do to diminish the risk of unemployment from a significantly higher National Minimum Wage? There needs to be a standing body routinely investigating issues like

these and gathering views from business, unions and academia on the broader drivers of low pay, how they vary by sector, and how they can be tackled.

Although there may be advantages to the Low Pay Commission maintaining its tightly focused remit, our view is that it would be well placed to complement its annual assessment of the National Minimum Wage with this broader, more strategic role. In this broader role, the Low Pay Commission would advise on sectors of the UK economy that could pay a higher “affordable” rate, advise on obstacles to a higher National Minimum Wage, and make policy recommendations to the government on how to reduce the risk of moving to a higher National Minimum Wage over time and reduce the incidence of low pay more broadly. This could involve demonstrating the potential savings to the Exchequer and the impact on the low paid. Given the fiscal costs of low pay, a statutory obligation on government to respond may also be appropriate.

Making bad jobs better

The National Minimum Wage is an example of legislation that sets standards across our economy, tilting organisations towards higher pay. It sits alongside a wider legal and policy framework including employee rights and product market regulations. In some cases, there may be a case for strengthening specific rules. For example in the case of the National Minimum Wage, there may be a case for applying joint and several liability to companies and their supply chains, putting a responsibility on large companies to ensure that their suppliers can show that they are also paying the National Minimum Wage.

In addition to standard-setting institutions like these, there is a growing body of literature on more targeted interventions to reduce the incidence of low pay.^[15] This recognises that ultimately low pay comes down to decisions made by individual employers, which are influenced but not fully determined by market rates and national standards. An important part of any low pay strategy will therefore involve working directly with organisations to reduce their reliance on low pay. This is new terrain for public policy in Britain and is an area that requires innovation rather than grand national plans. We talk through this more speculative area briefly below.

[14] Pennycook, M., (2012), What price a Living Wage? Understanding the impact of a living wage on firm-level wage bills, IPPR and Resolution Foundation.

[15] Professor Paul Ostermann of MIT coined the phrases “standard setting” and “programmatic” interventions.

9e A more experimental approach

Business strategy decisions made by individual employers (as opposed to the characteristics of workers themselves) have a big impact on wages. We have seen that the UK has an unusually long tail of poorly performing managers. Some studies suggest that firm-level effects like these account for as much as half of the variation in wages within industries^[16] and also shape earnings mobility.^[17] These decisions extend to how employers deploy their workforce, design jobs, and invest in training. This raises the question of whether

there are ways to help low paying organisations to raise their game.

At the moment there is little of this kind of activity in the UK^[18], not least because there are few bodies in the UK labour market that would be equipped to lead this kind of effort. But working with employers directly in this way is not a new idea internationally. Even in deregulated labour markets like the US, new civic organisations are working with firms to help make bad jobs better (see In depth 9.1 for practical examples).^[19]

In depth 9.1: How do you make bad jobs better? Case studies

Boston Skillworks is a \$25 million, 10-year programme, part funded by the Massachusetts state government and part through philanthropy, working with a number of employers to improve the quality of the jobs they offer. For example, the programme has worked with hospitals to create new intermediate jobs between entry level roles such as patient care technicians and better paid roles such as certified nursing assistants. This has allowed entry level staff to work their way up the pay scale in ways they couldn't in the past. Worksource Partners is a similar organisation that has worked with the large pharmacy chain CVS. It has created a certified training programme for the store's check-out assistants, enabling them to train as pharmacy technicians and store managers.

At federal level, the US National Fund for Workforce Solutions is running a series of similar projects across the country, part funded by the \$200 million White House Social Innovation Fund. It has worked with around 3,000 employers in around 30 states and has been able to use public money to raise additional investment from philanthropy and the private sector.

Our view is that there is a role for government in encouraging pilots to support better pay and progression. This would involve testing out alternative approaches, either through direct funding or match funding and supporting evaluation. This could include a competition for funds for which businesses and intermediary organisations could bid.^[20] One interesting way to think about this would be to start by working with the leadership of a specific city, one with the authority to convene key employers and other players. Another approach would be to target a low paying sector, working with employer groups and focusing on better skills utilisation and workforce deployment. In practical terms, organisations would work with employers to design new training opportunities for low wage workers, redesigning jobs or creating new career ladders.

It would not be a total leap in the dark for central government to encourage activities like this. The £50 million annual Growth and Innovation Fund and the £250 million Employer Ownership pilot already provide match funding to encourage employer engagement in skills, but without an explicit aim to tackle low pay or boost progression. Given the substantial costs to government of low pay, there could be a case for seeking to switch some resources from in-work cash transfers to invest in activities that seek to combat low pay and its effects at source.

Another interesting model would be the government's work to widen access to Britain's elite professions.^[21] It shows that government can work with employers, including in the private sector, to seek to change their internal recruitment and progression processes. No similar effort has yet been made to galvanise employers to improve job quality and progression opportunities for

the far larger number of people who work outside these professions in sectors like retail or hospitality. As we saw in Chapter 7, we can say with confidence which low-paid sectors and occupations are likely to grow in Britain in coming years. The government has direct influence over the design of jobs in some of these sectors, like social care and childcare, and should do more to shape them.

Changing norms have a major impact on pay

These efforts must be part of a broader new approach, fostering new norms and attitudes, which we know can have a major impact on pay.^[22] In the past, norms around pay were reinforced by public institutions, for example through "fair wage" clauses in public sector contracts and by wages councils in low wage sectors. With these institutions gone, there is a case for thinking of new ways in which stronger pay norms can be encouraged. For example, there has been a major shift in public attitudes towards top pay in recent years and the successful Living Wage campaign has begun to shine a spotlight on the scale of low pay. Public authorities could do more to support these developments while ensuring the debate is evidence based. A good way to do this would be to put better information on low pay into the public domain by increasing transparency. The UK Corporate Governance Code should be amended to require large companies to report the proportion of their workforce paid below a low pay threshold, such as the Living Wage or the OECD low pay threshold (earning less than two-thirds of the national gross median hourly wage). While only a start, small steps like these can give momentum to changing public norms, encouraging informed debate and supporting existing organisations in their campaigns to lift low pay.

[16] Goshen, E., (1991), "Sources of Intra-Industry Wage Dispersion: How much do employers matter?", *Quarterly Journal of Economics*, August, pp. 869–884.

[17] Holzer, H. J., (2007), "Better Workers for Better Jobs: Improving worker advancement in the low-wage labor market", The Brookings Institution, Washington, DC [18] Osterman, "Improving Job Quality". See also the work of Skills Development Scotland on increasing skills utilisation: <http://www.skillsdevelopmentscotland.co.uk/>. [19] For a summary of activity see Osterman, P., (2008), "Improving Job Quality: Policies aimed at the demand side of the low-wage labor market", in

Bartik, T. et al., *A Future of Good Jobs?: America's challenge in the global economy*, W. E. Upjohn Institute. [20] Along the lines suggested by Osterman. [21] BIS, (2010), *Unleashing Aspiration: The final report of the Panel on Fair Access to the Professions*, Department for Business, Innovation and Skills, London. [22] Bryson, A. and Forth, J., (2006), *The Theory and Practice of Pay Setting*, London School of Economics and Political Science.

{Section 4} **What can be done?**

Chapter 10 **Boosting the capacity for employment in the UK workforce**

Chapter summary

- Achieving the macroeconomic conditions for full employment is the most important thing that can be done to support living standards.
- The UK also needs to reduce the barriers to work faced by key groups of growing economic importance, particularly parents and older workers.
- Parents and second earners (overwhelmingly women) should be better supported by:
 - [i] Extending free childcare for pre-school children to 25 hours a week, 47 weeks a year, with extra hours charged at £1 an hour - the equivalent of three days a week of childcare for £10;
 - [ii] Better aligning cash support with work preferences by frontloading Child Tax Credit (and Universal Credit) on younger children; and
 - [iii] Allowing low paid second earners to keep more of their pay by adding a 'disregard' to Universal Credit.
- Capitalising on longer working lives requires more than just new obligations; the government needs to strike a new settlement giving people something in return.
- This should include support for social care and, because people are more responsive to incentives as they near retirement, lower employment taxes on over 55s.

Alongside efforts to boost wages in the bottom half there must be bolder action to boost employment and recover working hours. This is the second key ingredient of shared growth: high employment across society, where those who want to work, and who are able to work, are enabled to do so. A precondition for this will be ongoing efforts to achieve

the macroeconomic conditions for full employment. But Britain also needs new efforts to support economically important groups like parents and older workers. The long-term goal is to ensure that employment is not only high but also broad, with no significant group blocked from working by weak financial incentives or other obstacles.

10a Tackling unemployment then broadening employment

Right now, tackling unemployment tops the agenda. As we saw in Chapter 3, the goal of full employment is even more important than ever, with real wage growth now more sensitive to unemployment.^[1] The scarring effects of youth unemployment are well established and of immediate concern. Unemployment must now be reduced quickly, especially among the young, to avoid irreparable damage to living standards.

But, as in other areas, we focus on the longer-term, structural forces shaping living standards. While high employment is a prerequisite for shared growth, boosting

incomes by raising the steady-state level of employment (or the employment to population ratio) is vital for future prosperity. This means working with the grain of societal trends, in particular the long-term rise of female employment and the decline of the male breadwinner model and, in the coming decades, with the growth of older workers. It means fully adapting to the UK's increasingly diverse workforce and to the new working patterns that arose in the late 20th century. In practical terms, it means developing pro-employment public services and a smarter tax and benefit system to support parents with dependent children, in particular mothers, as well as older workers.

[1] Machin and Gregg, What a Drag.

10b Parents and second earners

In the 20th century there was a transformation in female employment

As we saw in Section 2, in the late 20th century there was a transformation in the composition of the UK workforce and in working patterns. The biggest change was the rise of female employment, which grew from around 55 per cent in 1971 to 70 per cent in 2008, with women accounting for four-fifths of the increase in employment income for low to middle income households since 1968.^[2] Linked to this were big changes in working patterns, in particular the decline of the “male breadwinner” model and the rise of households in which all adults are in work.^[3] These changes underpinned a big shift in the nature of poverty, with single earner households now making up a bigger share of the poor. The result is that household earnings - and the route to prosperity for working households - are now far more dependent on second earners, as well as single parents, in both cases the vast majority of whom are women.^[4]

The UK has only partially adapted to this change

Public policy has not yet fully adapted to these trends. While childcare provision has been substantially expanded, an

The first stage of expanded childcare support focused overwhelmingly on child development

overwhelming focus on child development means the system has underplayed parental employment. Tax credits have supported lower income families, helping to make sure that work pays to some degree, though support has recently been reduced. In any case the system is complex, creates crushingly high effective tax rates and offers little support to middle income families. Meanwhile, second earners look set to be disadvantaged by the upcoming Universal Credit. On all these fronts an era of squeezed living standards demands a much more concerted effort to support parents and second earners. Government should:

- *Extend childcare provision to support parents of young children who want to work, building on the current free universal offer with a guarantee of highly affordable additional hours that make part-time work possible for all;*
- *Encourage flexible and part-time working options as the norm in high-quality jobs, rather than simply a characteristic of low-paid work, by extending the right to request flexible work to all employees;*
- *Revise the proposed Universal Credit system so that it better supports second earners; and*
- *Reform the tax and benefit system in response to parents' changing preferences for work, providing cash support when it is most needed.*

The next phase of development on childcare

Childcare must be front and centre of a new approach to supporting parents. As we have seen, the high cost of childcare in the UK is a major barrier to employment, hitting many low income parents as well as those on

middle incomes who receive less tax credit support. Indeed many low income families are little or no better off from extra hours work due to childcare costs. With caring responsibilities still split very unequally by gender, these costs fall overwhelmingly on mothers, not only hitting living standards but also widening gender employment and pay gaps.

In the past 15 years the UK childcare market has grown and matured at a remarkable rate, driven in large part by a big increase in public subsidies. There are a number of different elements to the current system. All three and four year olds are now entitled to 15 hours of free early education a week for 38 weeks a year. From September 2014 this provision will also cover most disadvantaged 40 per cent of the two year olds. In addition, financial support is provided for working parents on low and modest incomes through the childcare element of Working Tax Credits. Finally, the employer-supported childcare scheme (“childcare vouchers”) allows employees to receive some help with childcare costs free of tax. Historically, these vouchers have been used mainly by higher earners.

The current system often leaves low-earning parents no better off in work

Yet despite this substantial expansion in support, which has overwhelmingly benefited mothers as the main providers of childcare, in the 2000s there was disappointing growth in female employment of only 1.4 percentage points (though this was an improvement on the 1990s). To understand why, it is important to note that the key plank of the expanded support, the free three- and four-year-old offer, was designed primarily with a focus on child development. This was undoubtedly right as a first priority given strong evidence for the widespread benefits of early education and the fact that the UK was starting from a very low base. Nonetheless, the fact that living standards and female employment were not the main focus of this first phase of expansion, and were not subsequently properly addressed, inevitably led to a number of shortfalls.

For one thing, a focus on child development determined the length of provision. Studies show that full-time childcare provides little or no additional benefit to children (but also no harm) compared with part-time childcare, suggesting that 15 hours of high-quality care was adequate.^[5] In addition, parents were initially restricted in how they could use the free provision, and had to use three- or four-hour slots, which made it very hard for them to work. Flexibility is now being improved but it remains a major issue for many parents. Meanwhile the overall length of the free offer remains a barrier for parents trying to hold down a part-time job (the preferred form of work for many parents with young children), particularly once travelling time is factored in.

[2] Brewer and Wren-Lewis, Why Did Britain's Households Get Richer? [3] Ibid Single adult working households increased as a share of low to middle income households from 7 per cent in 1968 to 25 per cent in 2008-09. Among households with two or more adults, the proportion with two or more workers has increased from 48 per cent in 1968 to 57 per cent in 2008-09. [4] Ibid. [5] DfES, (2004), The Effective Provision of Pre-school Education (EPPE) Project: Final report, Department for Education and Skills, London.

Under the proposal parents would receive the equivalent of three days a week of childcare for £10

The government has recently established a Commission on Childcare with an encouraging focus on “supporting families to move into sustained employment”. It is important that this work, as well as future policy development on childcare, not only looks at detailed questions of market design and regulation but also grapples with the big question of how much the UK prioritises childcare as a country. Given the scale of the squeeze on living standards, the need to shift to employment income, the importance of female employment, and strong evidence that childcare costs are a major barrier to work – not to mention other recognised advantages of early education – there is a very strong case for increasing overall public investment in childcare while ensuring value for money.

The high costs of childcare in the UK are a particular barrier for parents of pre-school age children (aged under five). One short-term way of helping with costs would be to raise the portion of childcare costs met by the Working Tax Credit (and in the future the Universal Credit) back to 80 per cent (as it was until 2011). However, there is also a strong case for further investment outside the tax credit system. As we have seen, new research for the Resolution Foundation shows that families on modest incomes, who receive less help through tax credits, spend the most on childcare as a portion of their income (see In depth 5.1), making their work incentives extremely weak.^[6]

Investment in a more universal, supply-side-funded offer also avoids exposing more people to high marginal tax rates, an inescapable downside of tax credits (and one that will remain under Universal Credit). There is also evidence that to date the UK’s supply-side-funded offer – the 15-hour offer for three and four year olds – has encouraged the expansion of

provision more effectively than the mixed market that operates through demand-side funding of tax credits.^[7]

Evidence also suggests that local childcare markets in low income areas have struggled to sustain themselves without some form of continuing supply-side subsidy.^[8]

There is a compelling case for additional support to enable parents of young children to work

We believe that the best way to support parents’ work aspirations is therefore to build on the current free entitlement. Government should extend the current 15-hour offer for three and four year olds and 40 per cent of two year olds to 25 hours a week. This should also be expanded from the current 38 weeks per year to 47 weeks a year to save parents from struggling to find cover for several weeks a year.^[9] Rather than making additional hours free, we favour a highly subsidised and regulated fee of £1 an hour. This would reduce the cost to government and could help to ensure that the service is valued.^[10] It would also help to target additional hours on working parents, in line with the principal objective of raising employment. (See In depth 10.1 for detail on the impact of our proposal on work incentives.) This approach of heavily subsidised, rather than free, supply-side funding works well in many continental European countries.

Extending the entitlement to year round cover of 25 hours per week, and charging £1 per hour for any hours above 15 hours a week would cost in the region of £2.3 billion. Because many of the families who would benefit from this are already claiming the childcare element of Working Tax Credit (which will broadly remain the case under Universal Credit), the government would save around £200 million in tax credit spend, reducing the net cost to around £2.1 billion.^[11] (See Annex E for more detail).^[12] This does not account for *any* of the additional tax revenue that would be expected as more parents entered work. It is therefore a worst case scenario and it is highly likely that this figure considerably overstates the true net cost the Treasury would face.

[6] Alakeson, V. and Hurrell, A., (forthcoming), “Modelling Childcare Costs in the UK”, Resolution Foundation, London. [7] For a full summary of evidence on early years policy see Waldfogel, J., (2004), Social Mobility, Life Chances, and the Early Years, CASE Paper 88, London. [8] NNI Research Team, (2007), National Evaluation of the Neighbourhood Nurseries Initiative: Integrated Report, Department for Education and Skills, London. [9] We define year round as 47 weeks per year, allowing for five weeks’ statutory leave. [10] The true cost of this £1 an hour childcare would be lower for claimants of Working Tax Credit (and its future Universal Credit variant), who would be entitled to claim back 70 per cent of childcare costs. [11] These numbers are rounded to the nearest £100 million, from £2.28 billion and £2.12 billion respectively. Tax credit savings are based on a couple in which the main earner works full-time earning £18.82 per hour (a salary of £705 per week or £36,7000 per year) and the second earner earns £9.41 per hour and enters full-time work at 35 hours a week. Assumes the second earner currently claims the full 15 hour free offer and any subsequent eligibility for tax credits and under the new offer claims the full 25 hour offer at £1 an hour. [12] It would be important to ensure that the per unit funding of any extended offer was adequate, not least because a longer public offer reduces providers’ ability to cross-subsidise from private provision, as many currently claim to do.

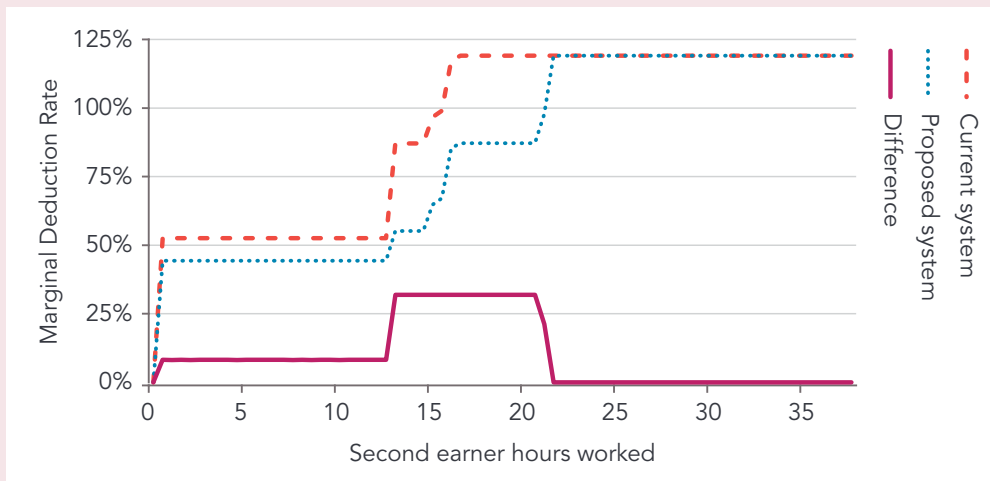
In depth 10.1: Before and after improved childcare support

Reducing childcare costs as we propose would significantly enhance work incentives for second earners. As we saw in Chapter 5 (In depth 5.1), work simply doesn't pay for many second earning parents (overwhelmingly mothers). The income of a typical middle income family with two children rises by just £1,060 a year after the second earner moves into full-time work. Under our proposed system, this £1,060 a year rises to £2,980, a 282 per cent increase in annual take home pay after childcare costs.

Figure 10.1 shows how the current system and our proposed system affect work incentives for a second earner in a typical middle income family with two children. It shows the effective tax rate faced by the second earner as they move towards full-time work, capturing the percentage of earned income lost through a combination of taxes, withdrawn benefits and childcare costs.

Under our proposal, work incentives would improve from the first hour of work because childcare coverage would increase from 38 to 47 weeks. The biggest beneficiaries of the change are second earners who want to work between 12 and 22 hours a week.^[13] Under the current system, optimum hours of work for a second earner are 15.5 hours a week, with effective tax rates after this point rising past 100 per cent so that every extra hour of work loses the household money. Under our proposed system this optimum point rises to 21 hours (when the second earner would be taking home £4,620 after taxes and childcare costs).

Figure 10.1: Marginal effective tax rate after childcare costs for a second earner in a typical middle income household in the UK with two children aged one and four



Source: RF analysis, Resolution Foundation childcare costs model, Family Resources Survey

[13] This does not align with 15 and 25 hours because the figures are averaged over a year and because travel time is factored in.

While we believe that a universal and highly affordable childcare offer is the correct way to proceed, this must be implemented in a way that works for childcare providers. Childcare providers have expressed concerns that funding for the current free three- and four-year-old offer does not cover their costs, leaving them to cross-subsidise from other provision. Any expanded entitlements must be funded in a sustainable way and implemented at a pace that allows the sector to adjust, not least given existing plans to expand the two-year-old offer. It should also be introduced carefully so as to promote the expansion of care outside term-time, which is currently lacking. Finally, it must be designed to minimise complexity for providers. None of these challenges are insurmountable.

In addition, government should prioritise efforts to address gaps in holiday care

While parents of pre-school children face the highest costs, we saw in Chapter 3 that it is among mothers of school age children that the UK falls furthest behind OECD average employment rates. This sits uncomfortably with the fact that preferences for work and longer hours are high among mothers of older children. Parent surveys suggest that the biggest barrier for this group is inadequate holiday provision rather than the overall cost of childcare.^[14] Recent evidence shows that just one-third

Under Universal Credit, most households will start to have their support withdrawn from the moment a second earner enters work

of local authorities are providing adequate holiday childcare, with two-thirds judged to be failing in their legal duty to do so.^[15] The government should urgently address the low availability of holiday

childcare provision. When one considers the low unit cost of additional school age care and preferences for work, there are few more productive, pro-work investments the government could make in a constrained spending environment. We urge the government to hold local authorities to account on their statutory duty to ensure sufficient childcare provision, and to work with them to identify and address the barriers that are holding them back in providing holiday childcare. Given existing problems with availability, there may be a case for targeted supply-side subsidies to support a wider range of providers.

Encouraging quality part-time and flexible work

More affordable childcare will help parents to better balance work and caring responsibilities. But it is also vital that good jobs are available for those who want to work flexibly or part-time. While there is clear demand for flexible working patterns, employers need to do more to respond. Despite a large increase in the quantity of flexible (mainly part-time) jobs in the UK, part-time work remains disproportionately low paid and the UK has one of the highest part-time pay penalties in the European Union. This is particularly important for women, with 39 per cent of all employed women in the UK working

part-time (the third highest rate in the OECD).

The part-time pay penalty largely reflects the occupational segregation between full- and part-time work, with relatively few flexible high-quality, high-paying jobs being offered. The result is that new mothers who go part-time often have to downshift into lower skilled and lower paid jobs and then struggle to progress as their situation changes. As many as half of part-time working mothers in low to middle income households have downshifted in this way.^[16] If the part-time pay gap remains as wide as it is today, any move towards shorter hours roles, which will be promoted under Universal Credit, will be likely to move more women into low-paid work.

The part-time pay gap is likely to reflect inertia from employers

More positively, recent evidence suggests that the part-time pay gap, though persistent, may be changing. New mothers who are able to stay with the same employer and reduce their hours now experience a much lower part-time pay penalty, while those who move employers – and this proportion is still large – still face a sustained hit to their earnings potential.^[17] Survey data also suggests that employers are persuaded of the business case for flexible work: 96 per cent now offer some form of flexible working, although this is overwhelmingly in the form of part-time work, and nearly three-quarters feel that this has boosted staff retention, motivation and engagement.^[18] Other forms of flexible working such as flexi-time or term-time working are still far less common.

Public authorities should use what levers they have available to make flexible work the norm

These changes may have been encouraged by the introduction in 2003 of a right to request flexible working for parents with a child aged under six, since extended to those with children under 17 and to some carers. The Coalition government has consulted on proposals to extend this right to all employees but, as yet, no firm plans have emerged.^[19] We would strongly support this move as an important step towards making flexible working the norm, rather than a feature of low-paid employment. The big challenge in the long run will be to encourage employers to advertise new vacancies as part-time-friendly roles rather than simply offering flexibility as a retention tool.^[20]

Another key aspect of mainstreaming flexible work is the distribution of part-time work between genders. Our part-time workforce is overwhelmingly female, in part because women carry out the bulk of caring responsibilities. This means it is important to encourage a more even split of caring responsibilities for living standards as well as gender equality reasons. There are practical ways government could encourage this in the UK, for example, mothers enjoy one of the longest maternity leave periods in the OECD (52 weeks, albeit at very low pay), while paternity leave is just two weeks, encouraging a highly unequal division of childcare. Again, the current government has stated its intention to make this system more flexible and we would strongly encourage it to follow through as a priority, while taking care not to reduce existing entitlements.

[14] DfE, (2010), Childcare and Early Years Survey of Parents 2009, Department for Education, London. [15] Daycare Trust, (2012), Holiday Childcare Costs 2012. [16] Alakeson, V., (2012), The Price of Motherhood: Women and part-time work, Resolution Foundation, London; Plunkett, The Missing Million. [17] Neuberger, J. et al., (2011), Part-time Working and Pay Amongst Millennium Cohort Mothers, CLS Cohort Studies, Working Paper 2011/12, London. [18] CBI/Harvey Nash, (2011), "Employment Trends Survey 2011", CBI, London. [19] HM Government, (2011), Consultation on Modern Workplaces. [20] Stewart, E., (2012), Building a Sustainable Quality Part-time Recruitment Market, Joseph Rowntree Foundation, York; CIPD, (2012), Flexible Working Provision and Uptake, Chartered Institute of Personnel and Development, London.

10c The importance of second earners

In addition to these general steps to support parents, more needs to be done to reduce specific barriers faced by second earners, a major source of rising prosperity, providing a growing share of household income over time.^[21] As we have seen, second earners, overwhelmingly women, face particular barriers to work because of their position in the household. For those with children, childcare costs need to be weighed up against any income earned through work – costs the first earner in a couple doesn't have to take into account. This makes affordable childcare essential. But the design of taxes and benefits also matters greatly. As things stand, the Universal Credit is set to weaken work incentives for low-paid second earners.

The tax and benefit system has a major impact on second earners' work incentives

The tax and benefit system always affects the way that work is divided within households but these effects have been strengthened by tax credits, which have weakened work incentives for low wage second earners. For example, a low income household may become entitled to Working Tax Credits when a first earner moves into full-time work but then gradually lose their entitlement as the second earner moves into work. For this

reason, tax credits have increased employment among parents whose partners do not work but have reduced employment among parents whose partners do work.^[22]

Universal Credit threatens to undermine second earners' incentives

As things stand, the overall effect of Universal Credit will be to further increase incentives for couples to have one person in work but to worsen the incentive for second earners. In simple terms, this is because couples will be allowed to earn between £1,920 and £3,000 between them (depending on circumstances) before support begins to be withdrawn. This is analogous to the personal allowance in the income tax system, which sets how much you can earn before paying tax, except that it is shared between both members of the couple.

In practice, most households receiving Universal Credit that have one person in work will already earn above this threshold. The result is that most households will start to have their support withdrawn from the moment a second earner enters work. The second earner (overwhelmingly women) will, in effect, face a tax rate of 76 per cent from the first pound they earn, assuming they pay tax. This discourages work and we believe it is a move in the wrong direction. (See In depth 10.2 for more detail.)

In depth 10.2: Is the Universal Credit a single (male) breadwinner system?

The introduction of Universal Credit from 2013 will bring together existing means-tested benefits and tax credits into a single system. While Universal Credit will generally strengthen the incentive to take up work, particularly for low-earning single people and primary earners in couples, (potential) second earners will face weaker work incentives. This is mainly because, under Universal Credit, support will be withdrawn more quickly as incomes rise. Specifically, the "taper rate" will rise from 41 per cent of gross income for tax credits, to 65 per cent of net income. Second earners who do not pay NICs or income tax will face an overall marginal effective tax rate of 65 per cent compared with 41 per cent at present. For those liable to pay the basic rate of income tax and National Insurance, marginal effective tax rates will rise from 73 per cent under the current system to 76.2 per cent under Universal Credit.

According to government estimates, 900,000 non-working individuals in households where the partner is already in work (potential second earners) will face higher participation tax rates under Universal Credit. This is the effective tax rate paid when moving into work, reducing their incentive to enter work (on average this will increase from 35 per cent to 65 per cent). The participation tax rate for 1.5 million second earners who are currently already in work will rise from 30 per cent to 45 per cent on average.^[23]

A disregard for second earners would make a tangible difference to work incentives

Reducing the incentive for second earners to work runs counter to the government's policy to raise the personal allowance to enable low earners to keep more of their pay.^[24] We would also argue that it is important, both in principle and practice, that Universal Credit goes with the grain of the long-term rise of second earners and women's work, rather than reinforcing an outdated "male breadwinner" model.

There should be additional investment in Universal

Credit to improve its impact on second earners. This would best be done by introducing a "second earner disregard", allowing the second earner to earn a certain amount before their Universal Credit is withdrawn. While the exact size of the disregard is, to some extent, arbitrary, our preferred option would be to introduce a disregard for the second earner of the same value as the existing minimum disregard for a couple with no children (£1,920). This would cost in the region of £700 million and would increase Universal Credit entitlement by around £1,200 for a second earner earning more than £1,920.^[25]

[21] 57 per cent of households with two or more adults had two or more workers in 2008-09, up from 48 per cent in 1968. [22] Brewer, M., (2007), "Supporting Couples with Children Through the Tax System", in IFS, The IFS Green Budget 2007, Institute for Fiscal Studies, London; Mirrlees, J. et al., (2011), Reforming the Taxation of Earnings in the UK, Institute for Fiscal Studies, London. [23] Brewer, M. et al., (2012), "Universal Credit: A preliminary analysis of its impact on incomes and work incentives", Fiscal Studies, 33 (1); DWP, (2011), Second Earners, Universal Credit Policy Briefing Note 5, Department for Work and Pensions, London. It is worth noting that these calculations do not include the impact of childcare costs. Universal Credit will retain the basic structure and levels of the existing childcare element of Working Tax Credits, but extend this to those working fewer than 16 hours per week. Compared with the results set out above, this would slightly improve work incentives for those working fewer than 16 hours per week. See DWP, (2011), Childcare, Universal Credit Policy Briefing Note 10, Department for Work and Pensions, London. [24] DWP, Second Earners. [25] See www.publications.parliament.uk/pa/ld201011/ldhansrd/text/111103-gc0001.htm. It is important to note that this would increase the relative generosity of tax credits towards couples as opposed to single people. There is a wider debate about the relationship between single and couple disregards, and we do not seek to enter into this debate here. Rather, our intention is simply to highlight the most promising way of increasing work incentives for second earners.

In depth 10.3: What impact would a second earner disregard have?

Questions about the design and size of so-called “disregards” may sound technical but they make a significant difference to people’s decisions about work. If we consider a couple with two children and one earner on a salary of £20,000 a year, under the government’s current plans for Universal Credit, if the second earner entered work at 20 hours a week earning £7 an hour she would keep only one-third (35 per cent) of her pay – taking home just £2,500 a year. In a system with a second earner disregard of £1,920, she would instead keep half of her pay (52 per cent).^[26]

Any such reform involves inescapable trade-offs. While a second earner disregard improves incentives to enter work, it would also lead to more people receiving Universal Credit and being subject to means-testing. We think this trade-off is worthwhile. There are also implications for the balance between couples and single people from a second earner disregard, which we don’t go into here. The bigger argument is that the goal should be to continue the move away from a system – through taxes and benefits and childcare costs – that is premised on a single (mostly male) breadwinner to one that recognises the high and growing economic importance of (mostly female) second earners.

Giving parents support that fits their preferences

Finally, we believe there is a case for better aligning the tax credit system with what is known about parents’ preferences for work. This is based on the principle that policymakers should worry more about work incentives when people are more likely to respond to them. Some groups are unlikely to work even with much stronger financial incentives – whether through

personal choice or inability – whereas others are more likely or able to respond to financial incentives.

This particularly applies to mothers before and after their children start school. Surveys show that financial incentives typically play less of a role for mothers of very young children who in general prefer a more even balance between work and parenting.^[27] Support should be designed to reflect these preferences, ensuring that help is provided in the right form and when it is needed most. This would mean giving relatively more cash support before children start school and relatively less after children start school, when preferences shift towards working more.

One way of doing this would be to rebalance Child Tax Credit (and its equivalent under Universal Credit) to focus support on pre-school children. This could be done in a cost neutral way by raising Child Tax Credit (or Universal Credit) for the under fives, offset by an equivalent reduction for school age children. If resources could be found from elsewhere, money could instead be added to the system. This change could be introduced gradually to stop parents of older children from facing big cash losses.

Note 10.1: Refocusing Child Tax Credit in line with parents’ work preferences

Our proposed reform would refocus spending on parents with younger children. If carried out in a cost neutral way, it would mainly take the form of redistribution over the life cycle: families would gain when their children are young and nominally lose when their children are older. In addition to these employment effects, there are other good reasons to give more cash support to younger children, since we know that the early years of life are the most important for child development and because poverty when children are very young is particularly problematic. Most would receive broadly the same support as they do now over the life course^[28] (if additional resources were identified there would be no losers at all), but the net impact could also be to raise overall employment.^[29]

To give a sense of the practicalities, we have looked at a revenue neutral version of the reform modelled by the IFS.^[30] This would increase the child element of Child Tax Credit from £2,235 to £3,100 where the youngest child in a family was under five, while reducing it by half to £1,550, where the youngest child was five or older. The IFS estimates that more than three times as many parents of older children would enter work than parents of younger children would stop work, creating a net boost to employment. Aggregate earnings (including employer NICs) would increase by £0.8 billion, of which about £0.5 billion would accrue to households and £0.3 billion to the Exchequer. These are not insignificant sums for a revenue neutral change that moves in line with parental preferences.^[31]

[26] On the basis of latest government assumptions about Universal Credit design and disregards. The family’s initial Universal Credit entitlement with one earner would amount to £7,080 a year, producing a total net income of £23,220. On entering 20 hours of work at £7 an hour the second earner would earn £7,280, but would face a withdrawal rate of 65 per cent, therefore increasing the household’s net income by £2,500. Under the proposed disregard system household net income would instead rise by £3,800, or 52 per cent of the second earners’ gross earnings. [27] Johnson, P., (2012), *Fairer by Design: Efficient tax reform for those on low to middle incomes*, Resolution Foundation, London. [28] The distributional impact is not quite so simple. For example, some families might have too much income to qualify for tax credits when their children are older, but not when their children are younger. [29] As parents of older children enter work, while a smaller number of parents of younger children leave work. [30] Modelled in the Mirrlees review, on the basis of the 2009-10 tax credits system, and assuming no behavioural change. [31] Mirrlees, *Reforming the Taxation of Earnings in the UK*, pp. 112–113.

10d Older workers

The ageing workforce will be the key employment trend of the early 21st century

The second major opportunity to boost employment in the coming decades will be among older workers. We have seen that, despite recent improvements, the UK remains a middling performer among the over 50s with large gaps compared to the best performers, particularly among older men. For example among men in the 60–64-year-old age group, the UK lags the employment rate among better performing countries by nearly 8 percentage points. People over 50 already head one in four low to middle income households and their share of employment income is only set to rise over time, making this group increasingly central to living standards.

There is a longstanding debate about how best to respond to increasing life expectancy. Alongside positive moves

The UK hasn't developed a fuller settlement with our older population that balances new obligations with something in return

such as the abolition of the default retirement age, the centrepiece of policy to date has been raising the state pension age. This means that many workers will have no choice but to work for longer (or spend longer

There is a strong case for a more positive and proactive approach

We have seen in this report that older workers face many barriers to employment, from the role the over 50s (particularly women) play in caring for grandchildren, sick spouses and elderly relatives, to widespread evidence of age discrimination and inadequate back-to-work support.^[32] There are particularly high rates of economic inactivity in later years, with ill health accounting for over one-third of inactivity among men and women just before they reach the state pension age. Ill health is an even greater barrier to work among those in skilled trades occupations, where many people on low to middle incomes work.

Tackle barriers to employment – social care and financial incentives

The most obvious barrier for those who are able to work – and the one most urgently in need of reform – is social care. Independent of concerns about employment income, current funding arrangements are unfair and, as a result of a strict means-test, many low and middle income people miss out on support. We must add to these reasons for reform the growing need to reduce barriers to employment among older people.

Reform the tax system to improve work incentives for low earners

As a Commission we have not sought to add to the crowded and complex debate about social care funding

but broadly speaking we support the fundamentals of the Dilnot Commission's proposals and urge the government to act quickly to implement this reform.^[33]

One aspect of a new settlement that is less widely discussed is a smarter approach to the taxation of older workers, to encourage work in the later years, which we know are so crucial to living standards in retirement. We have seen that the UK is a mid-level performer in its employment of older workers, lagging considerably behind leading countries. We also know that decisions about work become much more responsive to financial incentives as people approach retirement (especially from 55 to 70).

As we have argued, tax and benefit rates should better reflect people's preferences for work. We therefore propose raising the threshold at which those aged 55+ pay employee NICs from £7,592 to £10,000. This would boost the incomes of low and middle-earning older workers, who would be able to earn more before paying tax, in a similar fashion to the government policy of raising the income tax personal allowance. Coupled with greater access to flexible working, which we endorse elsewhere in this report, this would encourage more older people into employment. If necessary, the benefits of this reform could be more tightly focused on lower earners if accompanied by an off-setting increase in the rate at which NICs are paid by the over 55s.^[34] Any change in the NICs rate would need to be weighed against the significant disadvantages of increased complexity in the tax system.

The need for new investment: raising revenue by means-testing universal non-pension benefits

A substantial new settlement with older people will require significant new investment, and therefore additional revenue. There is a growing public debate about the way our tax and benefit system supports older generations, which many argue is outdated. Universal non-pension benefits may make less sense as our pensioner population becomes increasingly diverse, containing great inequalities in income and wealth. Similarly, employee NICs still end at state pension age, in part because there used to be a very sharp decline in employment at this age. Despite all the talk about an ageing society there is still a tendency to think of being 65+ (or 60+ for women) as a proxy for being out of work.

In the case of universal non-pension benefits, the UK government currently spends around £2.7 billion per year on Winter Fuel Allowances and free TV licences. Free bus passes and free prescriptions take total expenditure on universal pensioner benefits to well over £4 billion. With such strong pressure on resources, it has been argued that such spending, which supports all pensioners regardless of income, can no longer be justified. Means-testing Winter Fuel Allowance and free TV licences (by restricting them to Pension Credit recipients) would raise approximately £1.4 billion.^[35]

[32] Cory, G., (2012), *Unfinished Business: Barriers and opportunities for older workers*, Resolution Foundation, London. [33] Commission on Funding of Care and Support, (2011), "Fairer Care Funding: The report of the commission on funding of care and support", Department of Health, London. [34] An increase of 1.6 percentage points would make the reform revenue neutral. [35] In the long term, Pension Credit is to be phased out with the introduction of the single tier state pension, requiring a different method of means testing.

Too often the public debate about universal non-pension benefits has underplayed the difficulties of raising money in this way. Although the poorest pensioners would not lose out and the richest would not be adversely affected, those in the middle of the income distribution, who may

The government should quickly implement the Dilnot reforms

individual instincts on this issue differ sharply and some would instead opt for a different balance of revenues, raising a greater amount via a more restrictive approach to Pension Tax Relief.

However, in the context of improvements to the pension system – for example, the introduction of auto-enrolment and the restoration of the link between the basic state pension and earnings, and as a package alongside the other recommendations contained in this report – the clear prevailing view of the Commission is that the government should means-test universal non-pension benefits, as part of a mix of revenues to fund new support for living standards.

There is also a case for reforming National Insurance

Another potentially outdated aspect of our tax and

benefit system is the way that employee NICs stop at the State Pension Age (SPA). At present those working beyond SPA do not pay employee or self-employed NICs. Imposing these now would raise about £800 million per year (falling to about £400 million per year once the State Pension Age is 65 for men and women). Only pensioners in paid work would lose out from this reform, a group which tends to have higher incomes. Indeed, only the richest quintile of pensioner families would be significantly affected. This is a difficult trade-off, but one which we feel would be worthwhile given the importance of raising revenue to help improve work incentives for those between 55 and 65 when workers are likely to respond and continue in employment.

In total, these reforms would raise in the region of £2.2 billion, some of which could be invested productively in a positive deal to boost employment among older workers. These positive proposals form just some of the elements of a necessary settlement with older people that recognises the complexity of the group and the opportunity and challenge afforded by extended working lives. Although the aim of these reforms would be to increase employment, predicting the size of any change is extremely difficult. Again, we take a conservative approach, making no assumption in our costings of any increase in tax revenues from these measures. This is almost certainly too pessimistic.

{Section 4} **What can be done?**

Chapter 11 **Better support** **through the tax and** **benefit system**

Chapter summary

- Easing the squeeze within fiscal constraints means both rebalancing spending towards investments that more directly support living standards and fixing egregious design flaws.
- To fund our proposals on affordable childcare and second earners the government should reduce tax relief on pension contributions for the very wealthy, lowering the lifetime allowance for Pension Tax Relief to £1 million, raising £1.5 billion.
- Households and government can afford design flaws even less when finances are so squeezed. Council Tax is perhaps the most egregious tax for low to middle income households. Several extra top bands should be added in order to cut rates lower down.
- The tax and benefit system needs to rebalance from compensating for low wage work to reducing its incidence and effects. Universal Credit should be built on to better support those struggling to escape low pay.

If the UK tax and benefit system is to better support living standards in a constrained spending environment, established approaches will need to be rethought. Although as a Commission we have not sought a shared position on the overall level of public spending, we are clear that, even within the government's medium-term fiscal plans for deficit reduction, it is possible for the tax and benefit system to do more. This chapter approaches this question in three main ways, by asking:

- *Where spending could be rebalanced, switching money towards more productive investments that have a tighter link to living standards;*
- *If there are longstanding inefficiencies in the system, especially ones that impact heavily on low to middle income households, that now need to be tackled;*
- *If the tax and benefit system could play a more effective*

role in some areas such as assisting progression out of low-paid work.

Whatever one's position on the pace of deficit reduction, there is little doubt that the UK – indeed much of the developed world – is now entering a prolonged period of fiscal pressure. According to the OBR, demographic trends are set to increase UK spending on health and social care so significantly that in the absence of much stronger growth or increased migration, further consolidation could be required well beyond the current spending review period just to avoid sustained deterioration in the country's public finances.^[1] Unless this position changes, it suggests that an unprecedented squeeze on living standards will need to be addressed without significant new spending or by funding new spending with commensurate increases in revenue.

11a Rebalancing spending towards productive investments

It is more important than ever that the government is focused on raising employment incomes

In this report we have identified several areas for increased investment, some of which can be achieved in a cost neutral way. For example, targeting cash benefits on parents of younger children could be done by gradually reprioritising spending away from parents with older children. However, some proposals, like increased investment in childcare, will come at a net cost to government. Our argument is that these areas, of such direct importance to living standards, are now bigger priorities than some other areas of existing spending or that they merit specific revenue raising.

There is no easy way to switch spending from one area to another without creating winners and losers, just as any tax rise must be paid for by someone, however indirectly. Our test in identifying potential spending cuts or revenue raising opportunities has been to balance three objectives:

- *to improve the efficiency and/or coherence of the tax system as a whole;*

- *to support low to middle income households by retaining or increasing progressivity;*
- *to pass a very basic test of political plausibility.*

While no tax reform is perfect, we have sought to balance efficiency with political feasibility

One way of identifying feasible candidates for revenue raising is to think about how the UK's society and economy have changed since the existing systems were designed. One such change, as we saw in Chapter 3, is ongoing growth in inter-generational disparities in income and wealth. An older generation that is on average unprecedentedly wealthy, but also extremely diverse, containing major disparities of poverty and wealth, is now nearing retirement. It is also the case that, to date, the weight of fiscal consolidation has been borne by working-age people, accentuating rather than mitigating generational inequalities.

[1] OBR, (2012), Fiscal Sustainability Report 2012, Office for Budget Responsibility, London.

11b Raising revenue

Reducing generous tax reliefs on pension contributions, which overwhelmingly benefit those with very high incomes

This points to a potentially progressive way of raising revenue: reforming the very generous tax reliefs on pension contributions, which overwhelmingly benefit those with the very highest incomes. Two aspects of the current regime stand out as being both expensive and regressive.

First, National Insurance Contributions (NICs) are currently charged on employee contributions to private pensions, but employer contributions are exempt from NICs at the point of contribution and the point of withdrawal. There is no clear justification for such generous treatment of employer contributions, nor for treating employer and employee contributions differently. HMRC estimates that this tax relief was worth around £8.3 billion in total in 2009-10.

Second, income tax on employee pension contributions is currently deferred until pension income is withdrawn in retirement. Very few pensioners currently pay income tax at the higher or additional

rate, meaning that large numbers receive tax relief at the 40 per cent rate and then pay only the basic rate of 20 per cent on their retirement income.

In addition, individuals can take 25 per cent of whatever pension funds they have built up as a tax free lump sum on retirement (up to a maximum of £375,000), so that direct tax is not paid on this income at any point. While encouraging pension savings is a vital policy objective – particularly for those on low and middle incomes – these generous reliefs overwhelmingly benefit the wealthiest households. The government recently estimated that restricting tax relief on pension contributions to the basic rate would raise an additional £7 billion a year in income tax revenues.^[2]

Generous reliefs on pension contributions overwhelmingly benefit the wealthiest households

Both of these revenue sources could be used to support the low to middle income group better. But while there is a case for applying NICs on employer pension contributions, in the current economic climate we think it would be unwise to increase burdens on employers. Instead, we favour reducing the generosity of personal and occupational Pension Tax Relief to help fund our proposals aimed at raising employment income: highly affordable, accessible childcare and a disregard so that low-paid second earners keep more of their pay.

Cap the lifetime tax free allowance at £1 million, raising £1–1.5 billion per year

There are a number of ways to reduce the overall generosity of Pension Tax Relief, including: restricting all relief on contributions to the basic rate (raising an additional £7 billion per year); reducing the maximum size of the tax free lump sum; reducing the annual limit on tax free contributions (currently £50,000); and reducing the lifetime cap on pension contributions, currently £1.5 million. All these proposals have their pros and cons and could in theory raise far more than is required to pay for all the proposals in this report.

Overall, the collective position of the Commission is to favour a reduction in the value of the lifetime allowance for pension contributions to £1 million. This would reduce relief for the highest earners. It is a fairer way to limit reliefs than the annual limit, targeting those with the highest lifetime incomes.

Data on higher rate Pension Tax Relief is notoriously poor but reasonable estimates based on new data provided by HMRC put the money raised by this change at £1–1.5 billion per year, and likely towards the upper end of this range (see Annex C for detailed costings). The main obstacle to this change would be the administrative challenge of dealing with defined benefit schemes, which would take up a small portion of the overall amount raised.

[2] Johnson, P. et al., (2012), Pensioners and the Tax and Benefit System, Institute for Fiscal Studies, London.

11c Addressing serious design flaws

Addressing aspects of the tax system that are particularly inefficient or regressive

We have shown how spending could be rebalanced to allow greater investment in pro-employment public services that disproportionately benefit low income families with children. In addition, policymakers urgently need to address aspects of the tax system that are particularly inefficient or regressive. Government and households can ill afford these at the best of times and much less so when we face an unprecedented squeeze on the public finances and household incomes. We do not pretend to provide a comprehensive audit of the tax and benefit system but we are concerned with aspects of the system that are flawed from a design perspective and that are particularly egregious for low to middle income households.

There are many such flaws, not least the extremely inefficient way in which the government tries to support those on low incomes through a complex system of Value Added Tax (VAT) exemptions. The cost of our failure to take on reforms like these is paid for directly by low to middle income households in higher taxes and less support than would otherwise be possible.

Council Tax stands out as a regressive tax in need of reform

Perhaps the worst culprit is Council Tax. It is the only part of the UK tax system designed intentionally to be

regressive, with rates as a proportion of property value falling as property values rise. This is the equivalent of levying a lower rate of VAT on a Ferrari than a Ford Focus and has no economic justification.^[3] Rates are not only regressive but also arbitrary, being based on house values last assessed in the early 1990s.

Ideally Council Tax would be reformed through a full revaluation of house prices, combined with a simpler system based on a single, proportional rate linked to property values – essentially a (very low) flat tax on housing. The political obstacles to such reform are significant and we therefore do not hold this up as a potential source of new revenue. However, the government could adopt a more modest and achievable reform by adding several new bands to the top of the Council Tax scale to enable a cut in Council Tax for lower value properties.

Council Tax is not our main concern as a Commission, not least because we are realistic that only marginal reforms would be politically feasible. But we address it here because of its significance for low to middle income households. Council Tax bills take up 5 per cent of disposable income for an average low to middle income household and despite recent freezes their cost has soared in the past decade; the cost of Council Tax grew by just 10 per cent in the 1990s but by 67 per cent in the 2000s.

[3] Even based on early 1990s property values, occupants of Band H houses (the highest band) pay at most 1 per cent of their property value a year while occupants of Band A houses pay at least 2.6 per cent. On the basis of today's house prices this disparity would be far larger.

11d Recognising the importance of children

There is broad support for reducing the tax burden on low and middle income households

Throughout this report we have argued that employment income will need to provide a bigger share of income growth in the next ten years than it provided in the last 10. But we have also argued that the tax and benefit system will continue to play an essential role in supporting low income households with children.

As things stand, the current government is committed to raising the threshold at which individuals start paying income tax (the Personal Tax Allowance) to £10,000. This is a major commitment even if the significance can be slightly overstated since around a third of the increase would have happened anyway.^[4] Raising the

Personal Tax Allowance above the rate of inflation (and indeed earnings) now seems likely to remain at the heart of debates about tax reform. Further increases to £12,500, around annual earnings at the National Minimum Wage, have been mooted.

Over the medium term, it is not clear to what extent, or how, the government plans to support low to middle income households with children

The prominence of the Personal Tax Allowance policy suggests a political desire to use the tax system to support struggling households. Is this the best way to support low to middle income households? This question leads inevitably to fundamental issues in the design of our tax and benefit system.

The Personal Tax Allowance is poorly targeted on low to middle incomes households

While an increased allowance benefits the great majority of those in work (though not the minority earning less than the Personal Tax Allowance or those with earnings over £114,950) it is not a well targeted way of supporting low to middle incomes households, particularly those with children. First, the benefits of a higher Personal Tax Allowance are spread very widely and far up the income scale. Second, because income tax is assessed for individuals rather than households, the policy does nothing to target families

with children who may be in greater need. Around 70 per cent of the most recently announced increase in the Personal Tax Allowance goes to households in the top half of the income distribution.^[5]

The state is rebalancing from tax credits to using the tax system to support low income households

As we saw in Chapter 6, there has been a shift away from recognising children through the tax system over the last 30 or years (through family allowances and Child Tax Allowance) towards doing so through benefits and tax credits, with the introduction of Child Benefit and more recently the rise of Child Tax Credit. The balance between raising the Personal Tax Allowance and planned spending on Universal Credit now represents a shift away from the benefit and tax credit system as the favoured mechanism for supporting low income families. This has upsides and downsides. Tax credits (and Universal Credit) better target low income households and in particular families with children. An inevitable downside of this targeting is that, because they are withdrawn as earnings rise, they also make it harder for people to increase their income through better pay or more hours of work. In comparison raising the Personal Tax Allowance is far less well targeted but does not increase marginal tax rates.

The government needs to find a sustainable way to support households with children

We have seen that, although they have fared well in the past 20 years, working-age households with children have borne the brunt of post-recession fiscal consolidation. Over the medium term, it is not clear to what extent, or how, the government plans to better support low to middle income households with children. As we have discussed, there are a number of ways of doing this, including through tax credits and Child Benefit. While we have not taken a view on this difficult judgement, as is it beyond remit, this is an important area for future debate and there is a clear need for a coherent approach.

[4] Because of annual increases of the Personal Tax Allowance in line with inflation [5] Based on equivalised incomes. This figure relates to the increase in the allowance to £9,205 in April 2013. This increase was more progressive than the 2012 increase in the PTA, which was not targeted at basic rate taxpayers, and which led to an even higher proportion of gains going to households in the top half of the income distribution. [6] Solow, R., (2008), "Low Wage Work in Europe and America", Lecture to the 3rd meeting of Nobel Laureates in the economic sciences, The Lindau Mediatheque: <http://www.mediatheque.lindau-nobel.org/#/Video?id=433> [Accessed 3 October 2012] [7] DWP, (2010), "Universal Credit: Welfare that works", Department for Work and Pensions, London.

11e Boosting progression at the bottom

Finally, a core argument of this report has been that Britain needs a new national project to reduce the incidence of low pay in our jobs market. We have pointed to areas of potential from skills and the National Minimum Wage to the importance of new and stronger labour market institutions. But the role of the tax and benefit system also needs to change. Put crudely, the task is to move from a world in which the tax and benefit system compensates for the problem of low wage work to one in which it proactively contributes to its reduction and mitigates its effects. This is a new and experimental area that will require policy development.

Low pay comes at a large direct cost to government

We have already made the case for a more experimental approach to reducing low pay, by working with firms and individuals to redesign jobs and improve skills levels, helping businesses to move away from low paying strategies. One other important question is how the tax and benefit system could do more to support progression.

Helping individuals to progress

The extent to which the tax and benefit system helps people move out of low pay or leaves them stuck is critical. One of the interesting differences between low pay in the UK and Denmark, for example, is the prominence of young people carrying out low wage work. In Denmark, where collective pay agreements sometimes have an age cut off, low wage work is more often carried out by students part time; 63 per cent of the low paid in Denmark are young compared with 34 per cent in the UK. In the words of Nobel Laureate Robert Solow, low wage work in Denmark is a shared burden, rotating between young people “in the way

that boring committee assignments rotate in academic departments”.^[6] This difference matters for mobility.

The introduction of Universal Credit provides a new opportunity to support progression for those on low pay

What can be done in the UK, without strong labour market institutions, to encourage progression out of low-paid jobs? In part this may require institutional innovation. The introduction of Universal Credit also presents an opportunity. One lesser known aspect of the Universal Credit system is that it will place work-related conditionality on all recipients until they earn the equivalent of a full-time salary at the National Minimum Wage.^[7] The details of the new in-work conditionality regime remain unclear and raise significant practical challenges, particularly given the current scale of under-employment.^[8] One the one hand, the new system needs some form of conditionality regime in order to control costs. On the other hand, it is not yet clear how Jobcentre Plus will cope with a dramatically increased caseload given that over a million people meet the criteria for in-work conditionality and no additional funding has yet been earmarked.

Unquestionably, though, there is a need for more structured support to help those who are in work but stuck on low pay. With Universal Credit shortly to change the relationship between low earners and the state, with large swaths of people in low-paid work potentially required to contact Jobcentre Plus regularly, this is an opportunity to think more creatively about the support that could be provided. Universal Credit could be used, for example, to provide people who are struggling to progress into better paid work with access to skills support. It could also be a way of helping parents to access the childcare they need to work additional hours or to offer advice on writing CVs to those looking to progress. Whatever the actual systems of support look like, in-work conditionality is the kind of opportunity that needs to be seized if we are to address more actively the problem of progression out of low wage work.

We must move from a world in which the tax and benefit system compensates for low pay to one in which it reduces its incidence and effects

This section described what we have called key ingredients for shared growth in the 21st century. Much of the discussion has focused on specific steps that could be taken, many of which raise complex questions of design and implementation. But our real focus is on the bigger argument – the three key ingredients of shared growth:

- *Broad-based growth in wages*, backed by a skills system that gives people in the bottom half of the UK workforce – including those who don’t go to university – access to good jobs; and labour market institutions that encourage employers to share their proceeds broadly;
- *Fuller and broader employment*, including higher employment among key groups like parents and older workers, backed by pro-employment public services and a tax and benefit system that does more to support employment;
- *Smart support from state* that is better focused on raising material living standards, more attuned to incentive effects, and in which low to middle income households don’t have to pay the price for regressive design flaws.

[8]Pennycook, M. and Whittaker, M. (2012) “Conditions uncertain: Assessing the implications of Universal Credit in work conditionality”, Resolution Foundation, London.

The immediate priority for UK economic policy is undoubtedly to secure a rapid return to growth. In the past year this task has only become more urgent as fears have grown that the economy, starved of strong demand for so long, has begun to suffer long-term damage. This immediate and ongoing challenge comes on top of, and reinforces, a longer term, structural problem: how to secure steady gains in living standards for working households even once growth returns. For all its importance, this question has received little attention.

The link between economic growth and the outcomes that ultimately matter to families, from growth in disposable incomes to the affordability of essential goods, is less automatic than it once seemed. Economic growth is essential if living standards are to rise again. Without it we are nowhere. But it may not be enough.

By no means is the UK facing this challenge alone. In the US, Canada and, more recently, Germany, workers in the bottom half of the wage distribution have long found themselves missing out on much of the rising prosperity that is supposed

to flow from growth. The establishment of the Commission on Living Standards was motivated in part by the fear that this experience might become a new reality in the UK.

We were concerned that heated arguments about the proper balance of fiscal and monetary policy have not been matched by discussion about what *shape* the UK recovery might take and even less about the underlying factors that caused the pre-crisis faltering of living standards. There is too widespread an acceptance of the sanguine view that *if only we can secure growth* a return to the good years will follow. The good years weren't as good as we thought. Simply getting our economy back on the same road may mean that low to middle income Britain is failed once again.

In looking for possible solutions we have taken a hard-headed and focused approach. What are the long-term forces that really matter for real income growth for ordinary working households and how can they be strengthened? Where is future prosperity for households going to come from? Are there ways, however difficult, gradually to shift our economic model to one that better serves this group?

In this report we started by defining the problem, describing in Section 1 the way that real incomes had faltered in the run up to the crisis as wages flat-lined even as labour productivity continued to rise. Two worrying recent developments lay behind this squeeze: a falling labour share as profits rose and a fall in the share of compensation finding its way into pay-packets. Britain's workforce was getting a shrinking slice of a shrinking pie. The falling labour share echoed a

worrying longer trend in a number of other mature economies, raising the prospect that this decline in the slice of GDP going to labour may resume when our economy begins to grow. Meanwhile, rising non-wage costs, mainly pension contributions, warn us that the squeeze on wages may only tighten as the costs of an ageing society are met.

We also saw that these recent developments from 2003 to 2008 were part of a longer story. The two main motors of rising living standards in the late 20th century – broad-based wage growth and rising female employment – have lost their power. Hourly wages were lagging productivity long before the crisis, and employment among women had reached a lower plateau than in other leading advanced economies. With direct state support for household incomes now severely curtailed by short- and long-term fiscal pressures, past strategies to mitigate these underlying trends in living standards are not sustainable. This makes it worryingly difficult to answer the question: where will future rises in living standards come from? This early lesson from our evidence-gathering sessions struck us as missing from our public debate.

To better understand why these trends were taking place, Section 2 looked at specific elements of Britain's economy and policy environment. The decline of broad-based wage growth is complex and, to a degree, a global phenomenon, arising from shifts in consumer demand, patterns of trade, and the pace and shape of technological change. But the UK underperforms in key areas. Our chronic failure on intermediate skills and our lack of institutions to get employers engaged in training mean that a large share of the UK workforce simply doesn't have the skills they need to compete with graduates for 21st-century jobs. A failure to think of new ways to put upward pressure on low and modest pay – over and above the minimum wage – has left millions in a weak bargaining position in the face of new pressures on wages and job security. Both shortcomings tilt the UK towards an economic model in which the quickest route to profit is too often underinvestment in people and pay.

The distribution of employment across an economy owes much to social and cultural preferences but, like the shape of wage growth, is also moulded by policy choices. As things stand in Britain, large numbers of people who could work and who want to work – and who would probably work in some leading economies – stay at home. In our slowness to recognise fully the importance of new frontier pro-employment public services like childcare and social care, and in the inefficient design of our tax and benefit system, the UK has created its own glass ceiling for employment. This waste of productive potential has a direct bearing on living standards.

If Sections 1 and 2 helped us understand the problem, Section 3 showed where Britain is heading on our current path. Its projections for living standards to 2020 – on the basis of assumptions that can only be called optimistic – are extremely challenging. On our current path, households across the bottom half in 2020 are set to have incomes lower than in 2011. For low and middle income

Only in exceptional circumstances have other advanced economies achieved the scale and shape of earnings growth that now needs to be achieved

households, we projected income falls of between 3 and 15 per cent compared with their pre-recession peak. If this comes to pass, the 21st century will have begun with two decades of no overall real income growth for low to middle income households. Yet we also saw that a different path for living standards could be possible if the UK can raise its performance on low and intermediate skills, female employment and low pay.

The evidence we have gathered leads ineluctably to some tough conclusions. There is now an imperative to rebalance income growth away from state support and towards income from employment. This presents us with a stark choice: either we are heading for an unprecedented absolute and relative decline in the position of ordinary working households during a period of growth or government will need to be far more active in helping these households to raise their incomes through work. This can only happen through higher hourly pay, more hours worked or increased overall employment – there is no other way. Only in exceptional circumstances have other advanced economies achieved the scale and shape of earnings growth that now needs to be achieved.

Section 4 turned to practical steps. What are the ingredients for strong and shared growth in a mature economy like the UK today and how can we move towards putting them in place? Our focus was on the distribution of earnings. The interesting aspect of this debate isn't the obvious insight that earnings matter greatly but the more vexed question of *how* the distribution can be changed. First and foremost, people need better chances to earn a good wage and to progress in the jobs we have today. Longer-term, we must gradually move to a different type of economy, in which the bad jobs we have today get better and in which more good jobs are created. Making this agenda work is perhaps the biggest and most important

Market economies might move in similar directions but they also come in many forms, and choices can be made that are crucial in determining who benefits from growth

challenge facing the next generation of policy-makers. It leads directly to some new arguments that we have started to fill out.

While the government must keep pushing on higher education participation, today's defining challenge on education is the quantity and quality of low and intermediate skills. How can people without degrees gain access to well-paid, fulfilling careers in a polarising 21st-century jobs market? Part of the answer is that intermediate skills need to be so widespread and of sufficient quality that they give large numbers of people without degrees access to professional jobs in knowledge sectors, roles seen today as graduate-only professions. One necessary step in this direction is that our formal education system must, in time, switch its focus from attainment at 16 to the acquisition of intermediate skills by age 18.

At the lower end of our jobs market, reducing the share of people without basic skills like literacy and numeracy is equally important and could help to raise productivity

and pay in personal service roles. But the near consensus view is now that expanding skills supply is not enough. Demand for skills is weak in these parts of our jobs market, particularly in large and growing non-traded sectors like care and retail. Fixing this requires direct labour market policy, including new institutions that help employers to think long term, assessing their sectors' skills needs and their collective responsibilities to train. Public authorities must also do all they can to upgrade occupations like childcare and care for the elderly, which we know are mass-employing sectors in a maturing economy and ones that are currently dominated by low skilled roles.

In the short term, such steps help to make today's jobs better and ensure that more people can share in the good jobs the UK labour market will create. In the long run the task is to tilt our economy towards creating a greater proportion of good jobs, changing the mix between sectors and occupations. An important part of both these tasks will be new institutions to combat low pay. The National Minimum Wage has introduced vital protection for the very lowest paid. But having a wage floor is a very different thing from having a strategy to reduce low pay. Just 4 per cent of people are paid around National Minimum Wage while 20 per cent are paid below the Living Wage. We propose building on the success of the National Minimum Wage and the Low Pay Commission through new mechanisms like an "affordable wage", a push to understand and address the broader drivers of low pay, and new rules on transparency. These are only the first steps in a sustained effort to ensure that pay does more to provide a decent standard of living without jeopardising employment levels.

And on employment, we are clear that securing the macroeconomic conditions for a move back towards full employment is the most important thing a government can do for living standards. But there has been too little discussion about the social infrastructure needed for broad employment in which a higher proportion of parents with dependent age children and older workers find it worthwhile to be economically active. Both government and employers have a long way to go in responding adequately to the transformation of our workforce that occurred in the late 20th century with the rise of working parents and then longer working lives.

What does this mean in practice? Our nascent childcare system all too often leaves parents barely better off in work and must be expanded. Meanwhile, the costs of our failure to secure a social care settlement fall heavily on workers in their 50s and 60s, who have to stop work early to care for their ageing parents.

For both groups our tax and benefit system aligns poorly with modern preferences for work, giving and taking away money at the wrong times. And for all but a relatively fortunate few, the words part-time and flexible turn out to be synonymous with low paid and insecure, resulting in careers that are thwarted and skills that are wasted. Shaping a jobs market and policy stance that reflects the reality of today's workforce will be vital to securing future gains in living standards.

Action on all of these fronts is restricted by short and long-term fiscal pressures. As a Commission, we haven't sought a shared view on the pace of deficit reduction, but we agree that despite all the constraints of an era of austerity, it is still possible to act. This will mean the state doing more of some things and less of others, and we have identified sources of revenue to pay for new priorities that we think could better help lift living standards. We have been clear that the UK needs a tax and benefit system that does more work for us in boosting employment, and that government must finally face up to the political difficulties of reforming some of the greatest inefficiencies in our tax system, not least Council Tax, where low to middle income households pay the costs of our timidity.

Of course enormous uncertainties are inherent in any projection about the next decade and beyond. Many of the key trends are pessimistic, as is reflected in the scenarios we have set out. Yet we should also not forget that improvements in other areas, most obviously the collapsing cost of technology both at home and in the work place, are set to continue. That may create opportunities to raise living standards in new ways.

Similarly, in the workplace, we shouldn't forget that even while poorly paid service roles expand, our

traded services sector continues to create thousands of unprecedentedly well-paid and stimulating jobs. Some people who would not otherwise have done so will gain access to these jobs and will live prosperous lives as a result. The path of innovation is highly unpredictable and it is not infeasible that some of the core relationships between wages and technology could shift in a more progressive direction over time. Already, for example, technology is transforming retail, automating some roles and shifting whole product markets out of the retail sector and into distribution.

So although there aren't currently strong grounds for optimism and, as we have shown, the forces bearing down on living standards are considerable, we shouldn't be deterministic. Nor should we be fatalistic about the capacity of policy to influence what may feel like intractable trends. Even as common pressures from technology and globalisation bear down on countries, their impact on ordinary working people varies internationally and over time. Market economies might move in similar directions but they also come in many forms, and choices can be made that are crucial in determining who benefits from growth. Our research has shown us that shared growth will not come naturally in 21st-century Britain – nor is it likely to emerge by accident. But with the right steps, taken boldly across a broad range of areas, much more can be done to build it.

Annexes

Annex A

Commissioner biographies

Commissioner biographies

Clive Cowdery (Commission Chair)

Chairman, Resolution Group

Clive is Chairman of the Resolution Foundation Trustees and Chairman of Resolution Group, a FTSE 100 listed company which saw revenue of £4,104 million in 2011. Resolution is an investment vehicle that specialises in corporate buy-outs and restructuring in the insurance industry. He was previously the Chief Executive of Resolution Life Group Limited, a company that he founded in 2003. He was appointed Chairman of Resolution plc in September 2005 following the merger of Britannic Group plc and Resolution Life Group Limited.

Phil Bentley

Managing Director, British Gas

Phil is the Managing Director of British Gas, the UK's largest energy provider, employing 28,000 people and servicing 50 per cent of UK households. He was appointed MD in 2007, having previously served as Group Finance Director of Centrica plc from 2000. For two years, from 2004 to 2006, he also performed the role of Managing Director, British Gas, Europe. Phil joined Centrica in November 2000 from Diageo where he was Global Finance Director for Guinness-UDV. During the period from 1982 to 1997, Phil was at BP, where he spent 15 years in various senior finance roles.

Sir Win Bischoff

Chairman, Lloyds Banking Group

Sir Win is Chairman of Lloyds Banking Group plc. With 120,000 employees and total assets of £970 billion (2011) Lloyds Banking Group is the largest retail bank in the UK. Sir Win was formerly Chairman of Citigroup 2007-2009, where he also served as interim CEO in 2007. Prior to this he was Group Chief Executive of Schroders plc, appointed in 1984, becoming Chairman in 1995. In 2000, when Schroders was acquired by Citigroup, Sir Win took the role of Chairman of Citigroup Europe and sat as a member of The Operating Committee of Citigroup Inc. He is a non-executive director at McGraw-Hill, Eli Lilly and Company, Land Securities, Akbank and Prudential. Sir Win also sits on the Board of the educational charity Career Academies UK, which works to raise the aspirations of disadvantaged 16-19 year olds.

Mike Brewer

Professor, Institute for Social and Economic Research, University of Essex

Mike is Professor of Economics at the Institute for Social and Economic Research. His research has a particular focus on welfare reform and the way the tax and benefit system impacts families with children. He has been involved in many large scale evaluations of government policy and welfare programmes. Prior to his current role he worked at the Institute for Fiscal Studies for 10 years, from 2001-2011. He became Programme Director, Direct Tax and Welfare in 2004, before becoming Deputy Director in 2010. During the period 1997-2001, Mike worked as an Economic Assistant in HM Treasury.

Chris Gibson-Smith

Non-executive Chairman, British Land

Chris is non-executive Chairman of Britain Land and Chairman of the London Stock Exchange (LSE), a position he has held since 2003. He is also Chairman of the Advisory Board at the think tank Reform. The LSE administers the largest equities market in Europe covering companies with a market capitalisation of some £4 trillion. Chris is also a Director of the Qatar Financial Centre Authority and a Governor of the London Business School. Before becoming Chairman of the LSE, Chris was Chairman of The British Land Company: the UK's second largest property group by market cap and was Group Managing Director of BP from 1997-2001.

Gaby Hinsliff

Author and Political Editor-at-Large, Grazia

Gaby Hinsliff is Policy Editor-at-Large at Grazia magazine. She is a writer, blogger and broadcaster on public policy and private lives. Previously she covered politics for The Observer for 12 years, leaving the paper as political editor in 2009. She currently writes for a range of national titles from Grazia to The Guardian. Gaby is a trustee of the children's charity 4Children, a member of the advisory council for the Centre for Social Justice, and she also served on the Family Friendly Working Hours Taskforce established by the Department of Work and Pensions in 2010.

Paul Johnson

Director, Institute for Fiscal Studies

Paul is the Director of the Institute for Fiscal Studies (IFS), having been appointed in January 2011. The Institute is the UK's leading microeconomic research institute, and is viewed across the political spectrum as an objective and authoritative commentator on a range of issues including public finances, tax and welfare policy, and inequality and poverty. In between previous spells at the IFS, Paul has worked as Chief Economist at the Department for Education and as Director of Public Spending in HM Treasury. He has been a member of a number of advisory boards and commissions including the Pension Provision Group, the Commission on taxation and citizenship, the Youth Justice Commission.

Gavin Kelly

Chief Executive, Resolution Foundation

Gavin is Chief Executive of the Resolution Foundation and is a leading media commentator on politics and public policy – writing for the Guardian, FT, and Prospect as well as being a regular blogger for the New Statesman. He covers a wide range of issues spanning economic policy, low pay, welfare reform, public services and social mobility. He joined the Resolution Foundation from No 10 Downing Street where he worked as Deputy Chief of Staff. He spent over a decade in Whitehall and was a member of the Council of Economic Advisors at HM Treasury, the Senior Advisor to the Secretary of State at the Department for Education and the Department for Communities and Local Government, Deputy Head of the Prime Minister's Strategy Unit, and a member of Tony Blair's Policy Unit.

Professor Stephen Machin

Research Director, Centre for Economic Performance, London School of Economics

Stephen Machin is Professor of Economics at University College London and Research Director of the Centre for Economic Performance (CEP) at the London School of Economics. The CEP studies determinants of economic performance at the level of the company, the nation and the global economy; Professor Machin specialises in studying labour markets. He is one of the Editors of the Economic Journal. Previously he has been visiting Professor at Harvard University (1993/4) and at the Massachusetts Institute of Technology (2001/2). He is an elected fellow of the British Academy, current President of the European Association of Labour Economists (from 2008) and is a member of the Low Pay Commission.

Dame Julie Moore

Chief Executive, University Hospitals Birmingham NHS Foundation Trust

Dame Julie is the Chief Executive of University Hospitals Birmingham NHS Foundation Trust (UHB). She was appointed to the role in 2006, having started her career as a graduate nurse working in clinical practice. UHB has 1250 beds, £520m turnover, 6700 staff, treats 700,000 patients annually and has a £545m PFI new hospital building which opened on time and on budget in 2010. In 2008, UHB opened the Learning Hub in partnership with the Learning and Skills Council, which helps long term unemployed people back into work. In April 2011 she was asked by the Government to be a member of the NHS Future Forum to lead on the proposals for Education and Training reform. Julie was made a dame for services to health in the 2012 New Year's honours list.

Frances O'Grady

General Secretary Designate, Trades Union Congress

Frances became TUC General Secretary Designate in September 2012 and will be the first female General Secretary of the TUC. From January 2003 she was Deputy General Secretary of the TUC having lead responsibility for a wide range of key areas of policy development across the TUC's work including organising, inter-union relations, learning and skills, pay and the environment. Frances was appointed to the Low Pay Commission in April 2007 and, more recently, to the High Pay Commission. She is a member of the Green Economy Council, the Apprenticeship Ambassadors' Network and the Skills Funding Agency Advisory Group.

Ben Page

Chief Executive, Ipsos MORI

Ben Page is Chief Executive of Ipsos MORI and sits on the Global Ipsos Management Council. Since 1992 Ben has worked extensively with both Conservative and Labour ministers, leading the work of the Ipsos MORI Social Research Institute looking at issues such quality of life, welfare reform, and the effectiveness of public services for the Cabinet Office, CLG, Home Office and the Department of Health. He joined MORI in 1987 after graduating from Oxford University, and was one of the leaders of its first management buyout in 2000. Ben has been named one of the "100 most influential people in the public sector" by the Guardian, and one of the 50 "most influential" by both Local Government Chronicle and the Health Service Journal.

Sally Russell

Co-founder and Director, Netmums

Sally is the Director and founding-member of Netmums: a community-based network for parents, with over one million members across the country, and with two million visitors per month. Netmums contains comprehensive local information for parents. Sally is responsible for the website's content and external affairs, including research, campaigning work and the development of online support services. She has worked as Research Fellow at Imperial College, London and has sat on the Cabinet Office Innovators Council.

James Plunkett

Secretary to the Commission on Living Standards

James is Secretary to the Commission on Living Standards. As Secretary to the Commission, James' work at the Resolution Foundation focuses on the long-term economic trends that are changing the nature of life on low-to-middle income in modern Britain, from the labour market to trends in the cost of living. His work also examines the implications of these trends for the welfare state and public services. He joined the Resolution Foundation in 2010, prior to which he was a Kennedy Scholar at Harvard's Kennedy School of Government. From 2008-2009 he worked in the Prime Minister's Policy Unit at Number 10 Downing Street. He has also worked in the Cabinet Office and as a strategy consultant in the private sector.

Annexes

Annex B

Defining the low to middle income group

Defining the low to middle income group

The Commission's work, and the wider work of the Resolution Foundation, focuses on people living on low to middle incomes, a group that faces unique challenges as a result of their position in the income distribution. People on low to middle incomes are, in many senses, both 'too rich and too poor'. They are too rich to be traditionally considered in need of state support, yet too poor to thrive independently in important private markets, from the housing market to the market for childcare. Similarly, members of the group are mostly in work, and so have limited time, but are often also on low or modest wages, and so have limited money.

For the purposes of analysis, the Resolution Foundation defines this group as people living in households below middle (median) income, but above the bottom ten percent, and not heavily reliant on means-tested benefits. In technical terms, the Resolution Foundation's full definition of people on low-to-middle income is:

adults living in working-age households in income deciles 2-5 who receive less than one-fifth of their gross household income from means-tested benefits (excluding tax credits).

This is an income-based definition (rather than one based on earnings). Individual earnings and household income map onto one another in complex ways. For example, low earning individuals are spread very widely across the household income distribution. Where the Resolution Foundation's work, and the work of the Commission, focuses on earnings, it relies on a proxy of people earning below the median wage, which in gross terms is around £26k per year. More than three quarters of employees living in low to middle income households are in the bottom half of the earnings distribution.

For the purposes of the income distribution the Resolution Foundation uses 'equivalised' household incomes to take account of the importance of different household sizes and compositions. In some cases, where data makes it necessary, a simplified version of the definition is adopted.

The Resolution Foundation defines two other income groups by way of contrast with the low to middle income group:

- A 'benefit-reliant' group, containing people who live in households in the bottom ten percent of the income distribution and/or households that receive more than one fifth of their income from means-tested benefits (excluding tax credits).
- A 'higher income' group, containing those who live in households in the top half of the income distribution.

Defined as above, 10 million working-age adults live in low-to-middle income households in Britain today, making up one third of the working-age population. Because the Resolution Foundation's definition takes into account household size, the income boundaries of the group depend on the number of children living in a household. For example, couples with no children fall into the group if their incomes range from £12,000-£30,000 a year (from all sources), while couples with three children fall into the group if their incomes range from £19,000-£47,000 a year.

Many of the time series data set out in Resolution Foundation research represent series of snapshots. That is, they look at the characteristics of a different group of low to middle income households in each year, rather than tracking the same households over time. This approach gives a good sense of the changing realities of life on a low to middle income in Britain, but it does not track specific households over time.

Around two-thirds (67 per cent) of households on low to middle incomes remain in the group from one year to the next, with one-quarter (24 per cent) moving up and one in ten (9 per cent) moving down. The proportion staying in the group declines to half (54 per cent) after three years and drops again (46 per cent) after five years. This proportion appears to reach a plateau of around one-third (34 per cent) after around ten years however, suggesting that a large proportion of households stay in the group for an extended period.

After ten years around half of previous low to middle income households move up the income ladder, becoming classified as on higher incomes, reflecting life-stage earnings effects. The proportion falling into the benefit-reliant group is largely unchanged over the period with low to middle incomes households as likely to join this group in a year's time as they are in ten years.

Annexes

Annex C

Detailed outlines of real wage and income trends

Detailed outlines of real wage and income trends

Different points in the wage distribution

Labour income – earnings from employment and self-employment – forms the bulk of gross income in most working-age households. Low-to-middle income households have seen both a growing disparity in the distribution of earnings in recent decades (a relative squeeze), followed by a more recent stagnation in pay for many ordinary workers (an absolute squeeze). Figure A shows trends in gross weekly pay among full-time employees in the period 1984 to 2011. It highlights the fanning out of the earnings distribution that has occurred. For example, while full-time earnings at the 90th percentile increased from £662 a week in 1984 to £1007 a week in 2011, wages at the 10th percentile grew from just £218 to £279 over the same period.

Figure A: Trends in gross weekly wages at different points in the earnings distribution: GB 1984 – 2011

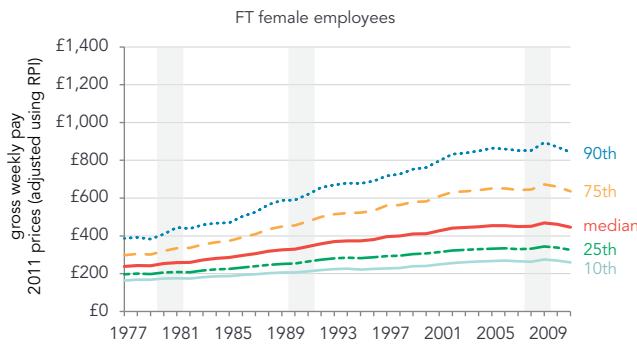
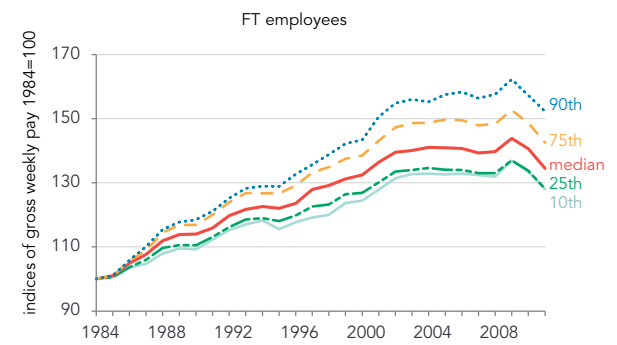


Figure B: Indices of gross weekly wages at different points in the earnings distribution: GB 1984 – 2011



Notes: There are two methodological breaks in the series, in 2004 and in 2006, but the changes have little bearing on the results shown here. 2011 data is provisional. Figures have been deflated using the RPI. Source: ONS, Annual Survey of Hours and Earnings (ASHE) and New Earnings Survey

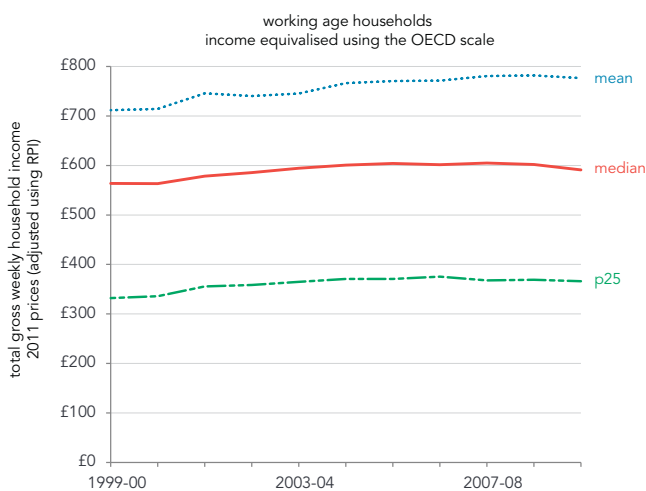
Figure B makes this trend clearer by setting out earnings at each point in the form of an index. It shows that pay increased more quickly at the top of the distribution than at the median and below.

Different points in the income distribution

Trends in incomes vary at different points in the distribution. Figure C below shows trends in the mean, median and 25th percentile for total gross household income over the period 1999-00 to 2009-10, whilst Figure D shows trends for total net household income.

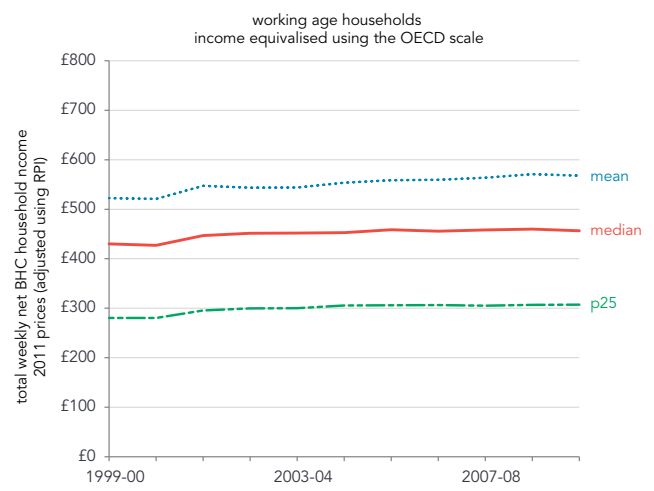
For all measures, the mean has increased more than the median over the period, indicating increasing inequality. However, the growth at the 25th percentile was in some cases higher than the median, indicating compression in the lower half of the income distribution.

Figure C: Trends at key points in the income distribution (gross): UK 1999-00 to 2009-10



Notes: Gross income includes all sources of household income including all social security benefits and tax credits. Source: DWP, Households Below Average Income (HBAI).

Figure D: Trends at key points in the income distribution (net): UK 1999-00 to 2009-10



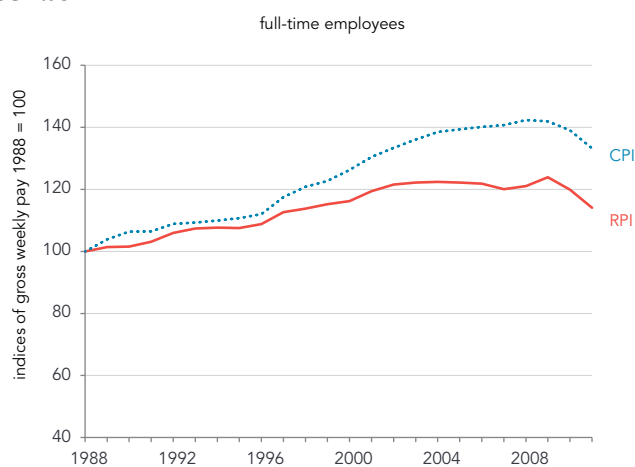
Notes: Net income is before housing costs (BHC) and is equal to gross income net of all taxes and national insurance contributions (NICs), pension contributions, maintenance & child support payments, parental support of students and student loan repayments. Gross income includes all sources of household income including all social security benefits and tax credits. Net BHC incomes have been inflation-adjusted using modified RPI series that exclude council tax. Source: DWP, Households Below Average Income (HBAI).

Inflation

The use of different inflation measures to adjust nominal wage and income measures produces differing real terms (i.e. inflation-adjusted) measures. Most Resolution Foundation analysis uses the Retail Prices Index (RPI), but the government is increasingly using the Consumer Price Index (CPI), most notably for uprating benefits and tax thresholds. RPI is a more appropriate inflation measure for the analysis of wage and income trends, but may in some cases overstate inflation. This is because the RPI calculation method implicitly does not allow for consumers to substitute between alternative products in response to price changes (referred to as the 'formula effect').^[1]

Nonetheless, while RPI-based inflation adjustment may overstate real wage stagnation, CPI is less appropriate for other reasons. CPI is primarily a measure of macroeconomic inflation pressures rather than the actual costs faced by households. Its most crucial limitation is that it currently excludes the costs of owner occupied housing, due to the fact that the CPI calculation method must comply with a set methodology specified by the EU to ensure comparability across countries.^[2] The figure below shows that the choice of inflation index has a big effect on the trend rate of wage increases in the late 1990s but less so in more recent years.^[3]

Figure E: Indices of median wages under alternative inflation measures: GB 1988 - 2011



Notes: There are two methodological breaks in the median wage series, in 2004 and in 2006, but the changes have little bearing on the results shown here. Source: ONS, Annual Survey of Hours and Earnings (ASHE) and New Earnings Survey.

Hourly, weekly and annual wages

The largest and most reliable survey of employee wages is the Annual Survey of Earnings and Hours (ASHE). ASHE collects pay information for a random sample of employees each year. The information is collected directly from employers and covers a variety of alternative pay measures, including gross hourly, weekly and annual wages which are the focus here. Hourly and weekly wages in practice understate annual bonuses and other performance incentive salary components. In terms of capturing total wage remuneration, annual rather than hourly or weekly wage measures are more accurate. The limitation with annual wages is that a consistent time series is only available back to 1999.

Figure F below shows that the trend is very similar whether annual, weekly or hourly wages are used. Median gross annual wages increased just 0.5 per cent over the 2003-08 period, compared to a rise of 0.1 per cent and 0.4 per cent for weekly and hourly wages respectively.^[4]

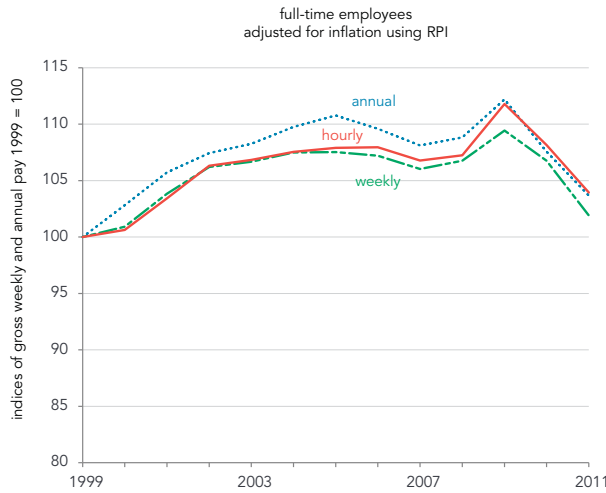
[1] See 'RPI versus CPI - The Definitive Account', Significance Magazine (www.significancemagazine.org). Jill Leyland, Vice President, Royal Statistical Society and Chair, RSS National Statistics Working Party, August 2011.

[2] Note that the ONS are in the process of producing a variant of the CPI (CPIH) which will include housing costs. The ONS are also, in collaboration with the Royal Statistical Society, undertaking a review of variations between RPI and CPI stemming from differences in how they are calculated (the formula effect). The Royal Statistical Society are in addition reviewing the scope for producing multiple cost of living indices that reflect the variation in consumption patterns at different points in the income distribution.

[3] The figure plots the time series back to 1988 because this is the first year for which the CPI is available. The data relates to GB only because UK-wide data on median weekly wages for full-time employees is only available from 1997 onwards.

[4] The reason for the difference between the 0.1 per cent increase in median gross weekly wages and the -0.2 per cent figure quoted in the previous section is that the former relates to the UK and the latter to Great Britain.

Figure F: Indices of median gross weekly and annual wages: UK 1999 - 2011



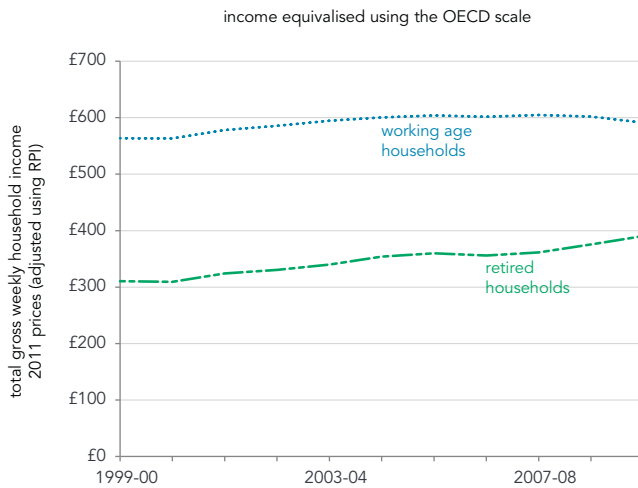
Notes: There are two methodological breaks in the median wage series, in 2004 and in 2006, but the changes have little bearing on the results shown here.
Source: ONS, Annual Survey of Hours and Earnings (ASHE) and New Earnings Survey.

Generational differences

When looking at incomes there are also important differences between working age and retired households (those containing at least one retired adult). Figure G and Figure H below show trends in median total gross and net household income for working-age and retired households over the period 1999-00 to 2009-10. Income growth is slower among working-age households. Retired households experienced stronger growth in both gross and net income.

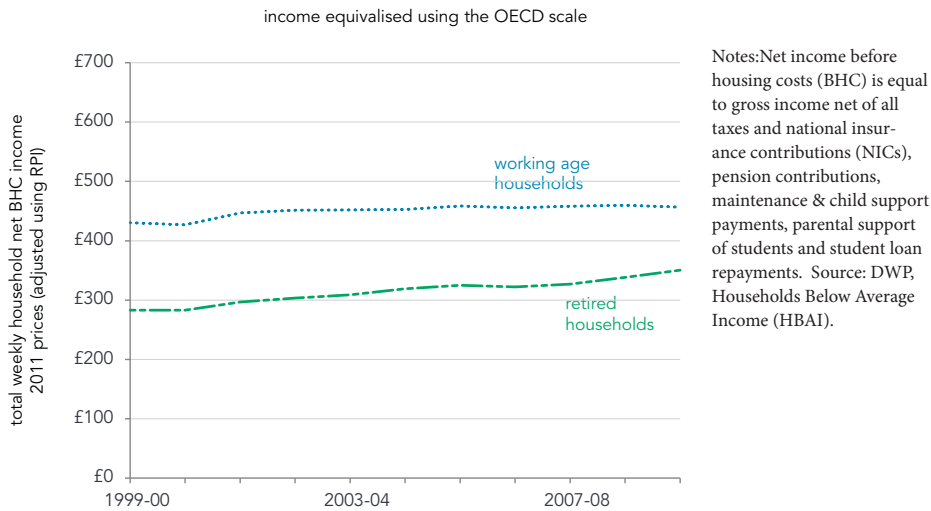
While retired households have seen continued growth in their incomes, on average their incomes are still lower than non-retired households. It should be noted that incomes are a poorer measure of living standards for pensioners, not capturing the ability of a household to draw down their assets and lower housing costs arising from home-ownership.

Figure G: Trends in median total gross household income for working-age and retired households: UK 1999-00 to 2009-10



Notes: Gross income includes all sources of household income including all social security benefits and tax credits. Source: DWP, Households Below Average Income (HBAI).

Figure H: Trends in median total net household income for working-age and retired households: UK 1999-00 to 2009-10

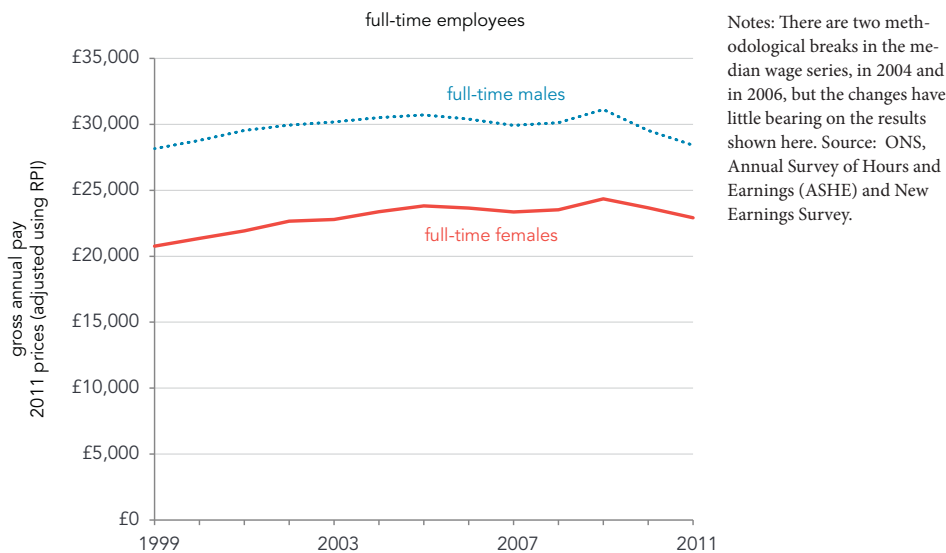


Male and female wages

Both males and females experienced a relative slowdown in wage growth from 2003, with stagnation particularly marked for males. However, focusing on full-time employees ignores the growth of part-time work, as well as the variability in number of hours worked across part-time workers.

Figure I below compares trends in median gross annual wages for full-time employees and all employees (i.e. both full- and part-time combined). The trend for all employees is very similar to those for full-time workers only, with median annual wages having increased by 0.3 and 0.5 per cent respectively under each of these alternative measures during the period 2003-08.

Figure I: Trends in median gross annual wages for male and female employees: UK 1999 – 2011



Annexes

Annex D

Detailed policy costings

Detailed policy costings

The below outlines costings for the Commission's proposals on:

- Extending the free childcare offer to 25 hours a week and 47 weeks a year;
- The introduction of a second earner disregard in Universal Credit;^[1]
- An increase in the NICs threshold for older workers;
- A reduction in the lifetime allowance for Pension Tax Relief;
- The means-testing of Winter Fuel Allowance and TV licences,^[2] and
- The extension of NICs past the State Pension Age.^[3]

Unless otherwise specified, tax and benefit costings relate to Great Britain. Childcare is a devolved responsibility and costings in this area apply to England alone.

Childcare

Proposal: extend the current free early education entitlement to cover the 47 weeks a year and provide an additional 10 hours per week at a heavily subsidised rate of £1 per hour.

Cost: we estimate the cost of extending the current free early education entitlement to be £2.1bn

- The 'current offer': all three and four year olds are entitled to 15 hours free early education per week, 38 weeks per year. From 2013 this will be extended to the 20% most disadvantaged two year olds and from 2014 to the 40% most disadvantaged two year olds
- Year round cover is defined as 47 weeks per year (assuming five weeks statutory leave)
- The first 15 hours per week will continue to be provided free at the point of use; the additional 10 hours will be charged at the rate of £1/hour

Scale up the existing free entitlements for 3-4 year olds

- The baseline: 570 hours per child per year at a cost of £1.9bn [2011/12, NAO figures]^[4]
- The new offer:
 - An additional 135 'free' hours per child [9 weeks at 15 hours per week]
 - An additional 470 'cheap (£1/hr)' hours [47 weeks at 10 hours per week]
- To estimate the cost of the additional free hours, we increase current spending in proportion to the additional hours to [$135/570 \times 1.9 =$] £0.45bn
- To estimate the cost of the additional 'cheap' hours we
 - (1) increase current spending in proportion to the additional hours [$470/570 \times 1.9 =$] £1.57m
 - (2) reduce this to reflect the £1/hour fee. The NAO estimates the average rate of local authority funding per entitlement hour in 2010-11 is £3.95. On this basis we assume that the cheap hours (on the basis of a £1/hour fee) can be provided at 75 per cent of the cost of the current offerThe estimated cost of these additional hours is therefore: [$1.57 \times 0.75 =$] £1.18bn
- The total cost of the proposal for 3-4 year olds is: [$1.18 + 0.45 =$] £1.63bn
- This is almost certainly an overestimate because it assumes the same level of take up as the current 15 hour offer

Scale up forthcoming free entitlements for the 40% most disadvantaged 2 year olds

- The baseline (from 2014/15) is 570 hours per child per year at a cost of £760 million in 2014/15^[5]
- The new offer:
 - An additional 135 'free' hours per child [9 weeks at 15 hours per week]
 - An additional 470 'cheap (£1/hr)' hours [47 weeks at 10 hours per week]
- To estimate the cost of the additional free hours, we increase current spending in proportion to the additional hours i.e. [$135/570 \times 0.76 =$] £0.18bn
- To estimate the cost of the additional 'cheap' hours we
 - (1) increase current spending in proportion to the additional hours i.e. $470/570 \times 0.76 =$ £0.63bn
 - (2) there are no equivalent estimates of the hourly cost of providing early education for two year olds, because this provision is yet to be rolled out nationally. As such, we discount these costs at the same rate (25%) as the 3-4 year old offer. This is probably an overestimate of the savings, because the hourly cost of childcare provision for two year olds is higher than that for 3-4 year oldsThe estimated cost of these additional hours is therefore: [$0.63 \times 0.75 =$] £0.47bn
- The total cost for the 40% most disadvantaged 2 year olds is: [$0.18 + 0.47 =$] £0.65bn

[1] UK Parliament Website (2011), "Welfare Reform Bill, Column GC464" <http://www.publications.parliament.uk/pa/ld201011/ldhansrd/text/111103-gc0001.htm> (accessed 10 October 2012) [2] Adam, S., Browne, J. and Johnson, P., (2012), "Pensioners and the tax and benefit system", Briefing Note BN130, The Institute for Fiscal Studies, London [3] Ibid [4] NAO, Delivering the free entitlement to education for three- and four-year-olds, 2012

Accounting for tax credit savings

- We would expect this policy to yield some direct savings to the Treasury as a result of the reduction in out-of-pocket childcare costs for families currently paying for more than 15 hrs of registered childcare, and claiming the childcare element of working tax credits
- We estimate that the overnight reduction in tax credit spending should yield a saving of around £163 million. This represents a reduction of around 0.54% of total tax credit spending in (£30.2bn in 2011-12).

Combined cost for 2-4 year olds: [1.63 + 0.65] – 0.16 =] £2.12bn

NICs for older workers

Proposal: raising the threshold at which those aged 55+ pay NICs to £10,000 (currently at £7,592)

Cost: the IFS estimates that the cost of raising the NICs threshold to £10,000 would be £0.8bn

This estimate was calculated using the IFS tax and benefit microsimulation model, TAXBEN, run on updated data from the 2009-10 Family Resources Survey. It ignores the likely upside for revenue of any behavioural response to the reform.

Pension tax relief

Proposal: to reduce the maximum tax-free lifetime allowance on pension savings from £1.5 million to £1 million

Revenue raised: £1.0bn -£1.5bn

The Government has published estimates of the additional revenue from reducing the lifetime allowance (LTA) from £1.8m in 2011/12 to £1.5m in 2012/13.^[6] Although the full data and assumptions underlying this calculation are not public, it is possible to extrapolate fairly robust estimates of the revenue from a further reduction to £1 million as follows:

Following HMRC, we assume that: all revenue generated comes from earned income that is diverted from tax-free pension contributions to taxable income; only those aged over 50 change their pension savings behaviour; if the LTA were to remain as it is, individual's savings rates would be constant over their remaining saving period

We estimate the following parameters:

- Number of individuals with savings between £1 – 1.5m: using the Wealth and Assets Survey we estimate there are 82,000 50-59 year olds with private pension wealth of between £1.0 - 1.5m.^[7] We exclude older savers because there is evidence that wealthy individuals tend to retire before the State Pension Age. This is likely to underestimate the total revenue raised.
- Additional revenue per person: due to the absence of public data on the distribution of pension savings, it is difficult to calculate precise estimates for revenue raised by person. Using HMRC estimates, we calculate that the average additional revenue per person from reducing the limit to £1.5m would be £12,500.^[8] If the distribution of pensions pots between £1 - 1.5m was the same as that between £1.5 - 1.8m, the revenue per person would be £18,750 to reflect the greater magnitude of the change in the allowance. The evidence suggests that the distribution of pension savings in this range is broadly the same, suggesting this is a reasonable estimate. For Defined Benefit schemes, we have built in to our estimate the approach that was taken by HMRC in modelling the revenue raised by the 2012 reduction in the lifetime allowance from £1.8m to £1.5m.

Two estimates of the additional revenue raised from reducing the LTA to £1m :

- Lower bound: using HMRC's estimate of an average per person saving of £12,500: £1.0bn
- Upper bound: using an average per person saving of £18,750 to reflect the larger change in allowance: £1.5bn

[5] <http://www.education.gov.uk/childrenandyoungpeople/earlylearningandchildcare/delivery/Free%20Entitlement%20to%20Early%20Education/b0070114/eefortwoyearolds> [6] HMRC and HMT, "Restricting pensions tax relief through existing allowances: a summary of the discussion document responses", 2010 [7] Resolution Foundation analysis using ONS' Wealth and Assets Survey 2006/08 [8] HMRC, "Restricting pensions tax relief: Reduction of the annual and lifetime allowances" Tax Information and Impact Note

- ACEVO, (2012), *Youth Unemployment: The crisis we cannot afford*, London: Association of Chief Executives of Voluntary Organisations
- Acemoglu, D. and Autor, D., (2010), *Skills, Tasks and Technologies: Implications for employment and earnings*, NBER Working Paper No. 16082, National Bureau of Economic Research
- Adam, S. and Browne, J., (2009), "A Survey of UK Tax System", Briefing Note No 9, London: The Institute for Fiscal Studies
- Adam, S., Browne, J. and Johnson, P., (2012), "Pensioners and the tax and benefit system", Briefing Note BN130, London: The Institute for Fiscal Studies
- Alakeson, V., (2012), *The Price of Motherhood: Women and part-time work*, London: Resolution Foundation
- Appelbaum, E., Bernhardt, A. and Murnane, R. J., (2003), "Low-Wage America: How Employers are Reshaping Opportunity in the Workplace", New York: Russell Sage Foundation.
- Appelbaum, E. and Schmitt, J., (2009), "Review Article: Low-wage work in high income countries: Labor-market institutions and business strategy in the US and Europe", *Human Relations*, 62(12): 1907-1934.
- Atkinson, A. B., (2008), "The Changing Distribution of Earnings in OECD Countries", New York: Oxford University Press.
- Atkinson, A. B., (2007), "The Distribution of Top Incomes in the United Kingdom 1908-2000", in Atkinson, A. B. and Piketty, T. (eds), *Top Incomes over the Twentieth Century. A contrast between continental European and English-speaking countries*, Oxford: Oxford University Press
- Australian Council of Trade Unions, (2011), "The Fair Work Act, two years on: A review of Labor's changes to workplace laws", Working Australia Paper 5/2011
- Autor, D. et al., (2003), "The Skill Content of Recent Technological Change: An empirical exploration", *Quarterly Journal of Economics*, 118 (4), pp. 1279-1333
- Autor, D., (2010), "The Polarization of Job opportunities in the US Labor market: Implications for Employment and Earnings", Center for American Progress and The Hamilton Project
- Azmat, G., Manning, A., Van Reenen, J. (2011), "Privatization and the Decline of Labour's Share: International Evidence from Network Industries", *Economica*, 79(315): 470-492
- Azmat, G., (2011), *Incidence, Salience and Spillovers: The direct and indirect effects of tax credits on wages*, Universitat Pompeu Fabra and Barcelona GSE
- Bailey, J., Coward, J. and Whittaker, M. (October 2011), "Painful Separation: An international study of the weakening relationship between economic growth and the pay of ordinary workers", Resolution Foundation
- Bain & Company, Inc., (2011), *The Great Eight: Trillion-dollar growth trends to 2020*
- Baker, D. and Rosnick, D., (2012), "Missing the Story: The OECD's Analysis of Inequality", Washington, D.C.: Center for Economic and Policy Research
- Bassanini, A. et al., (2005), "Workplace Training in Europe", IZA Discussion Paper No. 1640, Bonn: Institute for the Study of Labour
- Benito, A., Thompson, J., Waldron, M. and Wood, R., (2006), "House prices and consumer spending", *Bank of England Quarterly Bulletin*, Summer, pp. 142-54
- Bennett, F. and Lister, R., (2010), *The Living Wage: The right answer to low pay?*, Fabian society briefing paper, London: Fabian Society
- Bennet, F. and Hirsch, D., (2001), "The Employment Tax Credit and issues for the future of in-work support", York: The Joseph Rowntree Foundation
- Berg, A. G. and Osrty, J. S., (2011), "Inequality and Unsustainable Growth: Two Sides of the Same Coin?", Staff Discussion Note, International Monetary Fund
- Berg, P. and Frost, A. C., (2005), "Dignity at work for Low Wage, Low Skilled Service Workers", *Industrial Relations*, 60(4): 657-682.
- Blanchard, O., and Giavazzi, F., (2003), "Macroeconomic Effects of Regulation and Deregulation in Goods and Labor Markets", *The Quarterly Journal of Economics*, 118(3): 879-907
- Blanden, J. and Machin, S. and Van Reenen, J., (2006), "Have Unions Turned the Corner? New evidence on recent trends in union recognition in UK firms", *British Journal of Industrial Relations*, 44 (2), pp. 169-190
- See Bloom, N., Genakos, C., Sadun, R. and van Reenen, J., (2012), "Management Practices Across Firms and Countries", *Academy of Management Perspectives*, 26 (1), pp. 12-33
- Blundell, R., (2010), "Reforming the Taxation of Earnings in the UK", in Mirrlees, J., (2011), *Tax by Design: The Mirrlees Review*, Oxford: Oxford University Press, Ch 4.
- Blundell, R. W., (1995), "The Impact of Taxation on Labour Force Participation and Labour Supply", OECD Jobs Study Working Paper No 8, Paris: OECD Publishing
- Blundell, R. and Etheridge, B., (2009), "Consumption, Income and earnings in the UK", *Review of Economic Dynamics*
- Bosch, G., (2009), "Low-wage work in five European countries and the United States", *International Labour Review*, 148(4): 337-356.
- Bowler, T., (2007), "Taxation of the Family", TLRC Discussion paper No 6, London: The Institute for Fiscal Studies

- Brewer, M. et al., (2012), *Poverty and Inequality in 2020: The impact of changes in the structure of employment*, York: Joseph Rowntree Foundation
- Brewer, M. and Wren-Lewis, L., (December 2011), "Why did Britain's households get richer? Decomposing UK household income growth between 1968 and 2008-09", Institute for Fiscal Studies (IFS), for the Resolution Foundation
- Brewer, M., Muriel, A. and Wren-Lewis, L., (2009), "Accounting for the changes in inequality since 1968: decomposition analysis for Great Britain", Government Equalities Office
- Brewer, M., May, R. and Phillips, D., (2009), "Taxes, Benefits and the National Minimum Wage", The Low Pay Commission, London: The London School of Economics and Political Science
- Brewer, M. et al., (2012), "Universal Credit: A preliminary analysis of its impact on incomes and work incentives", *Fiscal Studies*, 33 (1)
- Brewer, M., (2007), "Supporting Couples with Children Through the Tax System", in IFS, *The IFS Green Budget 2007*, London: Institute for Fiscal Studies
- Bryson, A., Gomez, R., Kretschmer, T. and Willman, P., (Forthcoming 2012), "The Comparative Advantage of Non-Union Voice in Britain, 1980-2004", *Industrial Relations: A Journal of Economy and Society*, ISSN 1468-232X.
- Bryson, A. and Forth, J., (2006), "The Theory and Practice of Pay Setting", London: London School of Economics and Political Science
- Bryson, A., Forth, J. and George, A., (2012), "Workplace employee representation in Europe", *European Foundation for the Improvement of Living and Working Conditions*, Dublin: EuroFound
- Buchanan, J. et al, (2010), "Skills Demand and Utilisation: An International Review of Approaches to Measurement and Policy Development", *OECD Local Economic and employment Development (LEED) Working Papers*, 2010/04, Paris: OECD Publishing.
- Caranci, B. and Jones, C., (2011), "Caught in the Middle: The Polarization of Skills in the US Labor Market", *Special Report*, TD Economics
- Center for American Progress and The Hamilton Project, (2010), "Creating 21st Century Jobs: Increasing Employment and Wages for American Workers in a Changing World"
- Centre for Economic Performance, (2011), "Management Matters: Manufacturing Report", London: London School of Economic and Political Science
- Centre for Economic Performance, (2009), "Employee Voice and Private Sector Workplace Outcomes in Britain, 1980-2004", *CEP Discussion Paper No 924*, London: The London School of Economics and Political Science
- Centre for Analysis of Social Exclusion, (2010), "An anatomy of economic inequality in the UK: Report of the National Equality Panel", London School of Economics and Political Science
- Chapman, J., Seaford, C. and Shaheen, F., (2012), "Good jobs for non-graduates", *New Economics Foundation*,
- Chevalier, A. and Viitanen, T., (2002), "The Causality Between Female Labour Force Participation and the Availability of Childcare", in *Applied Economics Letters*, Vol. 9, pp. 915-918
- CIPD, (2012), *Flexible Working Provision and Uptake*, London: Chartered Institute of Personnel and Development
- Coats, D., (2010), "Time to cut the Gordian Knot- the case for consensus and reform of the UK's employment relations system", London: The Smith Institute
- Coats, D., (2007), "The National Minimum Wage. Retrospect and Prospect", London: The Work Foundation
- Coats, D. and Lehki, R., (2008), "Good Work: Job Quality in a Changing Economy", London: The Work Foundation
- Commission on Funding of Care and Support, (2011), *Fairer Care Funding: The report of the commission on funding of care and support*, London: Department of Health
- Connolly, S. and Gregory, M., (2009), "The Part-time Pay Penalty: Earnings Trajectories of British Women", *Oxford Economic Papers*, 61(1): i76-i97.
- Corry, D., Valero, A. and Reenen, J.V., (2011), "UK Economic Performance since 1997: Growth, Productivity and Jobs", *Centre for Economic Performance*, London: London School of Economics and Political Science
- Cory, G. (2012), *Unfinished Business: Barriers and opportunities for older workers*, London: Resolution Foundation
- Coulter, S., (2011), "Manufacturing Prosperity: Diversifying UK Economic Growth", London: The Social Market Foundation
- Crafts, N., Gazeley, I. and Newell, A. (eds.), (2007), "Work and Pay: In 20th Century Britain", New York: Oxford University Press Inc.
- Criscuolo, C., Martin, R., Overman, H.G. and Van Reenen, J., (2012), "The Causal Effects of an Industrial Policy", *SERC Discussion Paper No. 98*, London: London School of Economics and Political Science.
- Daly M., (2012), *Dissecting Aggregate Real Wage Fluctuations: Individual wage growth and the composition effect*, Working Paper Series, Federal Reserve Bank of San Francisco
- Daly, M. C., Hobijn, B. and Wiles, T. S., (2012), "Aggregate Real Wages: Macro Fluctuations and Micro Drivers", *FRBSF Working Paper 2011-23*

- Daycare Trust, (2012), *Childcare Costs Survey 2012*, London: Daycare Trust
- Del Boca, D. and Pasqua, S., (2005), *Social Policies and Employment of Married Women in Europe*, Child Working Papers wp19_05
- Department for Business, Innovation and Skills, (2011a), "National Minimum Wage", Low Commission Report 2011, London: HMSO
- Department for Business, Innovation and Skills, (2011b), "Returns to Intermediate and Low Level Vocational Qualifications", London: HMSO
- Department for Business, Innovation and Skills, (2010), *Unleashing Aspiration: The final report of the Panel on Fair Access to the Professions*, Department for Business, Innovation and Skills, London
- Department for Business, Innovation and Skills, (2010c), "Further Education – A New Horizon: Investing in Skills for Sustainable Growth", London: HMSO
- Department for Business, Enterprise and Regulatory Reform, (2008), "Cross-Country Productivity Performance at Sector Level: the UK Compared with the US, France and Germany", London: HMSO
- Department for Education, (2010), *Childcare and Early Years Survey of Parents 2009*, London: Department for Education
- Department for Education and Skills, (2004), *The Effective Provision of Pre-school Education (EPPE) Project: Final report*, London: Department for Education and Skills
- Department for Work and Pensions, (2012), *Attitudes to Age in Britain 2010/11*, London: Department for Work and Pensions
- Department for Work and Pensions, (2010), "Universal Credit: Welfare that works", Department for Work and Pensions, London
- Dickerson, A., (2005), "A Study on Rates of Return on Investment in Level 3 and Higher Qualifications", Coventry: Warwick Institute for Employment Research
- Dolphin, T., (forthcoming), *Don't Bank On It: The financialisation of the UK economy*, London: Institute for Public Policy Research
- Draca, M., Machin, S. and Reenen, J.V., (2005), "The impact of the national minimum wage on profits and prices", The Low Pay Commission, London: The London School of Economics and Political Science
- Dustmann, C. et al, (2003) "The local labour market effect of immigration in the UK", Home Office Online Report 06/03, Home Office
- Estévez-Abe, M. and Hethey, T., (2008), *How Policies Affect Women's Economic Position within the Family: Labor market institutions and wives' contribution to household income*, Luxembourg Income Study Working Paper Series
- Eurofound, (2011), "Industrial relations and working conditions developments in Europe 2010", Luxembourg: Publications Office of the European Union
- Faggio, G., Reenen, J. and Salvanes, K. G., (2007), "The Evolution of Inequality in Productivity and Wages: Panel Data Evidence", CEP Discussion Paper No. 821, Centre for Economic Performance, London: London School of Economics and Political Science
- Faggio, G and Overman, H. G., (2012), "The Effect of Public Sector Employment on Local Labour Markets", SERC Discussion Paper No. 111, London: London School of Economics and Political Science
- Feinstein, C. H., (1972), *National income, output and expenditure of the United Kingdom 1855-1965*, Cambridge: Cambridge University Press
- Fitzgerald, J., (2006), "Moving Up in the New Economy: Career Ladders for US Workers", Ithaca, New York: Cornell University Press
- Gardiner, K. and Millar, J., (2004), "Low pay, household resources and poverty", York: The Joseph Rowntree Foundation
- Gautié, J. and Schmitt, J. (eds), (2009), *Low Wage Work in the Wealthy World*, Russell Sage
- GLA Economics, (2011), *A Fairer London: The 2011 Living Wage in London*, London: GLA Economics
- German Institute for Economic Research, (2009), *Real Wages in Germany: Numerous years of decline*, German Institute for Economic Research Working Paper No. 28/2009
- GLA Economics, (2006), "Retail and the Labour Market", *Retail in London: Working Paper E*
- Glyn, A., et al., (2005), "Employment differences in services: the role of wages, productivity and demand", Working Paper 12, Amsterdam: Amsterdam Institute for Advanced Labour Studies
- Goldin, C. and Katz, L., (2008), *The Race Between Education and Technology*, Belknap Press
- Goodridge, P., Haskel, J. and Wallis, G., (2012), "UK Innovation Index: Productivity and growth in UK Industries", Discussion paper 2012/07, Imperial College London Business School
- Goos, M. and Manning, A., (2007), "Lousy and Lovely Jobs: The rising polarization of work in Britain", *Review of Economics and Statistics*, 89 (1), pp. 118–133
- Greenham, T., et al., (2011), "The Good Jobs Plan: A new approach to industrial strategy", New Economics Foundation
- Greenhouse, S., (2009), "The Bid Squeeze: Tough Times for the American Worker", New York: Anchor Books.
- Gregg, P. and Machin, S. (2012), "What a drag: The chilling impact of unemployment on real wages", London: Resolution Foundation

- Gregg, P., Whittaker, M. and Hurrell, A. (2012), *Creditworthy: Assessing the impact of tax credits in the last decade and considering what this means for Universal Credit*, London: Resolution Foundation
- Gregg, P. and Tominey, E., (2004), "The Wage Scar from Youth Unemployment", CMPO Working Paper Series No. 04/097
- Griffith, R., (2007), "Technology, Productivity and Public Policy", *Fiscal Studies*, 28(3): 273-291.
- Grimshaw, D., Bosch, G. and Rubery, J., (2011), "Pay equity effects of minimum wages in different industrial relations models", International Labour Organisation, *Regulating for Decent Work conference*, Geneva, Switzerland 6-8 July 2011.
- Groshen, E. L., (1991), "Sources of Intra-industry Wage Dispersion: How Much Do Employers Matter?", *The Quarterly Journal of Economics*, MIT Press, 106(3): 869-884.
- Guerrero, M. and Sen, K., (2012), "What Determines the Share of Labour in National Income? A Cross-Country Analysis", IZA Discussion Paper No. 6643
- Haley-Lock, A. and Shah, M. F., (2007), "Protecting Vulnerable Workers: How Public Policy and Private Employers Shape the Contemporary Low-Wage Work Experience", *Families in Society: The Journal of Contemporary Social Services*, 88(3):485-495.
- Hall, P. and Soskice, D., (2001), *Varieties of Capitalism: the Institutional Foundations of Comparative Advantage*, Oxford: Oxford University Press
- Hall, R. E. and Jones, C. I., (1999), "Why Do Some Countries Produce More Output per Worker Than Others?", *The Quarterly Journal of Economics*, 114(1): 83-116.
- Haskel, J., Marrano, M. G. and Wallis, G., (2007), "What Happened to the Knowledge Economy? ICT, Intangible Investment and Britain's Productivity Record Revisited", Working Paper No. 603, London: Queen Mary University of London
- Haskel, J. and Slaughter, M. J., (1999), "Trade, Technology and UK Wage Inequality", *The Economic Journal*, 111(468):163-187.
- Hasluck, C., (2011), "Low Skills and Social Disadvantage in a Changing Economy", London: UK Commission for Employment and Skills
- Henly, J. R., (2008), "Making it Work: Low Wage Employment, Family Life, and Child Development" by Lowe, E. D., Weisner, T. S. and Yoshikawa, H (eds.), reviewed in *Social Service Review*, 82(4): 756-759.
- Hills, S. et al., (2010), "The UK recession in context — what do three centuries of data tell us?", *Bank of England Quarterly Bulletin*, 2010 Q4
- Hirsch, D., Plunkett, J. and Beckhelling, J., (December 2011), "Priced Out: The new inflation and its impact on living standards", Resolution Foundation
- Holmes, C. and Mayhew, K., (March 2012), "The changing shape of the UK job market and its implications for the bottom half of earners", Resolution Foundation
- Holtham, G., (2012), "The Green Investment Bank: Do it Now, Make it Big", London: Institute of Public Policy Research
- Holzer, H. J., (2007), "Better Workers for Better Jobs: Improving worker advancement in the low-wage labor market", Washington, DC: The Brookings Institution
- Humphrey, A., Costigan, P., Pickering, K., Stratford, N. and Barnes, M., (2003), *Factors Affecting the Labour Market Participation of Older Workers*, National Centre for Social Research with Institute for Fiscal Studies
- Incomes Data Services, (2010), *What are we paying for? Exploring executive pay and performance*, discussion paper for the High Pay Commission
- Incomes Data Services, (2009), *Monitoring the Impact of the National Minimum Wage: A report for the Low Pay Commission*, London: Incomes Data Services
- Institute for Employment Research (IER), and Institute for Fiscal Studies (2012), "Who Gains from Growth? Living Standards to 2020", London: Resolution Foundation
- Institute for Fiscal Studies, (2010), *Untitled analysis into the fiscal costs of the living wage*, London: Institute for Fiscal Studies
- Institute for Fiscal Studies, (2010), *Dimensions of Tax Design*, Mirrlees Review, London: Institute for Fiscal Studies
- Institute for Fiscal Studies, (2007), "The IFS Green Budget", Tunbridge Wells: Patersons
- Jaumotte, F., (2003), *Female Labour Force Participation: Past trends and main determinants in OECD countries*, OECD Economics Department Working Papers, No. 376
- Jin, W., Joyce, R., Phillips, D. and Sibiet, L., (2011), "Poverty and Inequality in the UK: 2011", London: The Institute for Fiscal Studies
- Johnson, P., (2012), "Fairer by design: efficient tax reform for those on low to middle incomes", London: Resolution Foundation
- Joyce, R., (2012), *Tax and Benefit Changes, Excluding Those Affecting Mainly the Very Rich*, Institute for Fiscal Studies
- Kazis, R. and Miller, M. S. (eds.), (2001), "Low-Wage Workers in the New Economy", Washington D. C. : The Urban Institute Press.
- Kalwij, A. and Machin, S., (2004), "Changes in Household Demand Patterns: A Cross-Country Comparison", Amsterdam: Amsterdam Institute for Advanced Labour Studies.
- Keep, E., Mayhew, K. and Payne, J., (2006), "From Skills revolution to Productivity Miracle – Not as easy as it sounds?", *Oxford Review of Economic Policy*, 22(4): 539-559

- Kenworthy, L., (2011), "Progress for the Poor", Oxford: Oxford University Press
- Kenworthy, L. (November 2011), "When does economic growth benefit people on low to middle incomes – and why?", Resolution Foundation
- Lanning, T. and Rudiger, K., (2012), Youth Unemployment in Europe: Lessons for the UK, Institute for Public Policy Research, Chartered Institute of Personnel and Development and Trades Union Congress
- Lansley, S., (2009), "Unfair to Middling", Touchstone Extras, Trades Union Congress
- LaRochelle-Cote, S., Dionne, C., (2009), "International differences in low-paid work", Perspectives on Labour and Income, 10(6): 5-13.
- Leigh, A. (2010), "Who Benefits from the Earned Income Tax Credit? Incidence among recipients, coworkers and firms", Forschungsinstitut zur Zukunft der Arbeit, No. 4960
- Lemos, S., and Portes, J., (2008), The impact of migration from the new European Union Member States on native workers, DWP
- Lissenburgh, S. and Smeaton, D., (2003), Employment Transitions of Older Workers: The role of flexible employment in maintaining labour market participation and promoting job quality, York: Joseph Rowntree Foundation
- Lloyd, C. and Mayhew, K., (2010), "Skill: the solution to low-wage work?", Industrial Relations Journal, 41(5): 429-445.
- Low Pay Commission, (2012), National Minimum Wage, LPC Annual Report
- Lucchino, P. and Morelli, S. (2012), "Inequality, debt and growth", National Institute of Economic and Social Research for the Resolution Foundation
- Macallan, C., Millard S., Parker, M., (2008), The Cyclicalities of Mark-ups and Profit Margins for the United Kingdom: Some new evidence, Working Paper No. 351, Bank of England
- Machin, S., (2000), "Union in Decline in Britain", Centre for Economic Performance, London: London School of Economics and Political Science
- Machin, S. and Manning, A., (2004), "A Test of Competitive Labor Market Theory: The Wage Structure among Elder Care Assistants in the South of England", Industrial and Labor Relations Review, 57(3): article 3.
- Madrick, J. and Papanikolaou, N., (2007), The Stagnation of Male Wages, Schwartz Center for Economic Policy Analysis
- Mancorda, M. et al, (2006), "The impact of immigration on the structure of male wages: theory and evidence from Britain", Centre for Economic Performance, LSE
- Manning, A. (April 2012), Minimum Wage: Maximum Impact, London: Resolution Foundation
- Manning, A., (2010), "Imperfect Competition in the Labour Market", CEP Discussion Paper No. 981, Centre for Economic Performance, London: London School of Economic and Political Science
- Manning, A., (2004), "Monopsony in Motion: Imperfect Competition in Labor Markets", Princeton, NJ: Princeton University Press, Ch 1.
- Manning, A. and Petrongolo, B., (2005), "The Part-Time Pay Penalty", CEP Discussion Paper No. 697
- Martin, B., (2010), "Rebalancing the British Economy: a strategic assessment", Centre for Business Research, Cambridge: Cambridge University Press
- Mayhew, K. and Salverda, W., (2009), "Capitalist economies and wage inequality", Oxford Review of Economic Policy, 25(1): 126-154.
- McKinsey, (2012), Debt and Deleveraging: Uneven progress on the path to growth, McKinsey Global Institute
- McNeil, J., (2011), "Changes in Median Household Income: 1969 to 1996", US Census Bureau
- Metcalf, D., (2007), "Why has the British National Minimum Wage had Little or No Impact on Employment?", CEP Discussion Paper No. 781, Centre for Economic Performance, London: London School of Economics and Political Science
- Metcalf, H. and Dhudwar, A., (2010), "Employers' role in the low-pay/no-pay cycle", York: The Joseph Rowntree Foundation
- Michaels, G., Natraj, A. and Reenen, J. V., (2010), "The shrinking middle", CentrePiece, 15(2): 22-26.
- Mieske, K., "Low-skill Service Jobs and Technical Change", unpublished MSc dissertation, University College London (2009). Available from author on request.
- Migration Advisory Committee, (2012), Analysis of impacts of migration, UK Border Agency
- Mirrlees, J. et al., (2011), Reforming the Taxation of Earnings in the UK, London: Institute for Fiscal Studies
- Misra, J., Budig, M. J. and Boeckmann, I., (2009), "A Cross-National Perspective on Gender, Parenthood, and Employment", University of Massachusetts, draft
- National Audit Office, (2012), "Delivering the free entitlement to education for three- and four- year-olds", London: The Stationery Office
- Neuberger, J. et al., (2011), Part-time Working and Pay Amongst Millennium Cohort Mothers, CLS Cohort Studies, Working Paper 2011/12, London
- Nickell, S. and Saleheen, Jumana, (2008), The impact of immigration on occupational wages: evidence from Britain, Working Paper, Federal Reserve Bank of Boston

- NNI Research Team, (2007), National Evaluation of the Neighbourhood Nurseries Initiative: Integrated Report, London: Department for Education and Skills
- OBR, (2012), Fiscal Sustainability Report 2012, London: Office for Budget Responsibility
- OECD, (2012), "OECD Employment Outlook 2012", Paris: OECD Publishing
- OECD and FAO, (2012), Agricultural Outlook 2012-2021, Paris: OECD and FAO
- OECD, (2011), "Education at a Glance 2011: OECD Indicators", Paris: OECD Publishing
- OECD, (2011), "Divided We Stand: Why Inequality Keeps Rising", Paris: OECD Publishing
- OECD, (2011), Doing Better for Families, Paris: OECD Publishing
- OECD, (2004), "OECD Employment Outlook 2004", Paris: OECD Publishing
- O'Mahony, M. and Boer, W., (2002), "Britain's relative productivity performance: updates to 1999", London: National Institute of Economic and Social Research
- Osterman, P. and Schulman, B., (2011), "Good Jobs America: Making Work Better for Everyone", New York: Russell Sage Foundation.
- Osterman, P., (2008), "Improving Job Quality: Policies Aimed at the Demand Side of the Low-Wage Labor Market", in A Future of Good Jobs?: America's Challenge in the Global Economy, Bartik, T. J. and Houseman, S. N. (eds), Kalamazoo, MI: W.E. Upjohn Institute.
- Oulton, N., (2010), "Long term implications of the ICT revolution: applying the lessons of growth and growth accounting", CEP Discussion Paper No 1027
- Oulton, N. and Srinivasan, S., (2005), "Productivity Growth and the Role of ICT in the United Kingdom: An Industry View, 1970-2000", CEP Discussion Paper No. 681, London: The London School of Economics and Political Science
- Paul, G. and Patel, T., (2012), "An International Review of Skills, Jobs and Poverty: Implications for the UK", York: The Joseph Rowntree Foundation
- Pennycook, M. and Whittaker, M., (2012), Low Pay Britain 2012, London: Resolution Foundation
- Pennycook, M., (2012), "What price a living wage?", IPPR and the Resolution Foundation, London
- Pessoa, J.P. and Van Reenen, J., (February 2012), "Decoupling of Wage Growth and Productivity Growth? Myth and Reality", Resolution Foundation
- Philippon, T. and Reshef, A., (2009), Wages and Human Capital in the US Financial Industry: 1909-2006, NBER Working Paper No. 14644, National Bureau of Economic Research
- Phillips, A., (1958), "The Relation Between Unemployment and the Rate of Change of Money Wages in the United Kingdom, 1861-1957", *Economica*, 25, pp. 283-299
- Plunkett, J., (December 2011), "The Missing Million: The potential for female employment to raise living standards in low to middle income Britain", Resolution Foundation
- Plunkett, J., (May 2011), "Growth without gain?: The faltering living standards of people on low-to-middle incomes", Resolution Foundation, London
- Pronzato, C. D., (2007), Return to Work After Childbirth: Does parental leave matter in Europe?, Dondena Working Paper No. 14.
- Reinold, K., (2011), "Housing equity withdrawal since the financial crisis", Bank of England Quarterly Bulletin, Q2
- Roberts, S., (2012), "No snakes, no ladders: Young people, employment, and the low skills trap at the bottom of the contemporary service economy", Resolution Foundation
- Rodrik, D., (2007), "Normalizing Industrial Policy", The John F. Kennedy School of Government, Harvard University
- Rothstein J., (2008), The Unintended Consequences of Encouraging Work: Tax incidence and the EITC, CEPS Working Paper No. 165
- Roxburgh et. al, (2012), Debt and deleveraging: Uneven progress on the path to growth", McKinsey Global Institute, London
- Royal Bank of Scotland, (2012), "UK Household Deleveraging", London
- Savage, L., (2011), "Snakes and Ladders: Who climbs the rungs of the earnings ladder", London: Resolution Foundation
- Save the Children, (2007), The Poverty Premium: How poor households pay more for essential goods and services, London: Save the Children
- Schettkat, R. and Salverda, W., (2004), "Demand Patterns and Employment Growth: Consumption and Services in France, Germany, the Netherlands, the United Kingdom and the United States", Working Paper No 13, Amsterdam: Amsterdam Institute for Advanced Labour Studies.
- Schmitt, J., (2012), "Low-wage Lessons", Washington D. C. : Center for Economic and Policy Research
- Schneider, S., (2011), The International Standard Classification of Education 2011 and its Application in Cross-national Surveys, Oxford: University of Oxford
- Sefton, T., (2002), Recent Changes in the Distribution of the Social Wage, London: Centre for Analysis of Social Exclusion
- Sharpe, A., Arsenault, J.-F. and Harrison, P., (2008), The Relationship Between Labour Productivity and Real Wage Growth in Canada and OECD countries, 1961-2006, Ottawa: Centre for the Study of Living Standards

- Sissons, P. and Wright, J., (2012), *The Skills Dilemma Skills Under-Utilisation and Low-Wage Work*, London: Work Foundation
- Sissons, P., (2011), "The Hourglass and the Escalator: Labour market change and mobility", London: The Work Foundation
- Sharpe, A., Arsenault, J and Harrison, P., (2008), "The Relationship between Labour Productivity and Real Wage Growth in Canada and OECD Countries", Research Report No. 2008-8, Ontario: Centre for the Study of Living Standards
- Smith, N. and Taylor, P., (1999), " 'Not for Lipstick and Lager': Students and Part-Time Work", Scottish Affairs, issue no. 28.
- Smith, P. R., (2008), "The Publicization of Home-Based Care Work in State Labor Law", *Minnesota Law Review*, 92(5): 1390-1423.
- Solow, R., (2008), "Low Wage Work in Europe and America", Lecture to the 3rd meeting of Nobel Laureates in the economic sciences, The Lindau Mediatheque: <http://www.mediatheque.lindau-nobel.org/#/Video?id=433> [Accessed 3 October 2012]
- Stewart, E., (2012), *Building a Sustainable Quality Part-time Recruitment Market*, York: Joseph Rowntree Foundation
- Stewart, A., (2011), "Fair Work Australia: The Commission Reborn?", *Journal of Industrial Relations*, 53(5): 563-577.
- Stockhammer, E., (2011), "Wage-led growth: An introduction", *International Journal of Labour Research*, 3(2): 167-187.
- Swoffield, J. K., (2012), "Minimum wage hikes and the wage growth of low-wage workers", *Discussion Papers in Economics* No. 12/10, York: University of York
- Taylor, M., Haux, T. and Pudney, S., (2012), "Can Improving UK Skills Levels Reduce Poverty by 2020?", York: The Joseph Rowntree Foundation
- Thurley, D., (2012b), "Restricting pension tax relief", *Standard Note* 05901, London, HMSO
- Trade Union Congress, (2012), "Executive Pay Shareholder Voting Rights – TUC Response", BIS Consultation
- Trades Union Congress, (2011), "German lessons: developing industrial policy for the UK"
- Tu, T. and Ginnis, S. (2012), "Work and the welfare system: a survey of benefits and tax credits recipients", ipsos MORI for the Department for Work and Pensions
- Tudela, M. and Young, G., (2003), "The distribution of unsecured debt in the United Kingdom: survey evidence", *Bank of England Quarterly Bulletin* [Winter], London: Bank of England.
- UK Commission for Employment and Skills, (2012b), "Engaging low-skilled employees in workplace learning", Evidence report 43, London: UK Commission for Employment and Skills
- UK Commission for Employment and Skills, (2010), "Ambition 2020: World Class Skills and Jobs for the UK", London: UK Commission for Employment and Skills
- Van Wanrooy, B. (2005), "Adapting to the Lifecourse? Evaluating men and women's working-time preferences", *Australian Journal of Labour Economics*, 8(2)
- Vignoles, A. (July 2012), "Up-skilling the middle: How skills policy can help ensure that low to middle income households share in future economic growth", Resolution Foundation
- Wade, R., (2011), "The Return of Industrial Policy", *The London School of Economics and Political Science*
- Wadsworth, J., (2009), "Did the National Minimum Wage Affect Prices?", Centre for Economic Performance Discussion paper No. 947, London: London School of Economics and Political Science
- Wadsworth, J., (2007), "Did the Minimum Wage Change Consumption Patterns?" *The Low Pay Commission*, Centre for Economic Performance Working Paper No. 1517, London: The London School of Economic and Political Science
- Waldfogel, J., (2004), *Social Mobility, Life Chances, and the Early Years*, CASE Paper 88, London
- Weinkopf, C., (2009), "Job quality in call centres in Germany", *International Labour Review*, 148(4): 396-411.
- Weller, C., E., (2006), "Despite Strong Growth, Middle-Class Squeeze Continues Amid Higher Prices", *Center for American Progress*
- Whitehead, C. et al., (2012), *Housing in Transition: Understanding the dynamics of tenure change*, London: Resolution Foundation and Shelter
- Whittaker, M., (2012), *Creditworthy*, London: Resolution Foundation
- Whittaker, M. (2012), "Essential Guide to Squeezed Britain: The annual audit of low to middle income households", Resolution Foundation
- Whittaker, M. and Savage, L. (July 2011), "Missing out: Why ordinary workers are experiencing growth without gain", Resolution Foundation
- Wolf, A., (2011), "Review of Vocational Education – The Wolf Report", Department for Education, London: HMSO
- Wilson, R. A. and Homenidou, K., (2012), *Working Futures 2010–2020: Main Report*, Coventry: Institute for Employment Research
- Wilson, R. A. et al., (2012), *The Impact of Employment Changes on Poverty in 2020*, York: Joseph Rowntree Foundation
- Wright, C. F., (2011b), "Organising beyond the employment relationship: Unions, collective bargaining and supply chain coordination", London: Trade Union Congress.
- Wright, J. and Sissons, P., (2012), "The Skills Dilemma: Skills Under-utilisation and Low-wage Work", London: The Work Foundation

The Commission on Living Standards is an independent and wide-ranging investigation into the financial pressures facing low to middle income Britain. Its work has focused on the long-term economic trends that are changing the reality of life on a low to middle income, from trends in the UK labour market and tax and benefit system to new pressures from the cost of living and modern working patterns. The Commission's work has been supported and hosted by the Resolution Foundation, an independent think tank working to improve the lives of people living on low to middle incomes.



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