

# Growth without gain?

The faltering living standards of people on low-to-middle incomes

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**Commission on Living Standards:**  
Improving the lives of people on  
low-to-middle incomes

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## The Resolution Foundation Commission on Living Standards:

Improving the lives of people on low-to-middle incomes

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

The Commission is bringing 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 is engaging with politicians from across the spectrum. The members of the Commission are:

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The Commission's work is supported and hosted by the Resolution Foundation, represented by **Tina Alexandrou** (Resolution Foundation Trustee) and **James Plunkett** (Secretary to the Commission). The Foundation will be working with a wide range of organisations in the coming months to produce a series of reports that will form the evidence base for the Commission's discussions. If you would like to contribute to the work of the Commission, please get in touch at: [commission@resolutionfoundation.org](mailto:commission@resolutionfoundation.org)



## Who do we mean by ‘people on low-to-middle incomes’?

The Commission’s work, and the wider work of the Resolution Foundation, focuses on people living on low-to-middle incomes. By that we mean 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). As such, it is an income-based definition (rather than one based on earnings). For the purposes of the income distribution we use ‘equivalised’ household incomes, to take account of the importance of different household sizes and compositions. In some cases, where data makes it necessary, we adopt simplified versions of this definition. These cases are noted.

By way of contrast, we also define two other income groups: first, 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; and, second, a ‘higher income’ group, containing those who live in households in the top half of the income distribution.

In conceptual terms, the intention of our work is to focus on 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 social care. 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.

Defined as above, 11 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 £19,200-£48,500 a year.

For more information on the group, and on the technical aspects of the definition, see *Squeezed Britain (2010)*, a comprehensive audit of the economic position of people living on low-to-middle incomes, available at: [www.resolutionfoundation.org](http://www.resolutionfoundation.org)





## Executive Summary

This is the first report for the Resolution Foundation's *Commission on Living Standards*. Its purpose is to set the scene for the Commission's work by providing an overview of the long-term trends that are shaping the living standards of people on low-to-middle incomes. It doesn't intend to set out definitive answers, but simply to bring definition to current concerns about living standards, and to frame the key questions that will guide the Commission in the course of its work.<sup>1</sup>

### The global context

Recent trends in several of the world's advanced economies are prompting leading thinkers to reappraise the link between national economic growth and personal gain. These trends are most stark in the United States, where median earnings have now been stagnant for a generation. The median American worker in 2009 earned no more than an equivalent worker in 1975.<sup>2</sup> Over the same period, US GDP more than doubled.

There is now evidence that American workers are not alone in having failed to benefit from a long period of economic growth. Similar trends, though far less chronic and less acute, are now in evidence in leading economies such as the UK, Germany and Canada.<sup>3</sup> In all three countries, median wages were stagnant or falling during long periods of growth, prior to the 2008-09 global recession.<sup>4</sup> The phenomenon is by no means universal. Other OECD economies appear to have experienced better wage performance, including Australia, France, Sweden and Norway.<sup>5</sup>

In the US, the phenomenon of median wage stagnation is being interpreted by some leading economists as a 'decoupling' of growth from gain.<sup>6</sup> The productivity of labour – commonly understood as the key driver of rising wages – has continued to grow, but these gains have failed increasingly to feed through into pay packets. The effects of this 'decoupling' on households have not been trivial; if US median household earnings had continued to track GDP per capita since the mid 1970s – as they had from 1945 to 1973 – the average household would not have earned \$50,000 in 2008 but around \$80,000, or 60 percent more.

In search of explanations, many economists point to inequality.<sup>7</sup> Skewed by strong increases in wages at the top, mean wages have performed better than median wages across the world's developed economies.<sup>8</sup> The balance of proceeds between wages and profit has also shifted, with labour receiving a shrinking slice of the pie in recent decades. But evidence is also emerging of a deeper shift – a change in the way that technology drives jobs growth in advanced economies. Rather than displacing jobs at the bottom and creating them higher

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1. In line with the academic consensus, we define living standards as *the kind of life that people can afford to live*. Our focus is material wellbeing. As a concept, this makes living standards broader than income, because it also includes other determinants of the goods and services that people can afford; and it is a narrower concept than 'quality of life', not including less tangible aspects of wellbeing, such as culture. See page 13 for a fuller explanation.

2. Source: OECD Stat – in constant 2009 prices, controlled for the US Consumer Prices Index.

3. *Real wages in Germany: Numerous years of decline*, German Institute for Economic Research, No. 28/2009; *The relationship between labour productivity and real wage growth in Canada and OECD countries*, Centre for the Study of Living Standards (CSLS), Sharpe et. al, (2008)

4. p.1, CSLS (2008); p1, GIER (2009)

5. OECD Stat Database. For an account of wage trends in France see Howell and Okatenko (2009)

6. See, among others, Professor Tyler Cowen (<http://bit.ly/cmy8VG>), Professor Lane Kenworthy (<http://bit.ly/fXO2QD>), Professor Mark Thoma (<http://bit.ly/fnCN6f>).

7. Frank (2011)

8. OECD, *Growing Unequal?* (2008)

up, as happened in the post-war decades, today's technologies are displacing jobs in the middle, with poor consequences for those on low-to-middle incomes.<sup>9</sup> There is compelling evidence that this shift, to what might be considered a new phase of growth, has taken place across many OECD economies.<sup>10</sup>

### The UK picture

These global developments set a worrying context for the UK. So what has happened to living standards in the UK over the last thirty years? In absolute terms, UK earnings growth was strong from 1977 to 2003 but from 2003-08 – before the 2008-09 recession, and despite GDP growth of 11 percent in the period – wages in the bottom half flat-lined.<sup>11</sup> There is emerging evidence that wage growth has fallen behind growth in labour productivity. After a sharp fall as the result of the downturn, wages are now set to recover only very slowly. Based on current government forecasts, we expect that average wages will be no higher in 2015 than they were in 2001.<sup>12</sup> In relative terms too, the position of the UK's 11 million people living on low-to-middle incomes has deteriorated. The stark increases in inequality that took place in the 1980s and 1990s have now levelled off – *but only within the bottom half of the distribution*. The earnings of those at the top have continued to move away from those in the middle, while the wage-characteristics of the bottom half have coalesced.<sup>13</sup>

These trends in earnings have transformed government's relationship with people on low-to-middle incomes. The group's share of national income has declined – households between the 10th and 50th percentiles of income (40 percent of the total) accounted for 30 percent of national original income in 1977; in 2009, the group's share dropped to 22 percent. The group's share of wages has fallen more quickly.<sup>14</sup> In 1977, the tax-benefit system 'topped up' this group's share of national income by one percentage point; by 2008-09 the system was lifting their share almost four times as much, by 3.7 percentage points.<sup>15</sup> A system of tax-credits has been created to boost incomes, particularly targeted at low-to-middle income people in work and with children. This has raised living standards, but has also meant higher marginal tax rates, with many people on low-to-middle incomes now taking home less of every additional pound they earn.<sup>16</sup>

### New pressures affecting the character of life on low-to-middle income

Although real income is the most important determinant of living standards, other trends can transform the reality of people's lives. Headline inflation may have been low from 1993 to 2009 but, even in this time, changes in the relative prices of different goods altered the profile of households' living costs beyond recognition. Transport costs rose 115 percent from 1988 to 2010 while clothing costs fell by 50 percent.<sup>17</sup> A generation rich in housing and relatively poor in consumer goods has been replaced by one that is relatively rich in consumption and housing-poor. More recently, inflation has hit people on low-to-middle incomes disproportionately. A full picture of living standards cannot ignore the effect of these trends.

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9. Goos and Manning (2008)

10. Autor (2010)

11. See Figure 13, Chapter 3 below. Source: ONS and the Annual Survey of Earnings and Hours, full-time employees

12. Resolution Foundation analysis, based on ONS ASHE and Office for Budget Responsibility forecasts for average weekly earnings and RPI inflation

13. See Figure 16, Chapter 4 below. Resolution Foundation analysis based on ONS ASHE data for the 50:10 and 90:50 income ratios.

14. Resolution Foundation analysis, based on ONS The distribution of household income series, UK Data Archive

15. See Figure 24, Chapter 4 below. Resolution Foundation analysis, based on ONS The distribution of household income series, UK Data Archive

16. See Figure 27, Chapter 4 below.

17. See Figure 31.

Nor can it ignore assets and debt, and in particular housing. In 1988, 58 percent of young people in the low-to-middle income group owned a home and 14 percent rented privately.<sup>18</sup> By 2008, those figures had flipped to 29 percent (owning) and 41 percent (repetitively). This change took place in spite of a dramatic loosening of credit. In 2007-08, just prior to the financial crisis, 30 percent of people on low-to-middle incomes buying their first home relied on 100 percent mortgages, a higher proportion than in the income groups either above or below.<sup>19</sup> *Despite falling interest rates*, the burden of mortgage repayments on people on low-to-middle incomes has been rising, not falling over time.<sup>20</sup>

The report concludes by looking at new working patterns, and in particular the rise in female economic participation. This trend has been a significant contributor to rising living standards in the past three decades,<sup>21</sup> but new working patterns have also changed the *kinds* of support on which workers depend. The UK childcare market quadrupled in size from 1990 to 2006.<sup>22</sup> Now ageing is adding further pressure; by 2040, one in ten people will be over 75.<sup>23</sup> People will need to stay productive in work into later life. Public services have long had a significant impact on people's living standards in the sense that they provide significant 'benefits-in-kind'. Now services like childcare and elderly care look set to have a more direct impact than ever on people's ability to raise their earnings through work.

### The nature of the challenge

Today, in the UK economy, the prospects for growth remain unclear. Historically, recessions characterised by credit crises have often led to long periods of anaemic performance. For good reason, today's defining political challenge is framed simply in terms of securing a steady recovery. Nothing in this report undermines the significance of that task. Growth is a prerequisite to rising living standards. But an additional lesson does emerge from these pages: growth is necessary, *but it may not be enough*.

The late twentieth century rising tide of living standards did not fall out of a simple formula: 'growth leads to gain'. Instead, the period was characterised by a series of social and economic 'waves' that ensured that national economic performance fed through into widespread prosperity. In the post-war decades, new technologies and the widening of educational opportunity had an overall positive impact on skill- and pay-levels. In the 1970s and 1980s, female economic participation rose rapidly. From the late 1980s, financial deregulation resulted in the wider availability of credit. Into the 2000s, tax credits boosted the incomes of those in work on modest pay.

As set out in this report, for a variety of reasons, each of these waves is no longer boosting the living standards of ordinary workers to the same degree. The upward march of living standards for people on low-to-middle incomes had already started to falter prior to the recession. In this sense, we have entered a new phase. Today, a singular focus on growth obscures a more difficult question: what sort of growth should we be seeking? What other conditions will be required to ensure that economic recovery feeds through into widespread prosperity – and how can they be attained? This report sets the scene for a major programme of work on those questions over the next 18 months.

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18. See Figure 38, Chapter 6 below. Based on Resolution Foundation analysis of the Family Resources Survey and the Family Expenditure Survey.

19. The equivalent figure for those who are heavily reliant on benefits was 27 percent, and for those on higher incomes 18 percent. Resolution Foundation analysis, Survey of English Housing, 2007-08 '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 equivalised household income distribution for working-age households.

20. Resolution Foundation analysis, British Household Panel Survey.

21. See Figures 20 and 21.

22. Source: Laing & Buisson, 2007

23. Resolution Foundation analysis, ONS UK Census



## Chapter 1 – What do we mean by living standards?

For the purposes of this report, and for the wider work of the Commission, we adopt a simple definition of living standards as the *kind of life that people can afford to live*. In line with widely accepted definitions of living standards, we consider ‘material wellbeing’ to be at the core of this definition – that is, in simple terms, the quantity and quality of material goods and services that a person can afford to access. Overall, the concept is broader than a simple measure of income or poverty, because it also covers a wider set of variables that determine what goods and services people can afford to access, from the cost of living to the availability of credit. Conversely, it is a narrower concept than ‘quality of life’ or ‘social welfare’ in as much as it doesn’t cover intangible aspects of wellbeing such as security and culture.<sup>24</sup>

Our understanding of living standards is also informed by a reading of the academic literature, and in particular the ‘capabilities’ approach developed by Amartya Sen. This holds that material wellbeing is important by virtue of the *capabilities* with which it endows people, for example the ability to achieve certain key aspirations.<sup>25</sup> Material wellbeing isn’t an end in itself, but a means to a better life. Our work draws two key lessons from this debate. First, we are concerned with whether the pursuit of material wellbeing undermines the kind of life people are able to live; we treat issues like family time as being of primary rather than second-order importance. Second, we are concerned with relative positions and inequality, because although aspirations may be fairly constant over time – for example, the aspiration for a comfortable life or financial security – the material goods required to achieve these goals are likely to vary by context.

Having adopted this approach, we judge five areas to be particularly important to the question of living standards. These five areas are the focus of this report. The first – trends in **wages** or individual earnings – is self-evidently relevant to our definition. Earnings from employment make up 96 percent of UK household income.<sup>26</sup> Controlled for changes in prices, they are the major determinant of the goods and services that people can afford to access. For that reason, this document looks in detail at long-term trends in the absolute value of wages. We also look at changes in the distribution of wages and trends in inequality.<sup>27</sup>

These individual wage-trends can tell us a lot about how our economy is performing for people on low-to-middle incomes. But they fail to capture either the impact of taxes and benefits or the way people share their incomes across a household. When it comes to the political debate about living standards, these distinctions have caused particular confusion in recent months, with different commentators appealing to different statistics.

Secondly, therefore, this report looks specifically at **household incomes**. How are households fairing, as opposed to individuals, once we take into account changes in their size and working patterns? And how are incomes fairing, as opposed to earnings, once we take into account changes in the tax and benefit system? These questions help to determine how much money people have both in absolute and relative terms, and how that has changed over time. And, by impacting on marginal tax-rates, they also help to determine how hard it is for people to raise their household income through additional work.

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24. See, for example, the indicators captured in the Second European Quality of Life Survey, European Foundation for the Improvement of Living and Working Conditions (2003, 2009)

25. See Sen, *The Standard of Living*. Cambridge University Press 1987, Hawthorn (ed.); See also *The Living Standard* Amartya Sen *Oxford Economic Papers* New Series, Vol. 36, Supplement: Economic Theory and Hicksian Themes (Nov., 1984), pp. 74-90

26. Resolution Foundation analysis, Family Resources Survey

27. For a discussion of the importance of relative measures, see Frank, *Falling Behind* (2007)

Put together, these trends provide a useful picture of how living standards are changing. But as we saw above, the concept of living standards is broader than incomes, and so this picture is incomplete. We look at three other trends that impact on the *kind* of life that can be lived on a low-to-middle income: changes in relative prices; trends in assets and debt, including housing; and changes in the working patterns that people rely on to raise their living standards, including their implications for public services.

**Relative prices** are important because even benign headline inflation can mask dramatic shifts in the profile of household living costs. When clothes and communications get cheaper and transport and fuel get more expensive, people's lives feel materially different and consumption patterns change. And because the affluent spend their money differently to people in the middle and bottom of the income distribution, the shape of inflation also has distributional impacts. The third section of this report therefore digs beneath headline inflation figures to look at underlying movements in prices.

The fourth section of the report looks at trends in **assets and debt**, with a particular focus on housing. The acquisition of assets over a lifetime is one of the main paths to material wellbeing, and feeds through into the wealth of the next generation. Savings give security in difficult periods and, along with access to credit, help to smooth over the lumpy expenditures that arise in life and manage dips in incomes. Conversely, the failure to build up assets means a life 'on the edge' and – particularly in the case of pensions and home-ownership – a poor standard of living in old age. We focus in particular on housing because it is a powerful driver of asset-accumulation, and because housing costs make up a significant proportion of outgoings for low-to-middle income households, but also because home-ownership remains such a powerful aspiration.

Finally, changing **working patterns** – in particular the rise of dual-earning – have been an important driver of growth in household income in recent decades. Together with social changes, they have also altered the *kinds* of sacrifices that people have to make to secure certain levels of material wellbeing, as well as the types of support that people need to raise their living standards through work. The weakening of informal caring networks has left families more reliant on formal options. Meanwhile, the ageing of our society now means that people will need to stay in work for longer. People on low-to-middle incomes – in employment, but living on narrow margins – are at the sharp end of these trends, and can expect to find their living standards increasingly shaped by the availability of key public services, like childcare, in the coming years.

Together, these five broad areas provide some definition to current concerns about living standards. We begin, though, with an account of trends in pay, productivity and employment across the world's advanced economies. This contextualises our discussions of the UK situation.

### [The structure of this report](#)

The first section of the report (page 17) discusses **trends in pay, productivity and employment across the world's advanced economies**, and looks at why these trends are prompting a reappraisal of the relationship between national economic growth and gains at the household level.

The second section looks at the picture of **earnings** (page 27) and **incomes** (page 35) in the UK, first in terms of the absolute and relative value of individual wages, and then in terms of household incomes, and their implications for government and the welfare state.

The third section looks at three other trends that are changing the character of life on low-to-middle income in modern Britain: a **new profile of living costs** (page 45); **new pressures from assets and debt** (page 51); and the **new needs of modern workers** (page 61).

The report concludes by drawing these trends together, and by setting out the **nature of the challenge** they represent (page 67).



# Section 1

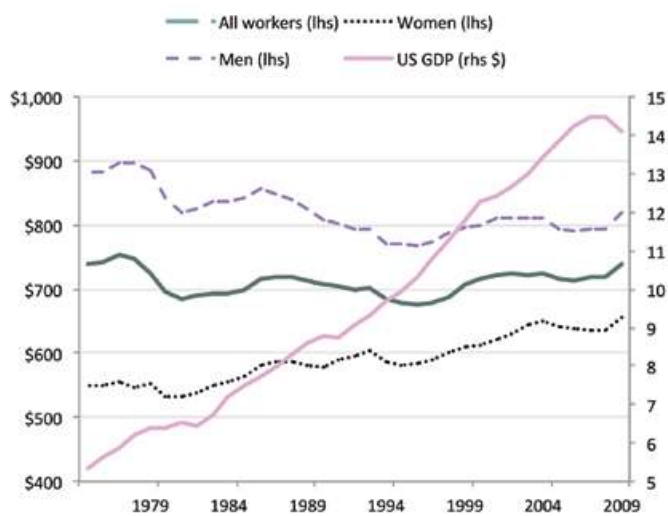
the global context –  
a great decoupling?

## 2. Trends in pay, employment and productivity in advanced labour markets

Evidence is emerging from a number of the world's advanced labour markets of surprisingly poor performance in the wages of ordinary workers. For much of the 20<sup>th</sup> century – outside of periods of economic contraction and their aftermath – workers in the developed world became accustomed to sustained year-on-year growth in the real value of wages. Now, it seems that across several major economies, at the end of the 20<sup>th</sup> century and the start of the 21<sup>st</sup>, these expectations were confounded. Median wages stagnated, even before the 2008-09 global recession, when national economic performance was still strong.

**Figure 1: Over the long-term, US wages have stagnated in a time of growth**

Median gross weekly earnings (left hand side) and US GDP, 1974-2009, \$ trillions (right hand side)



Source and notes: Full-time workers, Resolution Foundation analysis, US Census Bureau, Annual Social and Economic Supplements, OECD

This phenomenon is most established in the United States, where ordinary workers have now seen little or no improvement in the value of their wages for a generation. Many readers will be familiar with these trends from recent debates in the US academic community, and recent accounts of median wage stagnation.<sup>28</sup> As Figure 1 shows, an American worker on middle wages in 2009 earned no more than an equivalent worker in 1975, despite US GDP more than doubling over the period.<sup>29</sup>

Figure 2 suggests that this phenomenon of stagnating median wages may now be wider spread – albeit in a far less chronic and less acute form. Here we depict trends in the real value of median wages for a number of major economies for which long-term data is available, in the form of an index, showing comparable growth over time. In Canada, median real earnings were flat across the period covered in the chart, and in fact have shown little improvement since 1975, despite GDP having more than doubled since then.<sup>30</sup> In Germany, between 2003 and 2008, the median weekly wage fell by 9 percent in real terms,

despite GDP growth of over 9 percent in the period as a whole.<sup>31</sup> In the UK, median wages grew strongly in the earlier years covered by the chart, but have since stagnated, not rising from 2003-08, despite GDP growth of 11 percent over the period.<sup>32</sup>

These trends may suggest that median-wage stagnation is more widespread than previously thought, but they do not suggest that it is a universal phenomenon. Among the countries featured in Figure 2, Australia, France, Sweden and Norway appear to have experienced sustained real wage growth up to the 2008-09 global recession. Evidence suggests that the same is true of workers in Finland.<sup>33</sup> If poor wage performance is driven by international dynamics, there are clearly also country-specific factors at play.

28. See, for example, Tyler Cowen *The Great Stagnation* (2011)

29. Source: OECD STAT – in constant 2009 prices, controlled for the US Consumer Prices Index, US median weekly earnings were £739 in 1975 and £739 in 2009 (median gross usual weekly earnings of full-time workers aged 16 and over)

30. Canadian Centre for the Study of Living Standards, *Rising profit shares, falling wages* (2007)

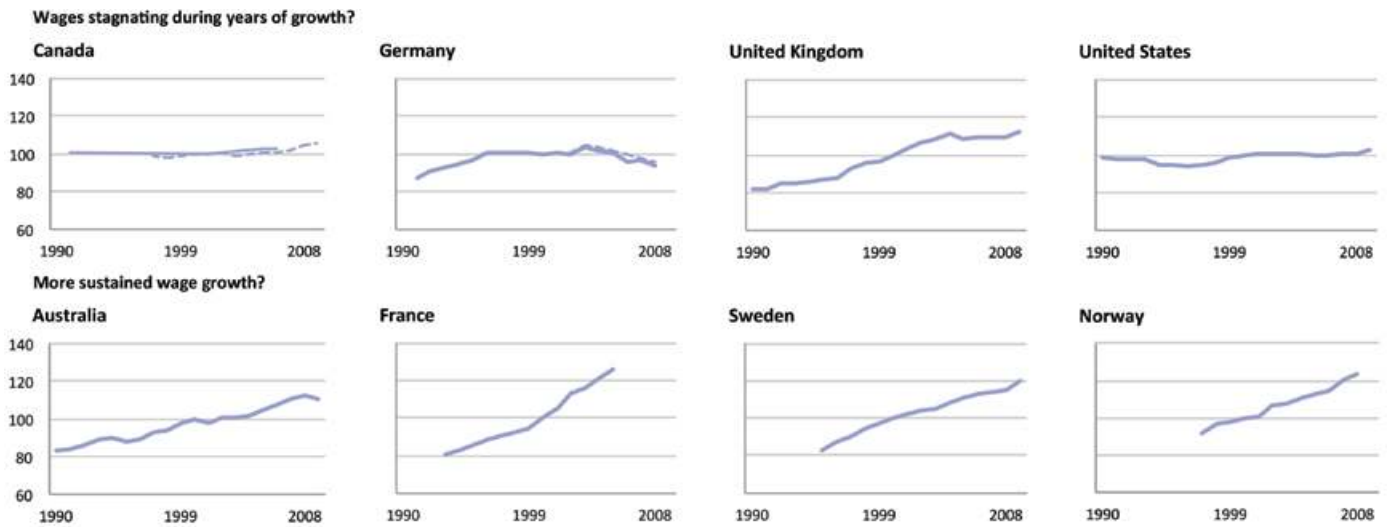
31. Gross monthly earnings adjusted for CPI

32. Median gross weekly earnings, Annual Survey of Hours and Earnings. UK wage trends are looked at in more detail in Chapter 3.

33. OECD Stat, gross weekly wages

**Figure 2: More widespread stagnation of middle wages?**

Median wages by country; Index, 2000 = 100; controlled for CPI inflation: 1990-2009; see notes for full details



Sources and notes: **Australia:** median gross weekly earnings in main job of full-time male and female employees, Labour Force Survey; **Canada** primary line = median earnings, full-time, full-year workers, including earnings from self-employment, secondary line = median gross weekly earnings for male and female full-time workers, Labour Force Survey, Statistics Canada; **France** Net hourly wages (after social insurance payments, before income tax), French Labour Force Survey supplied by Dr. A. Okatenko.; **Germany** primary line = gross monthly wages, DIW, secondary line = gross hourly wages; **Norway** Median monthly earnings for full-time employees, Statistisk Sentralbyrå; **Sweden** monthly median income for full-time employees; **United Kingdom** median gross weekly earnings for full-time workers, Annual Survey of Hours and Earnings; **United States** median gross usual weekly earnings of full-time workers aged 16 and over; Household Survey (Current Population Survey).

The caveats on these preliminary findings are significant; in particular, we are looking here at data for weekly (or in some cases monthly) earnings for full-time employees. This data does not, therefore, isolate the impact of genuine wage increases from changes in working hours, or the changing mix-effect of part-time versus full-time work. A forthcoming report will examine these international findings in more detail. Even so, in light of the long-term and well-evidenced stagnation of median wages in the US, and the significance of long-term wage trends to the living standards of UK workers (not least versus public spending cuts), these early warning signs – emanating from a wide-range of Anglo-Saxon and continental-European economies – merit significant attention.

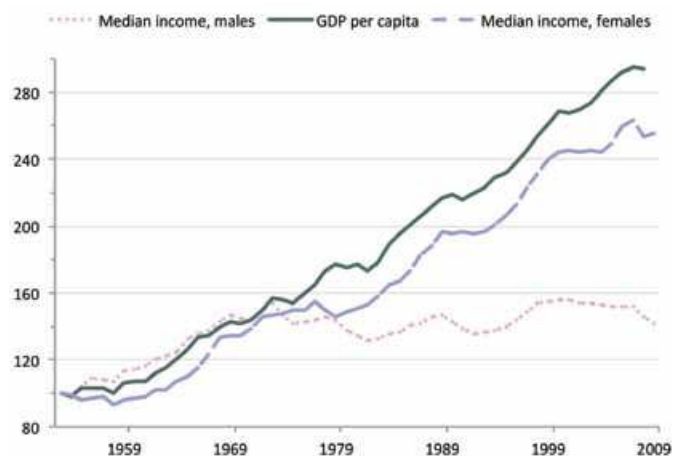
### The great decoupling?

To understand the nature of the challenge, it is worth looking in more detail at the way in which the US economy has seen a change in the relationship between national economic performance and the living standards of ordinary working households. Figure 3 compares trends in US GDP per capita with growth in the real value of median incomes for the median male and female worker.<sup>34</sup> (It is important to note that data constraints mean we rely here on data for *incomes*, rather than for wages.<sup>35</sup>) As can be seen, for both males and females, GDP per capita and incomes track each other fairly closely for the period from 1945 to the mid-1970s. However, from the mid-1970s onwards, a dramatic fall-off in the growth-rate of *male* median incomes changes things significantly. While GDP per capita continues to grow – and female median wages also grow, albeit more slowly – male median incomes stagnate.

34. It is important to note that this data focuses on *incomes*, rather than earnings, due to data availability restrictions before 1970. Nonetheless, since earnings make up the overwhelming proportion of income at the median, a significant part of the trend seen here must be accounted for by trends in wages.

35. Wages, or 'earnings', refers to money earned through employment, before the interaction of the tax-benefit system; 'income' customarily refers to the money taken home by an individual or household, after the impact of various taxes and benefits.

**Figure 3: The US decoupling of growth from gain**  
Median income and GDP per capita; Index, 1953 = 100



Source: Resolution Foundation analysis, US Census Bureau, Annual Social and Economic Supplements: constant 2009 prices, indexed with GDP deflator and RPI.

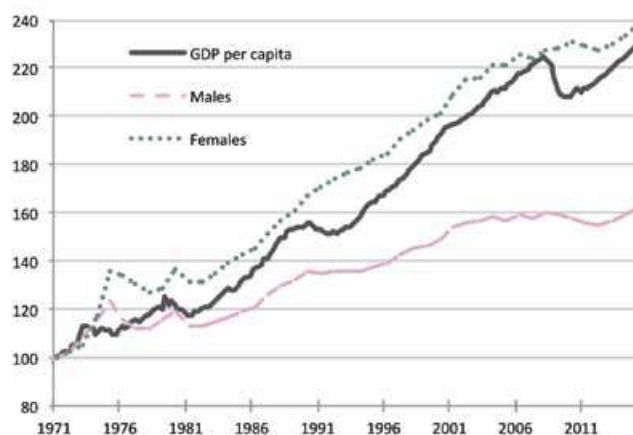
From this picture it is no surprise that some US economists have characterised the present period, beginning in the mid- 1970s, as ‘the great decoupling’ – a time in which economic growth at the national level appears to be less closely linked to recognisable gains for working households, driven in particular by the faltering prospects of male workers. If true, this is not a trivial development in terms of our standard economic assumptions; GDP per capita has long been considered a fairly straightforward proxy for the wellbeing of ordinary workers – not least because its value is driven partly by improvements in the productivity of labour, which are assumed to feed through into better wages. This development is also non-trivial from the point of view of households: if growth in US median wages had continued to track growth in GDP per capita over the period from 1973 to 2010 – as it broadly had in the period from 1945 to 1973 – the median US household would now earn around \$80,000 rather than \$50,000, or 60 percent more.<sup>36</sup>

### Important caveats remain

It is too early to say whether this dynamic of ‘decoupling’ is a good description of the trends being seen in economies outside the US, from the UK to Germany. In the UK, for example, wage-stagnation is far too recent a phenomenon to allow us to infer a fundamental shift in the nature of economic growth. That said, Figure 4 would be consistent with the early stages of such a trend. It suggests that the recent slowdown in UK median wage-growth, beginning in the early 2000s, has seen male median wage growth fall behind growth in GDP per capita. In a similar manner to Figure 3’s description of US trends, female wages have also performed more strongly in the UK, broadly keeping track with GDP per capita growth.

Figure 5 looks at this question from a different angle, plotting an index of male median wages against output per worker. It provides broadly the same conclusion: the tailing-off of UK median wages that occurred in the early 2000s has not been mirrored by a slowdown in productivity-growth, and to that extent may represent a weakening in the relationship between the value added by ordinary workers, and the value those workers accrue through wages.<sup>37</sup>

**Figure 4: Warning signs of a UK decoupling?**  
UK GDP per capita and earnings; Index, 1971 = 100



Source and notes: All figures adjusted using GDP deflator; median earnings projections based on OBR average earnings forecast; earnings are weekly, excluding bonus payments; ONS and OBR projections from Budget 2011

36. Resolution Foundation analysis, US Census Bureau

37. Trends in UK wages are covered in more detail in Chapter 2.

**Figure 5: UK warning signs of decoupling?**  
UK labour productivity and male median wages



Source: Resolution Foundation analysis ONS, annual output per worker; median earnings full-time male employees, ASHE

can be seen in US wage performance by educational background (Figure 6), to the extent that some economists now characterise US wage-stagnation as a disease peculiar to non-college educated males. Autor, for example, judges that the hourly wages of male high school dropouts declined by 16 percent in real terms from 1979 to 2007, while the real hourly wages of college graduates increased by 10 percent over the same period.<sup>39</sup> Madrick and Papanikolaou find similarly poor wage-performance among low-skilled males.<sup>40</sup>

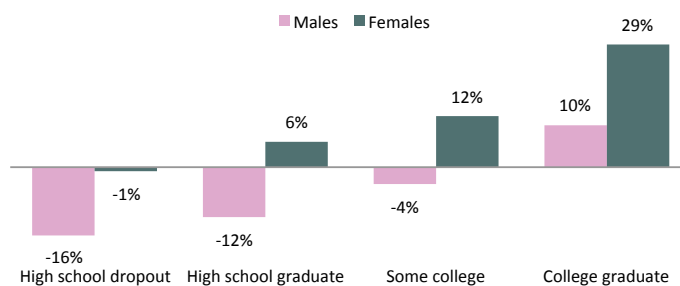
Any hypothesis about UK wage-stagnation will need to account for variations by gender and by education level. It will also need to learn from US debates about the important distinction between wages and employee compensation. These may prove less relevant in the UK context than in the US, where rising employer-paid health insurance premiums have squeezed the wage-element of workers' compensation packages in recent years, but it is nonetheless an important part of the picture. So too are more technical questions about how variables of GDP, productivity and wages are 'indexed' to produce real values to compare over time.<sup>41</sup>

It is fair to say that these nuances *complicate* our understanding of the phenomena of median wage stagnation and decoupling, rather than undermine their significance wholesale. In most cases, the

To understand these trends better it will be necessary to subject UK data to a higher level of scrutiny. In the US, these debates have been running for some time, and there is now a much more developed understanding about the nuances that sit behind claims of median wage stagnation and decoupling in that country. In particular, it has become clear that gender is a critical part of the US picture. As Figure 3 made clear, the wages of full-time female American workers have performed far better than those of men, in part because of improvements in the quality of jobs carried out by women over time, accompanied by a significant increase in female education levels. That said, more recent work by Greenstone and Looney of the Brookings Institute suggests that wage-stagnation may now be affecting female employees too, with the median wage of all US female employees not having grown since 2001.<sup>38</sup> Similarly, very significant variations

**Figure 6: The importance of education to US wage-growth**

US real hourly earnings by education, % change, 1979-2007



Source: David Autor analysis for the Centre for American Progress, Hamilton Project, based on May/ORG Current Population Survey 1973-2009.

38. Greenstone and Looney, Brookings Institute *Women in the Workforce: Is Wage Stagnation Catching Up to Them Too?*

39. Autor (2010)

40. See Madrick and Papanikolaou, *The Stagnation of Male Wages*, Schwartz Centre for Policy Analysis (2008) for a full disaggregation of trends in median wages by gender and education.

41. Links to all of these debates, in the US context, can be found in the footnotes and bibliography. See Jeff Lonsdale at <http://unpleasantfacts.com/revisiting-the-median-income-chart-comparing> ;

responses of ‘stagnation theorists’ to the issues outlined above are as compelling as the counterarguments. Levy and Temin, for example, look at the relationship between US productivity and wages taking account of non-wage fringe benefits (and on the basis of a consistent indexing method), and find a familiar pattern of stagnation from the 1980s onwards.<sup>42</sup> While the stagnation story is not as straightforward as some have suggested, it is sufficiently compelling to justify significant concern.

### What could explain these trends?

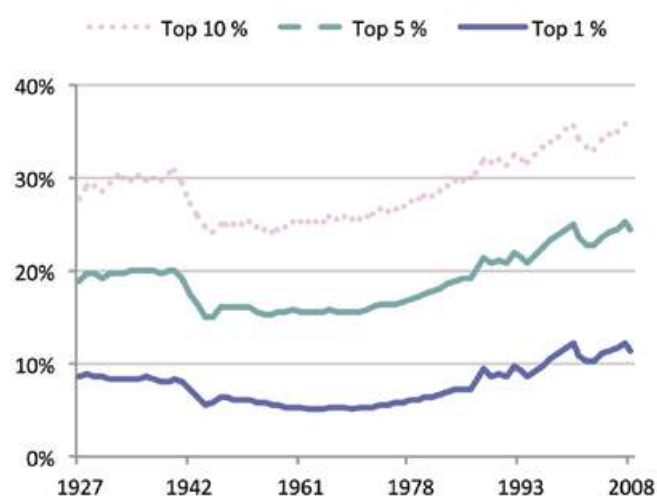
Broadly speaking, two complementary approaches have emerged as attempts to explain the long-running poor performance of wages for ordinary US workers. The first approach is principally energised by questions of the distribution of the proceeds of growth. Put simply, it asks the question: if productivity has grown, and output has expanded, but the average worker has not seen the gains in their pay packet, then where have the missing proceeds of growth gone?

As Figure 7 shows, the share of US national wages going to workers at the top of the earnings distribution is now at its highest level in modern history.<sup>43</sup> In 2008, the top one percent of earners received 11.4 percent of all US wages while the top five percent received 24.3 percent and the top ten percent 34.9 percent.<sup>44</sup> In 1965, the average salary of a Chief Executive Officer in the US was 24 times the salary of the average production worker; by 2008, just prior to the recession, it was 277 times, though it has since fallen to 185 times.<sup>45</sup>

As Atkinson and Piketty argue, it is this increase in inequality in *wages* (rather than capital incomes) that has been the main driver of increased inequality in the US (and UK) from the 1970s onwards. Indeed, wages now make up a far bigger share of the income of those at the top, and capital income a smaller share, than in previous periods.<sup>46</sup>

In the US context, evidence suggests that trends in education levels have been a critical driver of the rising inequality in earnings. The average years of schooling in the American population rose quickly for cohorts born through to 1945, but that growth has since slowed sharply. With demand for college-level skills growing rapidly in this period, and outstripping this slow growth in supply, returns to skills have increased markedly. Figure 8 shows the dramatic increase

**Figure 7: Historically high wage-inequality**  
US top wages, % of national wages



Source and notes: Piketty and Saez, database of top incomes; includes bonuses and profits from exercised stock options

42. Levy and Temin, MIT Department of Economics, Working Paper Series, Inequality and Institutions In 20<sup>th</sup> Century America (2007). See in particular: “In the quarter century between 1980 and 2005, business sector productivity increased by 71 percent. Over the same quarter century, median weekly earnings of full-time workers rose from \$613 to \$705, a gain of only 14 percent (figures in 2000 dollars). Median weekly compensation - earnings plus estimated fringe benefits - rose from \$736 to \$876, a gain of 19 percent.”

43. Resolution Foundation analysis based the data of top US incomes constructed by Piketty and Saez and available at: <http://elsa.berkeley.edu/~saez/TabFig2007.xls>. For more information on methodology see Thomas Piketty and Emmanuel Saez, “Income Inequality in the United States: 1913-1998,” *Quarterly Journal of Economics*, February 2003

44. Ibid.

45. Economic Policy Institute, State of Working America, 2010

46. Atkinson, Piketty and Saez (2011). Indeed, Atkinson et al find that even for those at the very top of the income distribution, capital income has fallen as a share of income over time.

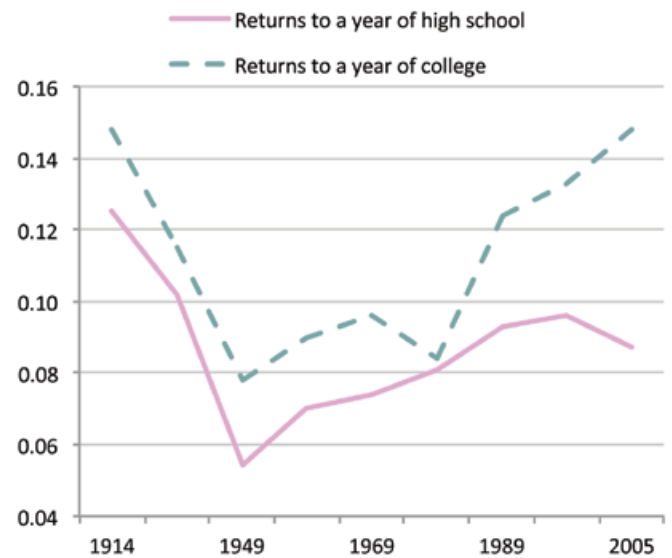


in the returns to education that has resulted since the mid-1970s. The impact of a year of college on later earnings is now back at the same level it was at in 1914. These trends have driven up the wage gap between individuals with high and low skills. This chimes with the fact that the US slowdown in median wages has hit those with low skills the hardest, as was seen in Figure 6.

As well as explaining poor median wage performance by appealing to the changing distribution of growth's proceeds between *workers*, some leading economists have looked to the way in which the proceeds of growth are distributed between the factors of production, namely capital and labour. In the past thirty years, the share of national income going to labour in the form of wages has declined significantly across the world's advanced economies, whilst the share going to capital, largely in the form of profits, has risen (Figure 9). More specifically, in the UK, wages as a proportion of GDP fell from a high of 64.5 percent in the mid-1970s to 53.2 percent in 2008. As with the rise in inequality between workers, this shift has meant a different distribution of the proceeds of growth, and therefore may help to explain the stalling living standards of ordinary employees.

Alongside this set of explanations, however, a second approach to explaining recent trends in US wage-performance has also risen to prominence. It acknowledges the importance of inequality and the distributions of growth's proceeds, but is driven by a different question,

**Figure 8: US rising returns to education**  
Wage differentials as a result of an additional year of high-school and college



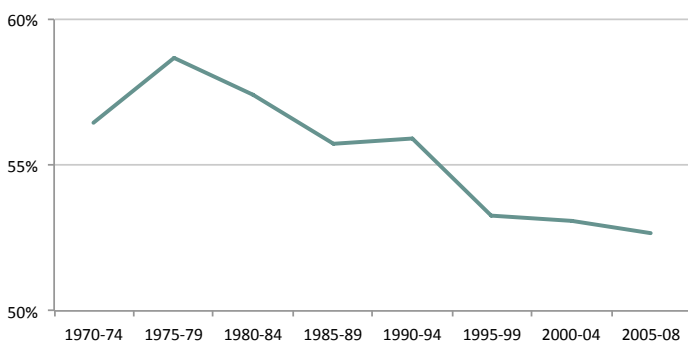
Source: Goldin and Katz, *The race between education and technology*, Harvard University Press (2009)

namely: what are the underlying dynamics that shape employment growth in today's advanced economies, and has anything about these dynamics changed over time?

Evidence suggests that in the last thirty years there has been a fundamental change in the way that new technological advances drive jobs-growth in advanced economies.<sup>47</sup> To understand why, we need to contrast today's modern labour markets with those of the post-war decades – a period widely credited with the creation of the modern 'middle-class'. In this earlier period, technology was a positive force in terms of its impact on the skill- and pay-profile of developed labour markets. New technologies, such as more mechanised manufacturing processes, may have displaced

unskilled jobs, but they also created new tiers of jobs higher up the skill-distribution, whether in skilled manufacturing or associated jobs in the services sector. As such, the overall effect of technology was to push the overall jobs market upwards.

**Figure 9: Labour's falling share of proceeds**  
Labour's share of national income, OECD average



Source: Resolution Foundation analysis, OECD structural analysis database

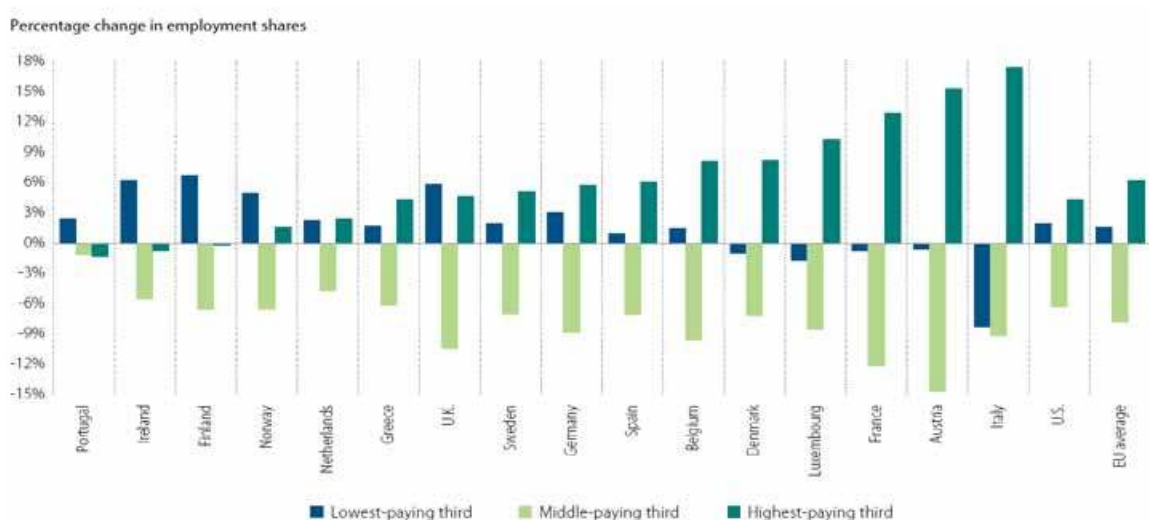
47. For the key papers on the topic see: David Autor, Goos and Manning.

The theory that came to describe this dynamic later became known as ‘Skills-biased Technological Change’ (SBTC). Put simply, it held that better technology meant better jobs, through a process of job-destruction at the bottom of the skill-distribution, and job-creation higher up. In the post-war decades when this theory seemed to match the evidence well, it also appeared to be bolstered by other pressures, in particular the globalisation of trade. In tradable sectors, the bottom-end of developed labour markets was meeting significant new sources of competition, and low-skilled manufacturing jobs were proving highly vulnerable. Again, unskilled jobs were displaced (this time, off-shored), and middle-skill jobs were relatively immune. The positive impacts of SBTC were thereby amplified.

For a time, SBTC became accepted orthodoxy as a way of explaining how new technologies drive jobs growth. More recently, though, the theory has become an increasingly poor description of advanced labour markets. Figure 10 describes that shift by showing the ‘shape’ of recent jobs growth in 16 European countries and the US. It splits the labour market into thirds, between the lowest paid, middle paid, and highest paid jobs at the start of the period. It then tracks the changing share of employment in each of these thirds over time. It shows that from 1993 to 2006 – a period of rapid technological advances – the middle third of jobs *lost* share in each of the world’s advanced economies. In most countries, both high and *low* paid jobs increased their share of employment.

**Figure 10: The shrinking middle in advanced labour markets**

Change in employment share by occupation in the US and 16 European countries  
Occupation grouped by wage tercile: Low, middle, high, 1993-2006



Source: The Polarisation of Job Opportunities in the US Labor Market, David Autor, MIT Department of Economics and National Bureau of Economic Research (2010)

These more recent trends run against what might be expected from the SBTC thesis – that employment growth should be higher the higher the job quality. Goos and Manning conducted early work to examine these trends in the UK context. Figure 11, a later update on Goos and Manning’s work by Mieske, looks at the shape of UK jobs growth from 1979 to 2008. It shows that, over the period, the employment share of high- and low-quality jobs (Goos and Manning define job-quality on the basis of wages in 1979) has held constant or risen, while jobs in the middle of the distribution have seen their share of overall employment fall. The theory that has arisen to explain this new phenomenon has become known as ‘labour market polarisation’.<sup>48</sup> It holds, in simple terms, that today’s technological advances appear to disproportionately displace jobs in the middle, leading advanced economies to polarise between ‘lousy’ and ‘lovely’ jobs.<sup>49</sup>

48. <http://www.nber.org/papers/w16138.pdf>

[http://cep.lse.ac.uk/textonly/\\_new/staff/vanreenen/pdf/eale8CompatibilityMode.pdf](http://cep.lse.ac.uk/textonly/_new/staff/vanreenen/pdf/eale8CompatibilityMode.pdf)

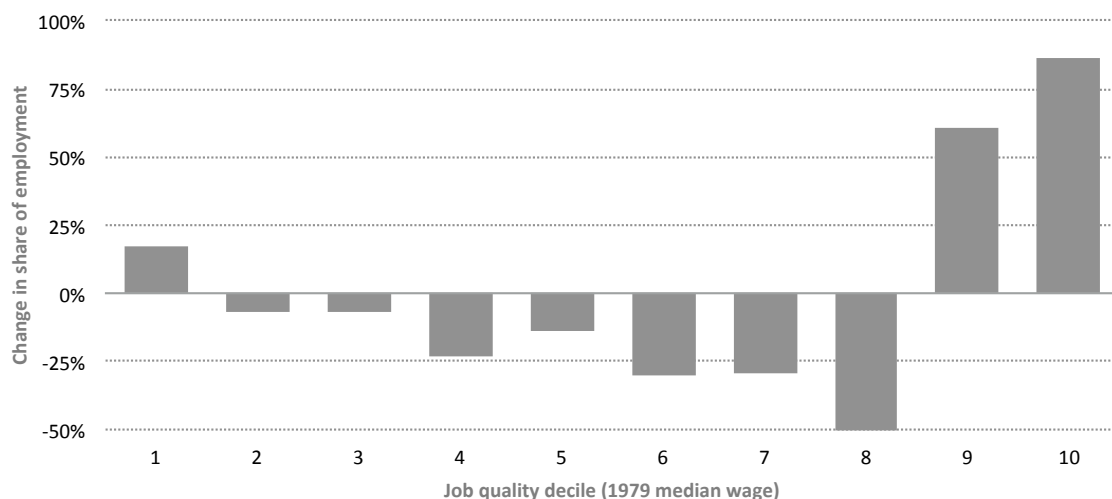
49. Goos (2007)



Why has this change taken place? Evidence suggests that the central assumption on which SBTC is based, namely that the most ‘routine’ jobs (those most easily displaced by new technologies) are at the bottom of the pay- and skill-distribution, is no longer true of advanced labour markets. On the contrary, in today’s leading economies, many of the lowest skilled jobs are highly *difficult* to automate, for example roles in personal service, such as cleaning and hospitality. In contrast with earlier periods, the most routine, ‘automatable’ jobs now appear to be clustered around the middle of the skill-distribution, in administrative white-collar work and skilled manufacturing. With high-skilled jobs, in knowledge-intensive industries, also proving relatively immune to automation, middle-skill jobs are the most exposed.

**Figure 11: The falling share of employment in middle-skill jobs in the UK**

Change in share of employment by quality of job, 1979-2008



Source and notes: Mieske, UCL (2009). Share changes are for the entire period. Job quality defined as median wage of job type in 1979.

Work by Michaels, Van Reenan and Machin has also shown that, in line with the central hypothesis of the polarisation theory, sectors in the UK that have seen the greatest increase in the use of technology have also seen the greatest reduction in the proportion of middle-skill jobs.<sup>50</sup> Evidence also suggests that other pressures are compounding this effect. In tradeable sectors, global competition is increasingly impacting on middle-skill jobs in IT and remote services. Here too, today’s low-skilled personal service jobs – unlike the low-skilled jobs of previous decades – are proving relatively immune, being largely concentrated in non-traded, personal service sectors.

This chapter has been able to provide only a high-level summary of complicated and technical debates. Even so, it should be clear that there is good reason to believe that a significant change is underway in advanced labour markets that may be fundamentally undermining the economic position of those on low-to-middle incomes. Moreover, this shift seems to be driven by fundamental characteristics of advanced economies, chief among them the nature of technological advances and their relationship to the sectoral breakdown of employment.

This discussion sets the context for the next section of this report, which turns to living standards in the UK, with a focus first on trends in *individual earnings* from employment, and then on *household incomes* and the changing relationship between people on low-to-middle incomes and the tax-benefit system.

50. Michaels et al (2010)



# Section 2

the UK picture – worrying signs for people on low-to-middle incomes

### 3. Individual earnings – the impact of trends in the UK jobs market

Over the long-term, wage-trends are more important to living standards than any other area covered in this report. Across the whole population, wages make up 96 percent of personal income; if wage growth had been slower by just 0.1 percentage points from 1977 to 2008, a median wage-worker would have lost out by £1,050 a year. An understanding of trends in pay must sit at the core of any understanding of living standards and household income. This chapter therefore focuses on trends in the distribution of wages in the UK – that is, pay before the intervention of the tax-benefit system. It looks in particular at changes in the real value of wages over time, and at changes in their distribution across the population.

It is important to note here that the Resolution Foundation’s standard definition of ‘low-to-middle *income* people’ is specifically *income*-based, and is calculated at the household level (see page 8 for a fuller explanation). 78 percent of the adults who live in low-to-middle *income* households themselves fall into *earnings* deciles 1 to 5. Conversely, more than half of the people in earnings deciles 1 to 5 live in low-to-middle income households. Therefore, although our concern is people in income deciles two to five, that translates, broadly speaking – though by no means exactly – into a particular concern with people in the bottom half of the *earnings* distribution. In this chapter we therefore focus on median earnings and below.

#### From growth to stagnation: the path of UK real wages

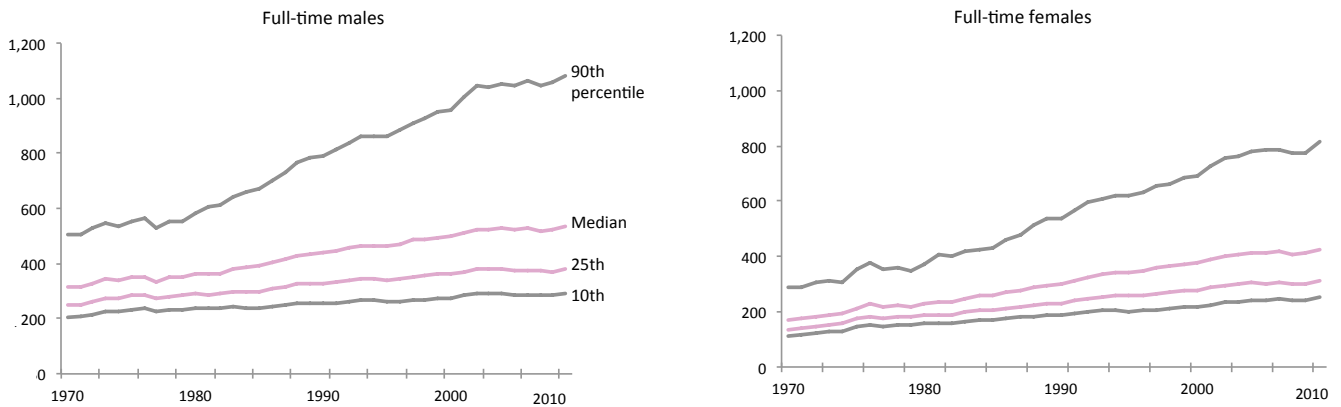
It is widely known that the 2008-09 recession has had a significant, negative impact on the real value of wages. But evidence of wage-trends over the longer term reveals that median wages in the UK had already stopped growing before the 2008-09 downturn was in sight. When long-term trends in wages are charted from 1970, three fairly distinct periods of wage growth emerge (Figure 12): a period of moderate growth for men and strong growth for women throughout the 1970s; a period of strong growth for most people (but fast-rising inequality) in the 1980s and 1990s; and a period of stagnation from 2003, beginning in a time of economic growth, and now set to continue as real wages fall in the aftermath of the 2008-09 recession, and recover only slowly to 2015.<sup>51</sup>

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51. Unless stated otherwise, wage-trends in this chapter are expressed in constant 2009 prices, controlled for RPI inflation.

**Figure 12: A shift from growth to stagnation in middle wages**

GB weekly earnings, full-time employees, constant 2009 prices, controlled for RPI inflation, £ per week



Source: Resolution Foundation analysis, ONS ASHE, indexed using RPI

The period from **1970 to 1977** saw moderate overall wage-growth for men and stronger growth for women, along with little, if any, increase in inequality. Males on middle earnings saw their real terms pay grow by 6.7 percent over the entire seven year period, an average increase of around £1,100, while females saw significant growth of 29 percent, or 3.7 percent per year, an increase in annual earnings of £2,500 a year over the period. (This was in part driven by improvements in the quality of jobs held by women over the period.) Overall, the period was also fairly benign in terms of inequality. As a result, although men on low and middle earnings did not see significant increases in the real value of their wages throughout the period, their standards of living did not change appreciably in relative terms compared to men above them. At the beginning of the period, the gap between median male earnings and male earnings at the 75<sup>th</sup> percentile was £4,380. At the end of the period, it was £4,460 – a rise of only 1.8%.

Wages then moved to a strong and sustained period of growth, and soaring inequality, from around **1977 to 2003**. The latter half of the period, from around 1983 onwards, saw both trends accelerate, particularly for female workers.<sup>52</sup> Over the entire period the earnings of people in the middle of the earnings distribution grew by a sustained 1.8 percent a year: pay at the middle grew by 57 percent in real terms – a rise of £9,960 in annual earnings. But wages grew even faster for those at the top. Earnings at the 90<sup>th</sup> percentile grew at 2.7 percent a year, a real-terms increase of £26,800. Those at the very top saw particularly strong growth. (Data on top earnings is limited, but analysis suggests that the share of national income going to the top 0.1 percent of the UK income distribution more than trebled between 1977 and 2003, from 1.3 percent to 4.4 percent.<sup>53</sup>) Meanwhile, wages for those at the bottom (at the 10<sup>th</sup> percentile), grew at just 1.0 percent – slower than in the previous period. As a result, whilst most of those in the bottom half of the earnings distribution saw their living standards grow significantly in an absolute sense, they fell behind those on higher earnings – while those at the middle pulled ahead of those lower down.

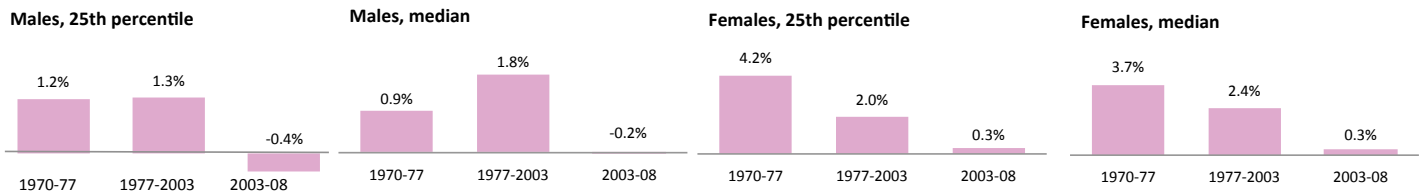
The period from **2003 onwards** has seen median wages stagnate, and then fall in the aftermath of the 2008-09 recession. From 2003 to 2008, median wages were stagnant. Despite growth in GDP of 11 percent over the period, median earnings fell by an annual average of 0.2% percent for men, and for women rose by 0.3 percent a year. Put simply, a middle earner in 2008 did not earn noticeably more than a middle earner in 2003. If earnings growth at the middle

52. The National Equality Panel has documented trends in equality in detail across sub-sections of the UK population.

53. Piketty and Saez, Database of top incomes (2006)

had instead continued at its 1977-2003 path, a person on median earnings would have entered 2008 being paid over £2,000 more a year. At the same time as this stalling of real wage growth, the picture of inequality became more mixed. At the 10<sup>th</sup> percentile, earnings fell, though only by a small degree, while earnings at the 90<sup>th</sup> percentile grew moderately, but still more strongly than those below them, at 0.7% percent. Those at the very top continued to see particularly strong growth.<sup>54</sup>

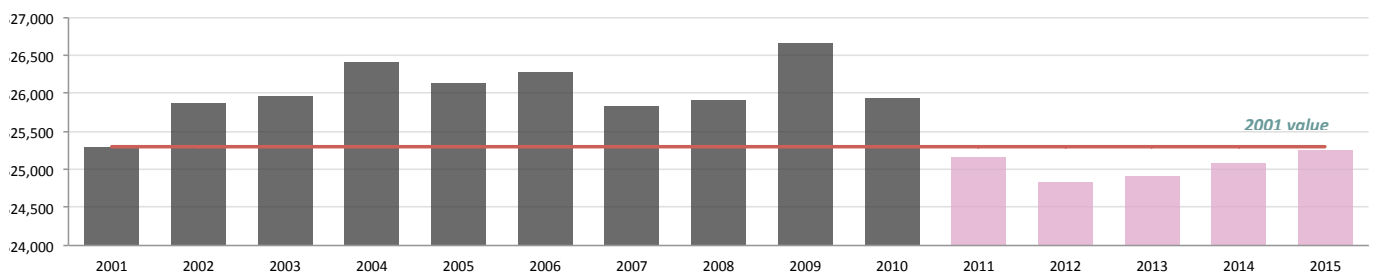
**Figure 13: The stagnation of wages in the bottom half**  
Annual average wage-growth controlled for RPI inflation, GB



Source: Resolution Foundation analysis, ONS ASHE and OBR projections

These trends bring us up to the onset of the 2008-09 recession. So what do we know about the prospects for wages in the coming years? On current government projections, real wages will dip significantly as the result of high inflation and anaemic wage growth through to 2013. Wages are set to recover only slowly through to 2015. Overall, on the basis of Office for Budget Responsibility projections, and as represented in Figure 14, median real wages are set to be lower in 2015 than they were in 2001. By that time, a thirty year period of steady growth in median wages will have been succeeded by almost 15 years of no growth.

**Figure 14: Median earnings – trends and forecasts**  
Gross annual earnings, controlled for RPI inflation, £ per year



Source: Resolution Foundation analysis, ONS ASHE and OBR projections; projections based on OBR figures for *average* earnings, as a proxy for medium wage growth.

Stepping back, we see the evolving fortunes of workers in the bottom half of the earnings distribution. In the past forty years, they have experienced first, a period of moderate and fairly equal wage growth; next, a long period of strong but highly unequal wage-growth; and, most recently, but beginning prior to the 2008-09, a long period of stagnation *and* rising inequality.

54. Hills et al (2010)

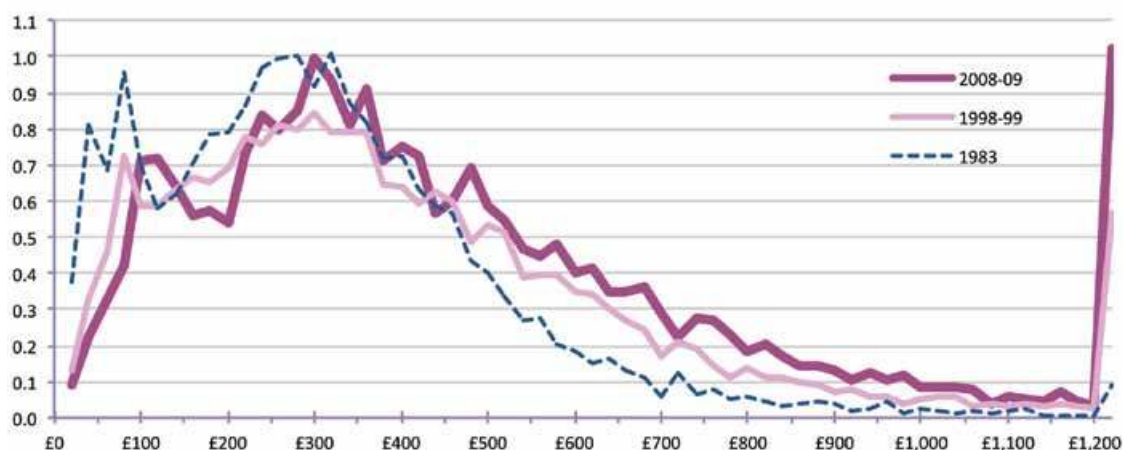
## Falling behind?

We are in the midst, then, of a long-term stagnation in the real value of wages for ordinary workers. What more can we say about the *relative* changes in position experienced by people in the bottom half of the earnings distribution in the last three decades? For some, that question is of limited importance, but others would contend that, even if we believe people's aspirations stay the same over time – from the hope of achieving a comfortable life, to the aim of financial security – the goods required to achieve these states will vary with context, as social standards change.<sup>55</sup> It is important that we understand the story of relative earnings performance if we're to have a full and informed discussion about living standards.

Figure 15 tells the story of relative earnings growth in richer detail. It shows the changing shape of the distribution of UK earnings from 1983 to 2008, and reveals two important shifts in the way in which wages are distributed in the economy. First, as discussed above, earnings have risen at all levels of the distribution (after controlling for inflation), as represented by the rightward shift in the graph. In 2006, a person on median wages was paid the same, in real terms, as someone at the 70<sup>th</sup> percentile of pay in 1983. There has been a particularly stark reduction in the numbers of people on very low pay (due in part to the introduction in 2000 of the National Minimum Wage), though data quality is poor at particularly low earnings. Meanwhile, the numbers of people on higher levels of pay has risen dramatically.

### Figure 15: The changing distribution of UK earnings

Millions of individuals at levels of £ per week earnings, constant 2008-09 prices



Source: Resolution Foundation analysis, Family Resources Survey and Family Expenditure Survey

The second shift that can be seen in Figure 15 is an increase in the range of pay, as represented by the broadening out of the 'hump' of earnings over time. In simple terms, people's wages have become more spread out. Earnings growth at the top has outpaced earnings growth lower down. In 1983, around 94,000 people earned over £1,100 a week in 2008-09 prices. In 2008-09, that figure had risen to over 1 million (as represented by the upward spike at the far right hand side of Figure 15). Wages are now distributed over a wider area.

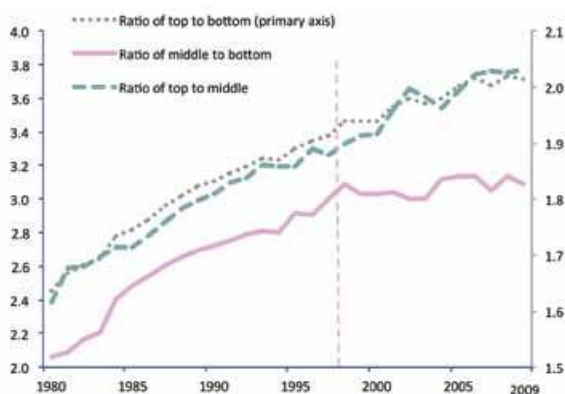
In 1983, a large proportion of people were grouped quite narrowly around what might be considered low and middle pay. 45 percent of people, for example, earned between £200 and £400 a week in (2008-09 prices). Quite small gaps existed between people on very different percentiles of the earnings distribution: a move from the 50<sup>th</sup> to the 75<sup>th</sup> percentile, for example, required an increase in take-home pay of around £120 a week (in 2008-09 values).

55. See, for example, Frank (2010) on the importance of relative positions.

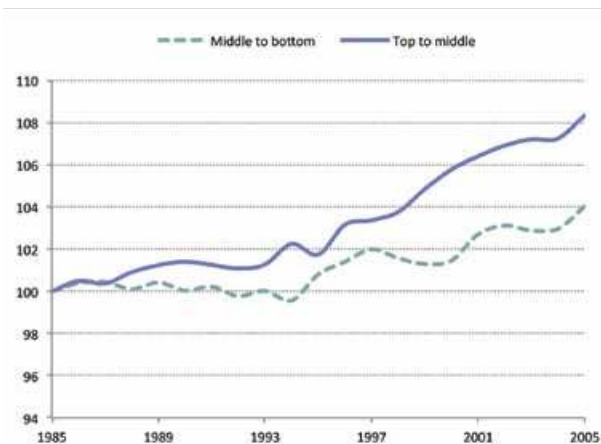
Over time, as the earnings distribution stretched out across a wider area, these gaps have grown. In 2008-09, the same move – from what might be called ‘middle’ wages (at the 50<sup>th</sup> percentile) to ‘comfortable’ wages (at the 75<sup>th</sup>) – required twice as big a pay rise, of around £240 a week.

The story of growing wage-inequality that underlies these changes in the earnings distribution is now broadly familiar. Less familiar is the story of the changing shape of inequality itself. During the major rises in inequality throughout the 1980s and early 1990s, inequality grew across the earnings distribution in the form of a ‘fanning out’ of wages at all levels. That can be seen in Figure 16, in which the ratio of earnings between the top and middle expands broadly in step with the ratio of wages between the middle and the bottom.<sup>56</sup> By contrast, since the mid-1990s, as growth in overall inequality began to slow, trends in inequality split in two. Whilst the ratio of top to middle earnings continued to grow, the ratio of middle to bottom earnings flattened out. What had formerly been a ‘fanning out’ of all wages became better characterised as a ‘detachment’ of the top from the rest. This trend has also played out in the US<sup>57</sup> and across the OECD more broadly (though it is important to note that Figure 17 focuses on *income* rather than earnings, due to data limitations).<sup>58</sup>

**Figure 16: Trends in UK inequality**  
UK earnings inequality ratios among full-time males



**Figure 17: Trends in OECD inequality**  
Index of 50:10 and 90:50 income ratios



Source: Resolution Foundation analysis, ONS ASHE and OECD Stat data.

If we believe that perceptions of a ‘comfortable life’ are to any degree relative – that is, are dependent to a significant degree on the society in which we live – then these trends in inequality are likely to have a significant effect on the self-perceived living standards of people in the lower half of the wage-distribution – and particularly on those towards the upper end of the bottom half. Figure 18 crystallises this point by looking at the real value of wages of people at the 25<sup>th</sup>, 50<sup>th</sup> and 90<sup>th</sup> percentiles in three years: 1980, 1995 and 2010. It shows that the ‘upper bottom half’ of the earnings distribution (the gap between the 25<sup>th</sup> and 50<sup>th</sup> percentiles) itself spread out quite significantly between 1980 and 1995.

56. Changing patterns of inequality over time, in particular between different social groups, has been documented in significant detail by the National Equality Panel. See *An Anatomy of Economic Inequality in the UK, 2010*

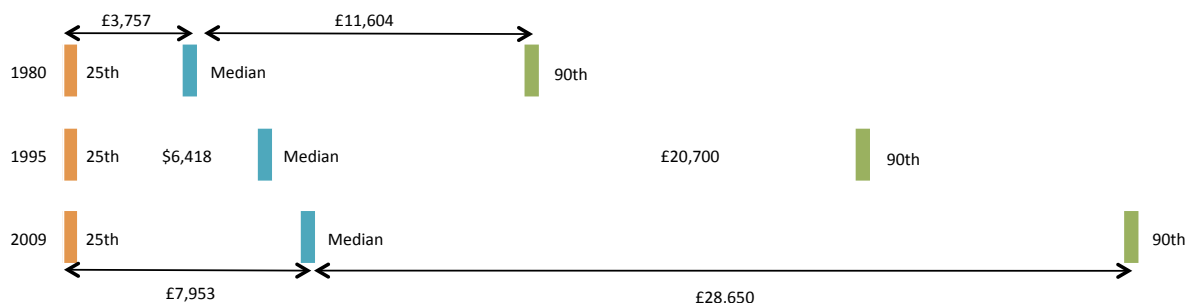
57. *The shrinking middle*, Guy Michaels, Centrepiece (2010)

58. It is worth noting the conclusion of Atkinson, Piketty and Saez (2011) that, although capital incomes are concentrated among those at the top end of the income distribution, it is principally an increase in top-end wages that drove inequality in the latter part of the 20th century, with capital incomes playing a less important role in top incomes over time, and wages a more important role.



However, from 1995 to 2009, the group began to coalesce, expanding much more slowly. By contrast, the gap between this '25-50' group and the affluent, defined here as those at the 90<sup>th</sup> percentile of pay, continued to grow quickly in this latter period. In a sense, at the same time as those in the middle are coalescing as a group with those below them, they are also seeing an aspirational group – with what might be described as a very comfortable life – move further away in absolute terms.

**Figure 18: The top leaving the rest behind**  
Gap in annual earnings, constant 2009 prices, GB



Source: Resolution Foundation analysis ONS ASHE data

### Earnings mobility

Of course, these changes in the earnings distribution also have important implications for earnings mobility. As Professor John Hills, Chair of the National Equality Panel has said, “moving up a ladder is harder if its rungs are further apart”.<sup>59</sup> It is important to remember that people on low-to-middle income are a dynamic group, with many people entering and leaving over time. Even in a context of rising absolute mobility, changes in *relative* earnings mobility – the extent to which people move around within the earnings distribution – can also have a profound effect on the experience of living at different parts of the wage-distribution.

The Resolution Foundation has analysed recent trends in earnings mobility, with a focus specifically on *intra*-generational mobility – that is, the extent to which people can move up the earnings distributions within their own lifetimes.<sup>60</sup> The work finds that the chance of making a significant move up or down the earnings ladder remained low in the 1990s and 2000s for those in their thirties and early forties, but did improve significantly in the latter period. Specifically, the analysis revealed a 22 percent increase in the probability of moving significantly up the earnings distribution in the 2000s compared to the 1990s.

To some degree, the trends in mobility captured by this work echo the shift in inequality outlined above. As Figure 19 shows, *intra*-generational mobility is not evenly distributed across the earnings spectrum, but is concentrated among those on and around middle wages. The highest earners in the 2000s continued to be largely sheltered from downward mobility, and those at the bottom remained far less likely to move up a substantial distance than those in the middle. Further work is now being carried out on the causes of these trends, and will be published later in the year.

59. An Anatomy of Economic Inequality in the UK, 2010

60. Savage (2011)

**Figure 19: UK earnings mobility remains low but has improved**

Proportion who moved (up or down) earnings quintile over the course of each decade



Source: Resolution Foundation analysis, the National Childhood Development Survey and the British Cohort Study

## Conclusion

The pattern of UK earnings described in this chapter is worrying for people on low-to-middle incomes, 78 percent of whom fall into the bottom half of the earnings distribution. It is particularly concerning in light of the broader international trends outlined in Chapter 2. In reality, the link from underlying international dynamics to UK wage trends will not be straightforward. Take the example of the ‘polarising’ jobs market: evidence suggests that middle-skill jobs began to decline as a share of UK employment as far back as the late 1970s, yet this chapter has shown that median *wages* only began to perform poorly in the UK much more recently, from around 2003.

An unsophisticated account that drew a direct line of causation between these trends would miss important parts of the picture. For example, in order to understand the impact on wages of changing demand for workers, we need to understand how the supply of workers at different skill-levels has changed over time. In the US, a slowdown in the supply of skilled-workers, when coupled with soaring demand for high-skilled labour, is believed to have been a key driver of rising wage-inequality in recent years, by increasing the returns to top-level skills. In the UK we need to understand these dynamics in more detail.

That will also mean capturing the significance of other variables such as immigration. Evidence suggests that, in recent years, immigration has had little impact on wages at the middle of the distribution.<sup>61</sup> However, other studies do suggest that there may be measurable negative impacts at the lower end of the wage distribution.<sup>62</sup> Dustmann et al (2008), for example, find that a 1 percent increase in the share of migrants in the UK-born working age population has a negative impact of 0.6 percent on the wages of the 5 percent of lowest paid workers. Future work will look at these impacts, and their implications for living standards, in more detail.

61. Specifically, Dustmann, Frattini and Preston (2008) found that in the period 1997 to 2005, an increase in the number of migrants of one percent of the UK-born working-age population led to an *increase* in average wages of 0.2 to 0.3 percent. By contrast, Reed and Latorre (2009) found, using data from 2000 to 2007, that a one percentage point increase in the share of migrants in the UK’s working-age population had a negative effect on the average wage of 0.3 percent.

62. Dustmann et al (2008). Nickell and Salaheen 2008 found similar effects. Manacorda, Manning and Wadsworth (2007) also conclude, using data from 1975 to 2005, that existing migrants are hit harder by such negative wage impacts than non-migrant UK residents.

The trends in individual earnings outlined in this chapter tell us a lot about how people are faring in our economy. But to understand their effects on living standards, it is important to switch to a focus on household incomes. By switching to the household level, we can take account not only of the way in which people share their earnings across a household, but also of the way in which changing working patterns, such as a move to dual-earning, are affecting household-level resources. And by focusing on income, rather than earnings, we can understand how the changes in the tax-benefit system have affected the amount of money people take home. The next chapter turns to these questions.

## 4. Household incomes – long-term trends in the tax-benefit position of low-to-middle income households

Recent debates about people living on low-to-middle incomes have been confused by the failure to make two important distinctions: the distribution between individuals and households, and the distinction between earnings (that is, wages, or money earned from employment) and incomes (the money people bring home after the effect of taxes and benefits).<sup>63</sup> This chapter starts by setting these out clearly.

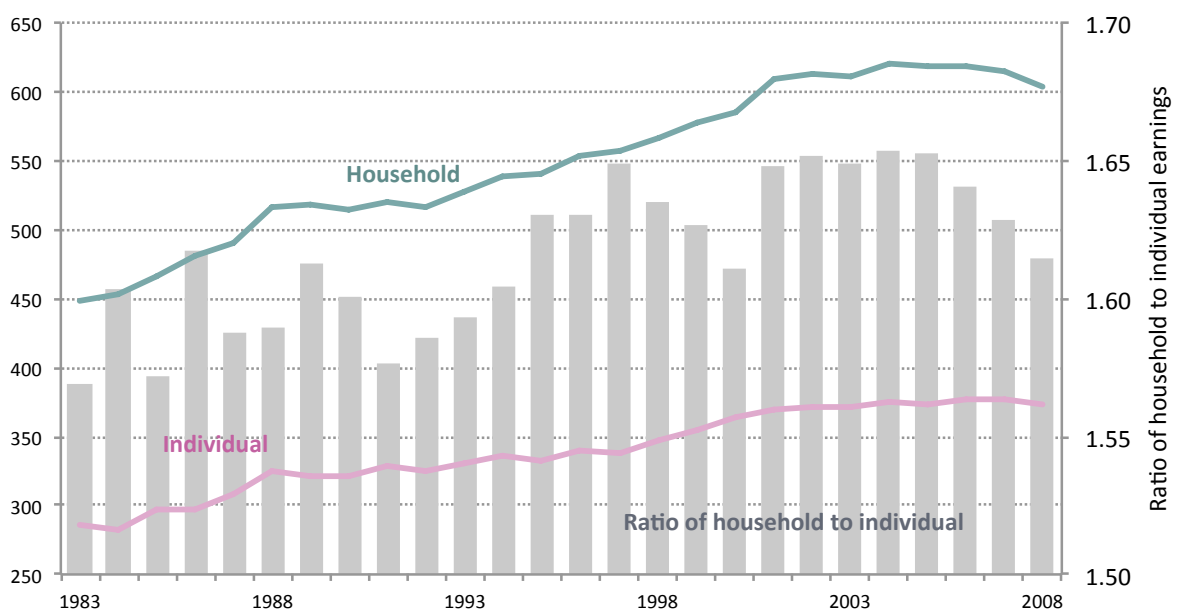
### From individual to household earnings

Figure 20 shows how the relationship between individual earnings and household earnings has played out over the long-term. Because on average households have more than one individual in work, household earnings are consistently and significantly higher than individual earnings. And because household size and working patterns are not constant, the gap between household earnings and individual earnings changes over time. This relationship is one of the most critical aspects of living standards, because it helps us to understand the extent to which living standards have been driven by better pay, or by changing working patterns at the household level.

The grey bars in Figure 20 represent the ratio of household earnings to individual earnings. Over time, the ratio has grown, driven by an increase in the number of people working per household. Underlying this trend is the rise of women’s participation in the labour market, which is discussed in more detail in Chapter 7. Dual-earning has become more common. Had it not done so, living standards would have been markedly lower today than they are.

**Figure 20: Trends in individual and household earnings**

Real gross weekly median individual and household earnings, £ per week, UK



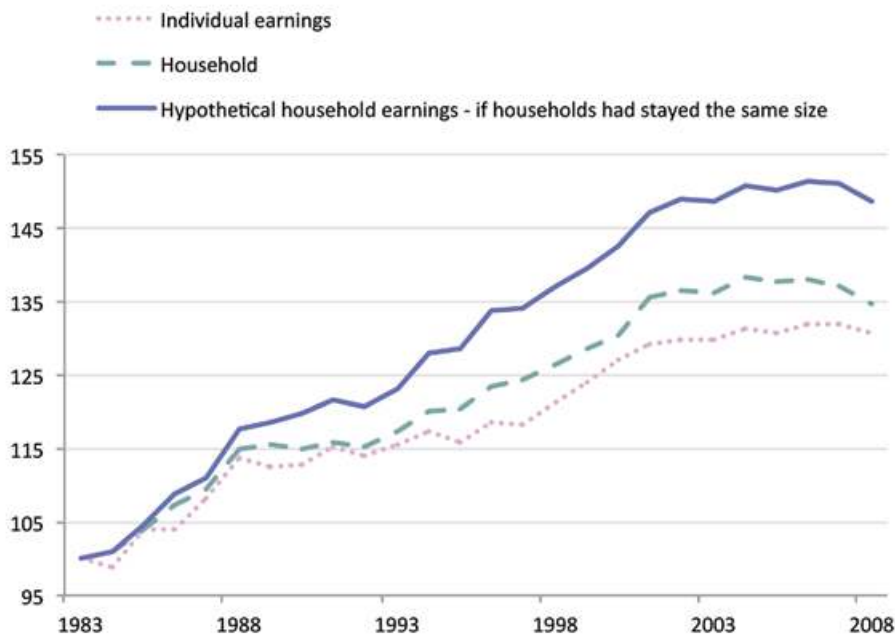
Source: Resolution Foundation analysis, Family Resources Survey and Family Expenditure Survey

In fact, the extent to which new working patterns have driven rises in living standards is underplayed in Figure 20 because household size has actually fallen over time. Figure 21 makes this point clearly. It plots individual earnings against household earnings in the form

63. This discussion does not include unearned income, for example savings, which represents a relatively small proportion of the overall income of low-to-middle income households, and will be looked at in more detail in later work.

of an index, in which values in 1983 = 100, and also shows indicatively the trend in household earnings that *would have taken place had households remained at their average size in 1983*. The pattern is significantly higher than that of individual earnings.

**Figure 21: Individual- and household-level earnings growth**  
Index, 1983 = 100



Source: Resolution Foundation analysis, Family Resources Survey and Family Expenditure Survey

Despite the importance of these new working patterns for living standards, there is currently little understanding of how they have played out in recent decades, and are likely to continue to do so in coming years. Chapter 7 looks in more detail at how new working patterns are changing the kind of support that households depend on to maintain or raise their living standards. The Commission on Living Standards will be looking at this question in further detail.

### From household earnings to post-tax household income

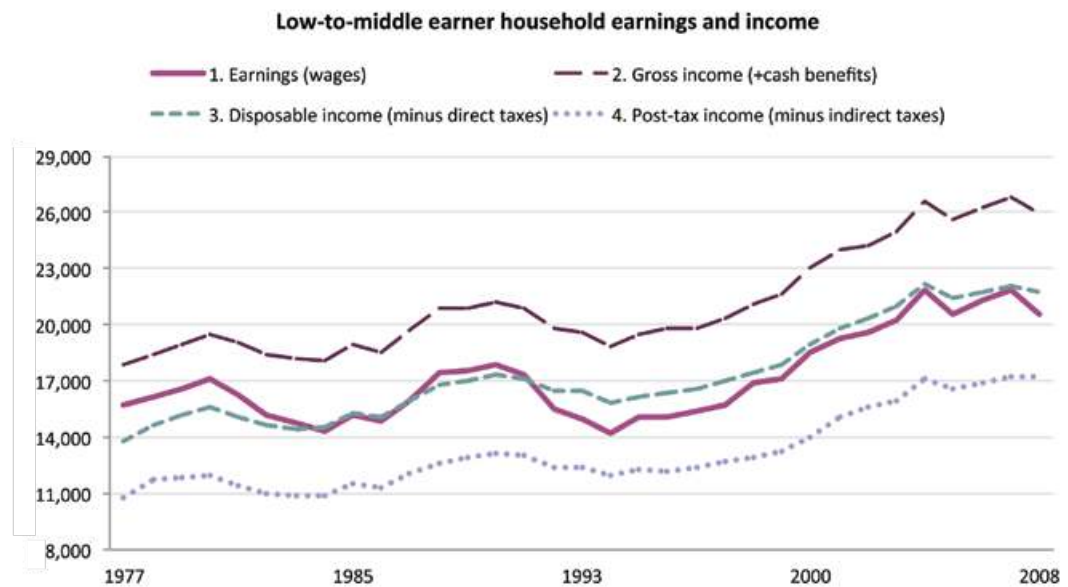
A second important distinction – that between ‘earnings’ and ‘income’ – is drawn out by Figure 22. It focuses specifically on low-to-middle income households and plots four variables over time which capture four ‘stages’ of household income, representing the impact of different parts of the tax-benefit system. We discuss the significance of these trends for households in more detail later in the chapter – the intention here is simply to set out the headline relationships.

The solid line shows trends in earnings, or wages, before any impact from the tax-benefit system<sup>64</sup>; the long-dashed line (the highest on the chart) adds on cash-benefits (including tax credits) to give a measure of gross income; the short-dashed line subtracts direct taxes (income tax and National Insurance) to give a measure of the disposable income that low-to-middle income households have available to spend; finally, the dotted line (the lowest on the chart) subtracts indirect taxes (VAT and duties) to give a measure of post-tax income.

64. Data is used as a proxy and includes other elements of original income, such as investment income, which are negligible in this portion of the income distribution.

**Figure 22: Trends in the stages of household earnings and income for low-to-middle income households**

Annual earnings and gross, disposable and post-tax income



Source: Resolution Foundation analysis, ONS, The distribution of household income

Two lessons are worth noting here. First, there is a significant difference between earnings and income, with the impact of the tax-benefit system being significantly net negative for low-to-middle income households (as would be expected of such a large group).<sup>65</sup> Second, the impact of the tax-benefit system varies quite significantly over time. For example, the gap that can be seen opening up as disposable income moved above earnings from 1991 to 1993 (driven by falling direct tax payments and rising cash benefits in the aftermath of the recession), was worth around £1,700 a year to the average low-to-middle income household, or 11 percent of disposable income. It is also important to note that the relative position of different households in the group – and changes in that position over time – will vary dramatically depending on household composition, due in part to the fact that many benefits are targeted at households containing children.

It is worth noting briefly that the trends outlined in Chapter 3 in relation to real wages are mirrored in trends in these post-tax measures of income. Analysis of ONS data, for example, reveals that disposable incomes were falling in every English region outside London for the period in which wages stagnated from 2003 to 2008 (Figure 23). This is a startling fact in light of the aggregate performance of the UK economy at this time.

**Figure 23: Declining disposable incomes in all English regions outside London, 2003-08**

Growth in real gross disposable household income per head, controlled for RPI



Source: Resolution Foundation analysis, Office for National Statistics, Regional gross disposable household income

65. This excludes 'benefits-in-kind', which capture spend on public services, and are discussed later in the chapter.

## The changing net impact of the tax-benefit system on low-to-middle income households

The net-position of households vis-a-vis the tax-benefit system, then, is a critical determinant of living standards. So how has the impact of the system changed over time? Today's tax system in the UK is almost unrecognisable from the system of thirty years ago.<sup>66</sup> Figure 24 shows how the overall impact of recent changes have altered the low-to-middle income group's share of national income.<sup>67</sup> It shows that, in 1977, households in this income group received 29.5 per cent of all original income. By 2008/09, their share had fallen to 21.5 – a fall of eight percentage points. Over the same period, the group's share of post-tax income, including cash benefits, fell, but less steeply – by 5.3 percentage points from 30.5 percent to 25.2 percent.

This rising gap between people on low-to-middle income's share of *original* income, and the group's share of *post-tax* income, is accounted for by greater redistribution. As represented by the bars in Figure 24, the gap between the group's shares of pre- and post-tax income was very small in 1977, at just 1.0 percentage point. In other words, government action in the form of taxes and benefits had a very small net positive effect on the share of income going to this group. The gap between the two measures grew particularly quickly during the recessions of the early 1980s and early 1990s, as unemployment grew in this portion of the income distribution and, with it, the amount claimed in out-of-work benefits. The gap between the group's share of original income and post-tax income fell from a peak of 3.8 percentage points in 1993/94 to a low of 2.5 percentage points in 2000-01.

However, in the period from 2000-01 to 2008-09 – a period of strong growth and low unemployment – the gap grew again, rising to 3.7 percent, near to its previous recession high. Unlike in the previous period, though this growth in spend appears to have been driven not by rising unemployment, but by a strategic decision from government to introduce a system of tax credits to supplement the incomes of households on relatively low incomes.

**Figure 24: The share of the pie going to low-to-middle income households**  
Percentage of national original and post-tax income



Source: RF analysis of ONS, The effects of taxes and benefits on household income, 2008/09

66. Among many other changes, since 1979, the basic rate of income tax has fallen from 33 percent to 20 percent; the top rate has fallen from 83 percent to 40 percent; the rate of employee National Insurance Contributions has risen from 6.5 percent to 12 percent; the standard rate of VAT has risen from 8 percent to 20 percent; 'domestic rates' have been reformed into Council Tax; the married couples allowance has been abolished; and a system of tax credits, worth around £30 billion per year, has been created. For a summary of these various changes see Adam and Browne, A survey of the UK tax system, IFS briefing note 9. (2009).

67. Due to data limitations, low-to-middle income people are defined here as those in deciles 2 to 5.

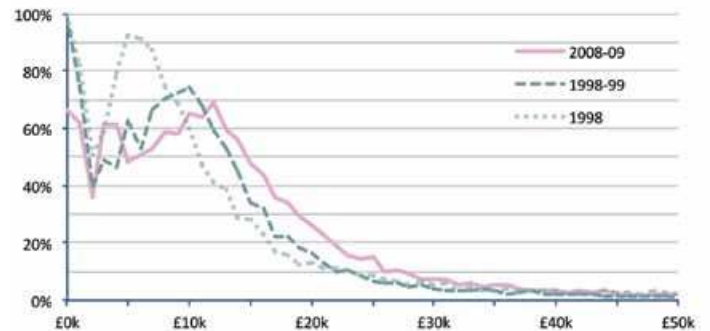


In this respect, the development of tax credits represented a profound shift in government tax-benefit strategy. The system has significantly increased household incomes for people on low-to-middle incomes both by doing more to redistribute the proceeds of growth, by incentivising work and providing support for work-related costs like childcare. However, as an obvious corollary of topping up wages, tax credits have also led to more people being dependent on the state for more of their income than would otherwise have been the case.

Figure 25 looks in more detail at the evidence for the way in which government income support has changed over time. It highlights changes over the last 20 years in the *distribution* of average levels of state support for households at different levels of income. It uses large-scale sample data to record the proportion of income that households received from benefits and tax credits in three years: 1988, 1998-99 and 2008-09. Household incomes are inflation adjusted, so differences in the shapes of the distributions are due to differences in the design of the welfare system, and to changes in the relationship between earnings and tax- and benefit-thresholds.

**Figure 25: More support from government?**

Proportion of income derived from benefits and tax credits for households at different levels of annual income

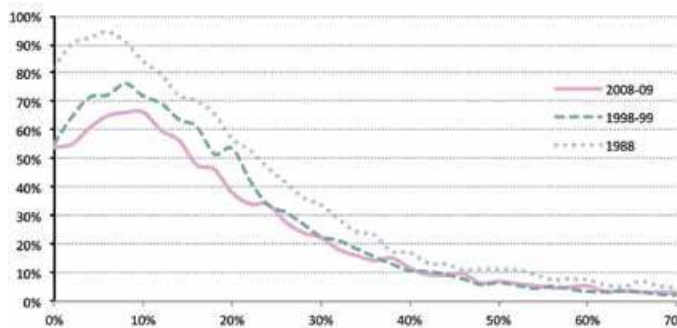


Source and notes: RF analysis of DWP, Family Resources Survey and Family Expenditure Survey. Based on an equivalised annual income distribution, constant 2008-09 prices.

As might be expected of a system that is now providing more support to those on higher incomes, Figure 25 shows a rightwards shift over time. At modest and middle ‘£’ incomes, households are now receiving a higher proportion of their income from the state. The shift can be seen most dramatically for those with incomes from around £10k to around £30k, broadly speaking the group that is targeted by the tax credit system. The chart seems to imply that the welfare system is becoming more majoritarian over time, with a shift away from the use of state income supports as an insurance mechanism for the poor when times get tough, to one in which government plays a larger role in raising the living standards of those on low-to-middle incomes, even in good times.<sup>68</sup>

**Figure 26: Less support at each position on the income distribution**

Proportion of income derived from benefits and tax credits for people at different points in the income distribution



Source and notes: RF analysis of DWP, Family Resources Survey and Family Expenditure Survey. Based on an equivalised annual income distribution, constant 2008-09 prices.

Figure 26, however, looks at this same data from another angle. Rather than asking how much state support goes to households on different annual incomes (ie defined in £s), it looks at changes in the proportion of income received from the state by households *at different points of the income distribution*. It shows that, in most parts of the income distribution, the proportion of household income coming from the state has actually *fallen* over time. For example, a household at the 20th percentile of the income distribution now receives a lower proportion of their income from government than they used to.

68. See Chapter 6 for a fuller discussion of the increasing support needs that arise from modern working practices.



This makes sense when we consider that government income supports (benefits and tax credits) generally grow more slowly than earnings. As a result, the proportion of household income that households receive from government (rather than from wages) will, ordinarily, decline over time. This chart still shows the impact of the tax credit system: above the 25th percentile of income state support did not fall as a proportion of income in the period from 1998-99 to 2008-09. In this decade, rising government support appears to have broadly maintained their share of household income. This income group, in this period, is the exception to the general rule that people at any position on the income spectrum now earn a higher percentage of their income themselves.<sup>69</sup>

### Increased support, increased effective tax rates?

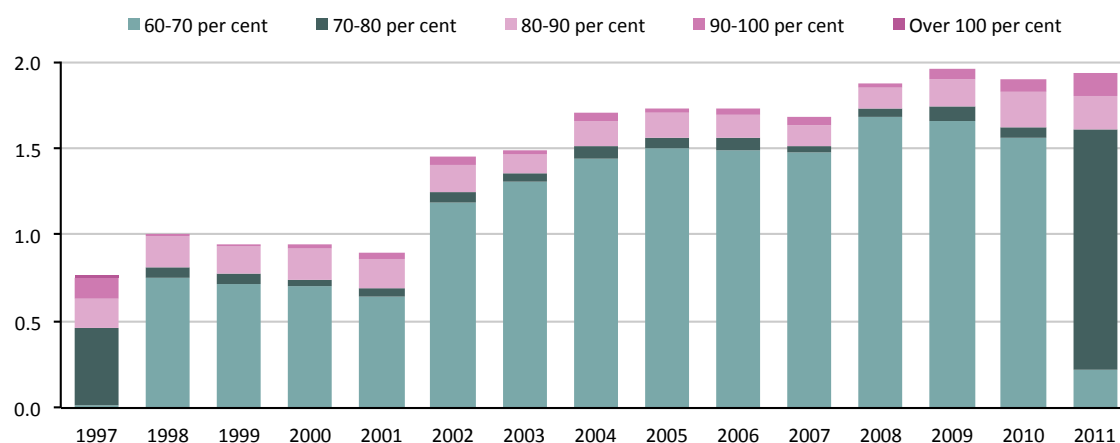
As a result of changes in the level of support provided by government, many people on low-to-middle incomes have seen their living standards rise more quickly than they would have done on the basis of the earnings trends outlined in Chapter 3. One consequence of this greater provision of support through means-tested benefits is that households are exposed to higher marginal deduction rates (MDRs). That is, an additional £1 of earnings results in a smaller increase in net income, because taxes and benefits are taken away as earnings rise. For example, a MDR of 70 percent means that, for every additional pound earned through employment, 70 pence goes to government in the form of taxes and withdrawn benefits.

Figure 27 shows how the number of working heads of households falling within different bands of MDR has changed since 1997-98. While there has been a reduction in the numbers facing exceptionally high MDRs over most of the period, there has also been a significant increase in the proportion of the overall population facing MDRs in excess of 60 per cent. In 1997-98, 0.8 million workers received less than 40p of every additional £1 they earned. By 2010-11, that figure had risen to 1.9 million. In 2011-12, the number of people taking home less than 30p of every additional pound they earn is set to rise from 0.3 million to 1.7 million. Although this data does not reveal the distributional spread of this impact, it is likely that a significant proportion of the group now facing higher MDRs are those on low-to-middle incomes in receipt of tax credits. For many of these households, not attuned to being subject to high marginal rates in the manner of top-earners, and not part of the small but fairly consistent group of the very poorest who have long been the victims of very high overall marginal tax rates, these withdrawal rates are likely to be a new experience.<sup>70</sup>

69. At first, these charts may appear to be inconsistent with one another, but they make sense when we consider that wage-growth ordinarily outpaces inflation. As a result, a household living on an annual income of £20k today (in 2008-09 figures) will be at a lower position in the income distribution than a household living on £20k (in 2008-09 figures) in 1988. Because the overall income distribution has shifted upwards a household on £20k today is relatively poorer than a household on £20k in 1988, and this fact is reflected in the support they receive from government. Although state support has become more generous over time relative to inflation (having risen for households on constant inflation-adjusted incomes), support has not kept pace with rising wages, having fallen for people at constant positions of the income distribution.

70. While comparable figures for earlier periods are not readily available, analysis conducted by Mike Brewer for the Joseph Rowntree Foundation suggests that tax and benefit changes in the last 30 years have tended to increase marginal deduction rates: in 1979, 80 per cent of the population faced an MDR between 29 per cent and 37 per cent, by 2005/06 the range had spread to between 23 per cent and 68 per cent. In simple terms, more support has helped raise incomes, but has also made the climb to still-higher incomes steeper. See Adam, Brewer & Shephard, JRF, *The poverty trade off: Work incentives and income redistribution in Britain*, 2006

**Figure 27: Numbers of families facing different marginal deduction rates**  
 Marginal deduction rates faced by working heads of families (millions of families)



Source and notes: Marginal deduction rates are for working heads of families in receipt of income-related benefits or tax credits where at least one person works 16 hours or more a week and the head of the family is not receiving pensioner or disability premia; HM Treasury, Budget documents.

### The importance of benefits-in-kind

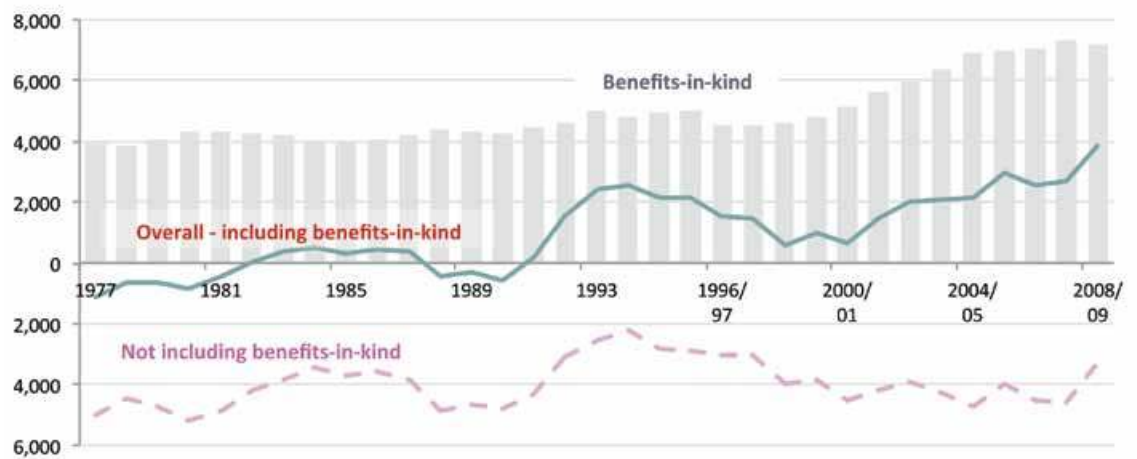
The above analysis misses one important aspect of government support: spend on public services. This is a vital part of the living standards picture, not least because of dramatic shifts in spend in recent years.<sup>71</sup> The amount of government support going to people on low-to-middle incomes in the form of ‘benefits-in-kind’ was relatively flat from the late 1970s to the late 1980s. The average amount received in benefits-in-kind by a low-to-middle income household rose by just £400 between 1977 and 1990, from £3,900 to £4,300. Spend began to increase moderately in the early 1990s before falling off again, but then increased significantly from around 1998-99, as a result of a decision by government to invest heavily in public services. The average value of benefits-in-kind received by a low-to-middle income household rose by nearly 60 percent in real terms from 1998/99 to 2007/08, from £4,600 to £7,300.

This increase had a significant effect on the overall net ‘tax-benefit balance’ of low-to-middle income households, inclusive of benefits-in-kind. As shown in Figure 28 (and as was implied in Figure 22), the average tax-benefit balance for people on low-to-middle incomes not including benefits-in-kind is quite strongly negative and actually fell from 1993 to 2008-09 to -£3,300 (as represented by the dashed line in Figure 28). As the solid line shows, though, once benefits-in-kind are included, the average net tax-benefit position of a low-to-middle income household is strongly positive and increased dramatically from +£600 in 2000-01 to +£3,900 in 2008-09, up from -£1,100 in 1977. As the gap between the two lines in Figure 28 shows (represented by the grey bars), increased spend on public services explains almost all of the improvement in the group’s net tax-benefit position in recent years.

71. Chapter 6 looks in more detail at the particular value of ‘new frontier’ public services, such as childcare, to modern working patterns.

**Figure 28: The impact of benefits-in-kind on the net tax-benefit position of low-to-middle income households**

£ per year, constant 2008-09 prices



Source: RF analysis of ONS, The effects of taxes and benefits on household income, 2008/09

This chapter has surveyed the extent to which the tax-benefit system has amplified or moderated the impact of trends in earnings outlined in Chapter 3, and has discussed some of the key complications that arise from government’s changing relationship with people on low-to-middle incomes. This provides a fuller picture of trends in living standards, but not a complete one. That’s because even after *incomes* are accounted for, other trends can transform the character of life on low-to-middle income. The next section looks beyond the fundamentals of earnings and income to examine three particularly relevant trends: the changing profile of household living costs; new pressures from assets and debt; and new pressures arising from modern working patterns.



# Section 3

a new kind of life for those  
on low-to-middle income?

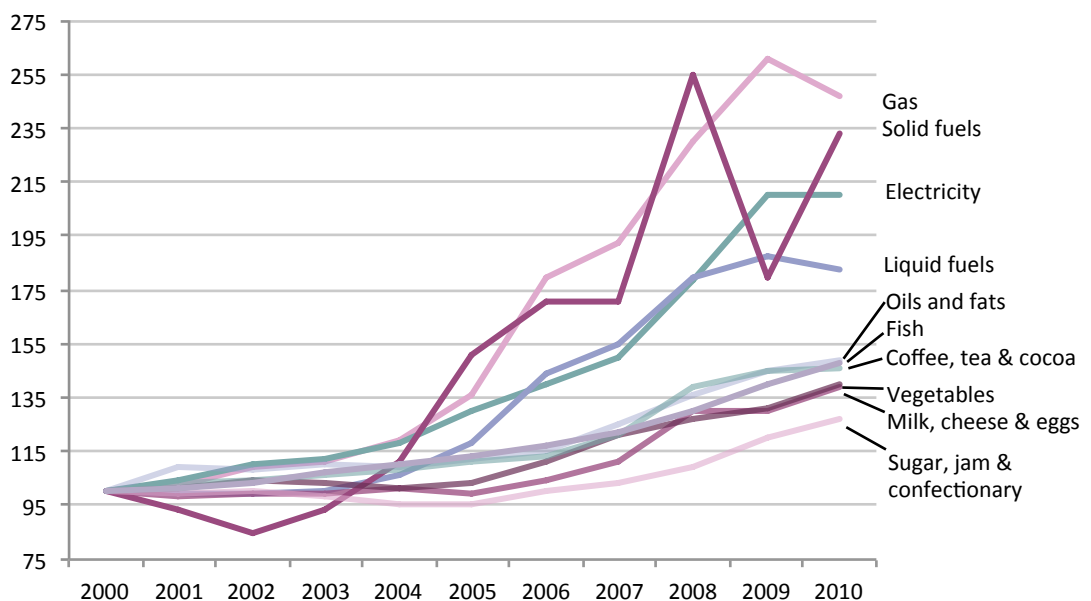
## Chapter 5 – New pressures from inflation and a different profile of living costs

After a long period of low inflation in the UK, rising prices are once again in the news. Consumer Prices Index (CPI) and Retail Prices Index (RPI) stood at 4.5 percent and 5.2 percent respectively in April 2011, high by the standards of the last twenty years. Worryingly, the drivers of these recent price spikes appear, to a large degree, to be global. The impacts of this development on living standards are highly significant and more complicated than they at first appear.

At a basic level inflation erodes the value of wages and incomes. In this sense, the weak performance of earnings and income outlined in Chapters 3 and 4 is as much a feature of the inflation environment as it is of the nominal value of wages or tax-thresholds and benefits. By controlling for headline rates of inflation, those discussions took into account the *overall* corrosive effect of rising prices.

Looking forwards, a return to persistently higher inflation – if not coupled with higher wage-growth, itself a nightmare scenario for the Bank of England – will worsen the prospects for living standards. In fact, from the perspective of households, price-changes can be an even more salient reminder of poor performance in living standards than poor nominal wage performance. Shopping for food and fuel in recent years, households would be forgiven for thinking that inflation was much higher than headline figures suggest. As Figure 28 shows starkly, some prices have soared far above the level of headline inflation since 2004.

**Figure 29: Top ten subcategories of CPI inflation since 2005**  
Index, 2000 = 100



Source: ONS category-level inflation (at the level of D7D)

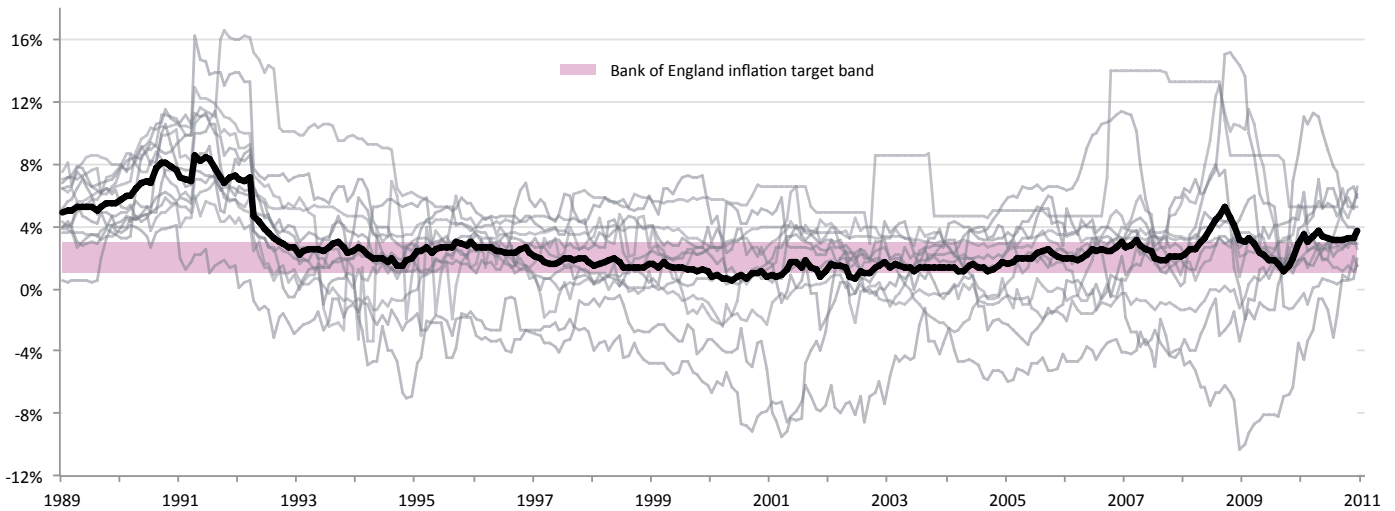
But as well as the overall impacts of this high inflation environment, it is important to understand the implications of the changing *shape* of inflation. Changes in the *relative* prices of different goods and services over time are not captured by controlling for headline, average price changes. Yet they too are important for living standards. Variation in these category-level trends means that inflation doesn't just 'pile on the pressure' by eroding the value of wages at an aggregate level, it also has progressive or regressive effects, and can change fundamentally the *kind* of life that can be lived on a low-to-middle income.

## The changing profile of living costs

As Figure 30 shows in stark clarity, headline inflation figures are averages that mask a significant amount of noise. Even the benign headline numbers of recent years have hidden dramatic changes in the *profile* of household costs. Whilst annual CPI inflation averaged 2.7 percent from 1988 to 2010 – and remained broadly within one percentage point of the bank’s inflation target for 15 years from 1993 to 2008 – annual inflation in the various sub-categories of goods and services ranged at times from 15 percent (education), to -10 percent (clothing).<sup>72</sup>

**Figure 30: The noise that sits behind headline rates of inflation**

Headline CPI inflation and inflation for various (unlabelled) categories of goods and services

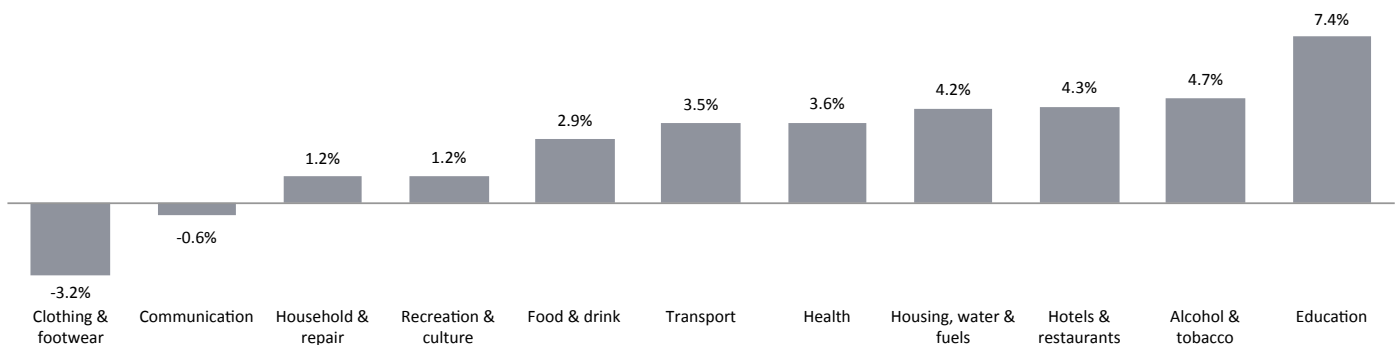


Source: ONS CPI inflation and category-level inflation

Of course, in many cases, high or low inflation in certain categories represents just a short-term fluctuation that nets out over time. But some price trends sustain, and when they do, can lead to significant changes in the profile of household living costs. Over the entire period captured in the above chart price rises in alcohol and tobacco averaged 4.7 percent a year, and rises in housing, water and fuels averaged 4.2 percent (Figure 29).<sup>73</sup> In the same period, clothing and footwear and communications *decreased* in price, by an average of 3.2 percent and 0.6 percent a year respectively.

**Figure 31: Inflation by category**

Average annual price change, 1988-2010



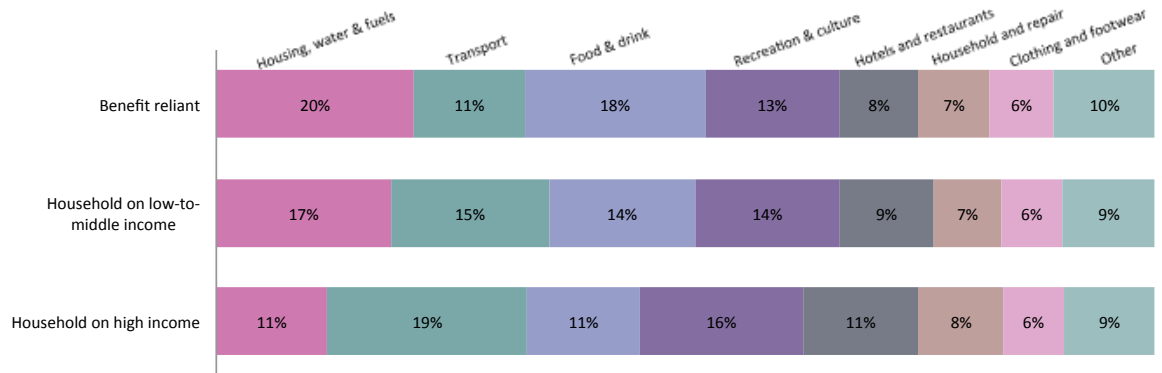
Source: Resolution Foundation analysis, ONS category-level inflation

72. Education costs include private school fees and tuition fees. Significant rises in recent years have been principally driven by the creation of, and increases to, tuition fees.

73. Increases of 7.3 percent in education are largely driven by increases in university tuition fees, and should be taken in the context of government support through student loans and grants.

One obvious implication of this dramatic variation in category-level inflation is that household-level inflation depends on what you buy. Big increases in prices matter less when households don't spend much on that category, while even small increases can have a big impact when they occur in major areas of household expenditure. So how do different households spend their money? Figure 32 outlines the share of spending on different categories, and does so for different income groups. It shows that people on low-to-middle incomes spend higher proportions of their income on essential goods such as food and fuel, while people on higher incomes spend more on transport, recreation and culture, and hotels and restaurants.

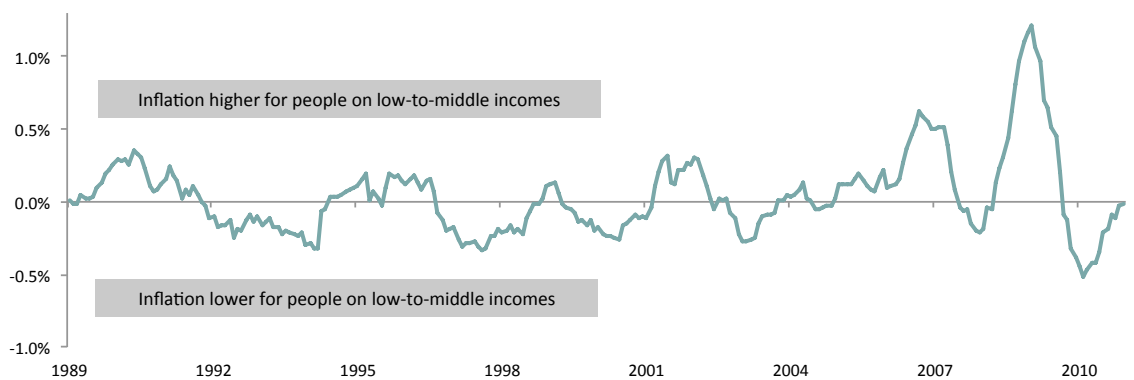
**Figure 32: Share of expenditure by category for different income groups**  
% of total spend, 2008-09



Source: Resolution Foundation, Family Resources Survey, 2008-09

As a result of these systematic expenditure differences across income groups, different types of inflation can have significantly different distributional impacts. Figure 33 uses these expenditure shares (and their equivalents in earlier years) to calculate the gap between the 'true' rates of RPI inflation that have been experienced by those on higher incomes and those on low-to-middle incomes in recent years. Until 2006, the variation in inflation rates between those on low-to-middle, as opposed to higher incomes, was relatively benign. Since 2006, however, this variation has become more volatile – and has increasingly seen inflation reach higher levels for those lower down the income spectrum. Recent spikes in inflation have seen CPI as much as one percentage point higher for those on the low-to-middle incomes than for those higher up. As we have entered a period in which the weight of inflation has shifted towards fuel and food, we are also seeing greater volatility in terms of the extent to which inflation is progressive or regressive.

**Figure 33: The gap between CPI inflation for higher and low-to-middle income groups**  
Percentage point gap in CPI inflation experienced by the two groups



Source: Resolution Foundation analysis, ONS category-level inflation and Family Resources Survey expenditure data



The implications of this trend for government are not trivial. For instance, benefits are indexed to headline levels of inflation with the intention that their value tracks the cost of living. According to this chart, that system has become increasingly inaccurate in recent years, with annual increases poorly reflecting changes in costs. The government's recent decision to switch the indexing of many benefits, including tax credits, to the CPI measure of inflation, (generally lower than the RPI), will shift this error upwards. It is also worth noting that analysis of real wage trends – most of which is controlled only for headline measures of inflation – will have overstated the 'real' wage performance of people towards the lower half of the distribution in recent years.

### Locating the pinch points

Bringing together these two parts of the puzzle – inflation by category and share of spend – also gives us a clearer picture of where the biggest pinch points have been for people on low-to-middle incomes in recent years. Figure 34 plots the price inflation of various categories of goods and services in the period 1988 to 2010 by each category's share of the basket of spend of low-to-middle income households. Education, for example, saw dramatic price rises of over 400 percent in the period from 1988 to 2010<sup>74</sup> but, as a category, only constitutes around one percent of the expenditure of people on low-to-middle incomes. As a result, it exerted only light upwards pressure on the overall living costs of the group.

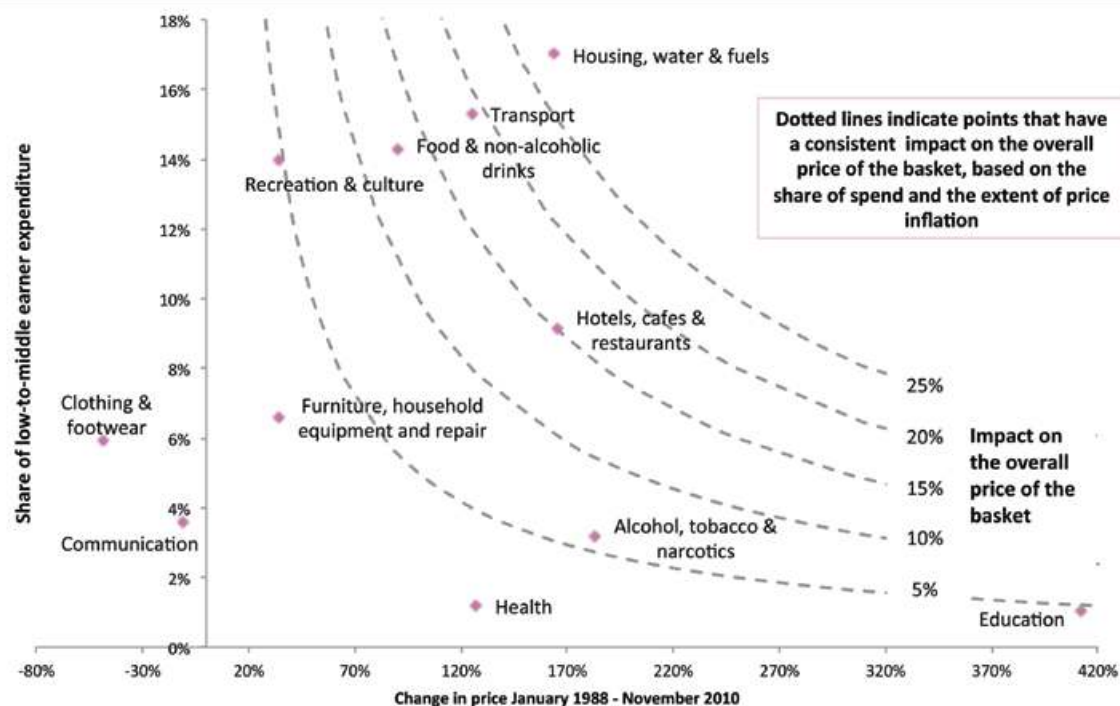
The curved dotted lines on the chart are designed to give an indicative sense of the categories of goods and services that have exerted the most significant pressure on low-to-middle income households over the last 12 years. They join points on the chart that represent consistent inflation impacts on the overall basket of goods. For example, a price increase of around 400 percent of a good that makes up 1 percent of spend (education), will have roughly the same impact on the overall basket-price as a price increase of around 40 percent on a good that makes up 14 percent of expenditure (recreation and culture). It is important to treat these lines as indicative because they assume a consistent share of spend over time, when in fact households will have changed their expenditure patterns over the period. Nonetheless, they give a useful sense of the key pinch points for low to middle income households.

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74. Driven primarily by the introduction of, and increases in, university tuition fees.

**Figure 34: Inflation and share of spend by category**

Percentage inflation 1988-2010 and share of spend of low-to-middle income households 2010



Source: Resolution Foundation analysis, ONS inflation by category

As the positioning of the data points in Figure 34 reveals, it is the prices of housing, water and fuels; transport; and food and non-alcoholic drinks that appear to have had the biggest impact on the budgets of low-to-middle income households, along with hotels, cafes and restaurants. By virtue of their large share of expenditure and moderately high inflation, they are having by far the largest impact on household budgets. Noticeably, three of these four categories have not only large impacts on overall living costs but, as necessities, are also hard to escape.

The advent of a new period of higher inflation in the UK economy would be a worrying development for living standards, even more so if it takes the shape that inflation is currently taking. In many cases – such as rises in global commodity prices – there is little government can do to directly influence the drivers of price trends. In other cases, government can and does exert an influence on the profile of living costs, and on households’ abilities to meet them. It does so through a suite of policies from competition policy (in the case of retail), tax strategy (in the case of goods subject to VAT and duties), subsidies (from investment in housing to support for free museums), indexing rules for benefits and tax thresholds, or simply by providing targeted income top-ups. As things stand, existing policy responses are not well equipped to deal with this new period of inflation.



## Chapter 6 – New pressures from housing, savings and debt

Assets and credit are an inescapably important determinant of material wellbeing in a modern economy, over and above income and the cost of living. When asset ownership is widespread and responsible credit is accessible, they can help even those on modest disposable incomes to achieve some measure of financial security. Assets and credit enable people on low-to-middle incomes to manage large, irregular expenses and reach key aspirations. And they mean that even those living on narrow margins can build their earning potential through investment in training.

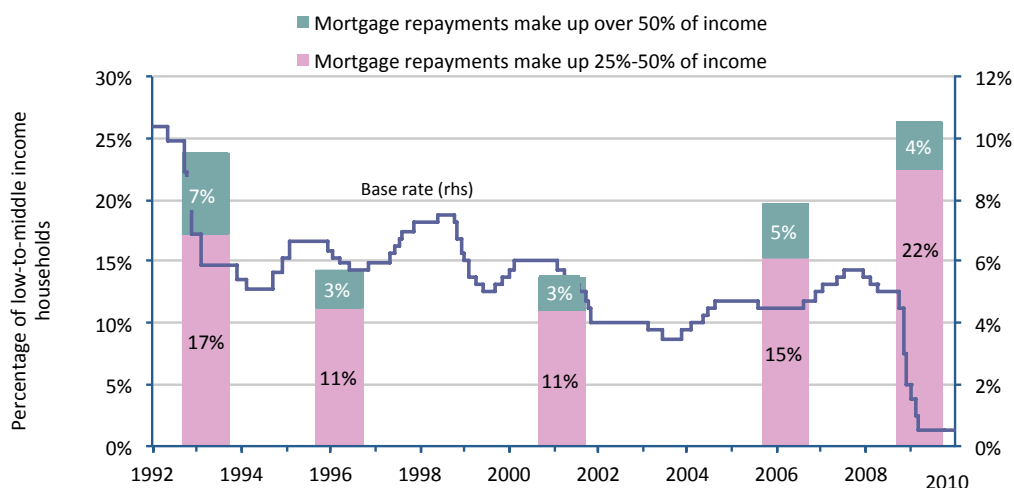
Housing is a particularly important part of this picture. Housing costs make up a significant proportion of household budgets and ownership is a key route to asset-accumulation for people on low-to-middle incomes. It is also an important aspiration. Yet as this chapter shows, the reality for many in the group is now long periods, if not a lifetime, spent living in the rental sector. The characteristics of the private rental sector in particular will be a key determinant of the material quality of the lives of people on low-to-middle incomes in the coming years.

In the aftermath of a crisis fuelled by a credit boom and accompanying housing bubble, and sparked by a failure in the US mortgage market, questions about regulating asset- and credit markets are particularly pertinent and will have a direct bearing on living standards. To what extent did the pre-crisis credit boom artificially prop up living standards, obscuring anaemic trends in incomes that should have been confronted sooner? Can a post-crisis, stable, sustainable approach to lending ever put those on low-to-middle incomes in reach of their aspirations? These will be key questions for the Commission.

### The rising mortgage burden

Mortgages and other secured debt (such as personal loans secured against a home) make up 88 percent of the debt burden among people on low-to-middle incomes. Figure 35 sets out the distribution of the monthly mortgage burden among low-to-middle mortgage holders, and shows how this burden changed over the period 1992-2009. It sets these changes in the context of interest rates and shows that when rates were high, in 1992/93, 17 per cent of low-to-middle income mortgage-holding households were making payments of 25 to 50 percent of their monthly income, while around 7 percent were making payments of more than half their monthly income.

**Figure 35: The growing weight of mortgage repayments, even as interest rates fell**  
Distribution of mortgage payments as a proportion of income in low-to-middle income households, 1992-2010



Source and notes: The proportions shown are averages among those households with outstanding mortgages only; RF analysis of ONS, British Household Panel Survey (various)

As would be expected, as rates fell sharply in the early to mid 1990s, the proportion of households on low-to-middle incomes spending more than one quarter of their income on mortgage payments decreased over the course of the decade. However, despite further falls in the 2000s, the mortgage burden rose for people on low-to-middle incomes in this later period. This increase began before the 2008-09 financial crisis hit incomes and credit conditions. While the Bank of England base rate fell from 6.6 per cent at the end of 1995 to 4.5 per cent towards the end of 2008, the proportion of those in the group spending more than one quarter of their income on mortgage payments increased from 14 per cent to 26 per cent.

These figures confirm the intuition that low-to-middle income households became more heavily exposed to high mortgage burdens in the run up to 2008-09, in a context of relatively low rates and loose borrowing conditions. Part of this increased exposure will have been driven by rising stocks of debt as house prices rose and households took on larger mortgages. But for low-to-middle income households in particular other factors have also been important. Analysis of the Survey of English Housing reveals that of the low-to-middle income households who became first-time buyers in 2007-08, just prior to the financial crisis, 30 per cent relied on 100 per cent mortgages. Such high loan-to-value ratios will have put the market's lowest rates beyond the reach of many buyers in the group. As rates fell this effect will have been compounded by the high proportion of the group that are on fixed rates mortgages – 54 per cent in 2010. These households will not have profited quickly from falling rates.

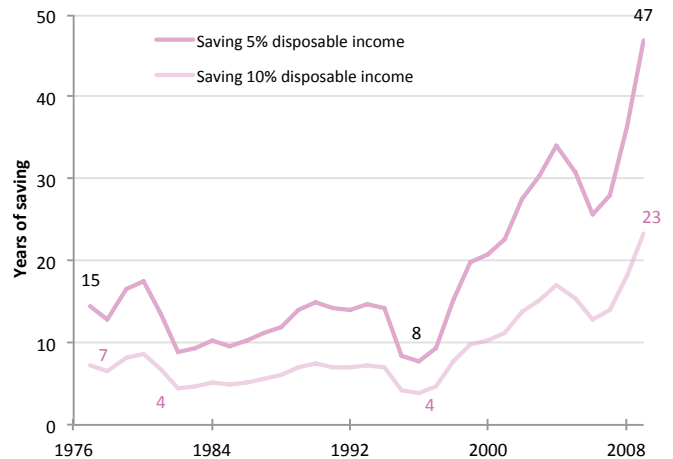
Conversely, the high proportion of the group that are on fixed rate mortgages will prove beneficial as rates rise in the coming months and years. That said, the group remains highly vulnerable to the dangerous combination of rising rates and already high repayment burdens. Overall the story of the group's interaction with the mortgage market in recent years raises important questions about the extent to which people on low-to-middle incomes had come to rely on the very financial products that the 2008-09 crisis proved to be unsustainable.

## Aspirations moving beyond reach

Substantial increases in house prices in recent years have not only driven up the debt burden of new mortgagors, but have also hit the viability of home ownership for people on low-to-middle incomes. More recently a fall in the availability of credit has had even more dramatic implications for those wanting to get on the housing ladder. Figure 36 shows the average time required for a household on a low-to-middle income to save for the average deposit on a first home. It confirms the sharp impact of a combination of long-term house price rises and the short term impacts of credit constraint from 2008-09 onwards. An average low-to-middle income household would have needed to save five percent of their income for 46 years (or 10 percent for 23 years) for an average first-home deposit, under the lending figures of 2008. The impact of this development on living standards, both through squeezed household budgets, a diminished potential for asset-accumulation, and less attainable aspirations, is considerable.

**Figure 36: Accessibility of home-ownership to those on low-to-middle incomes**

Years of saving required by average low-to-middle income household to accrue a first home deposit



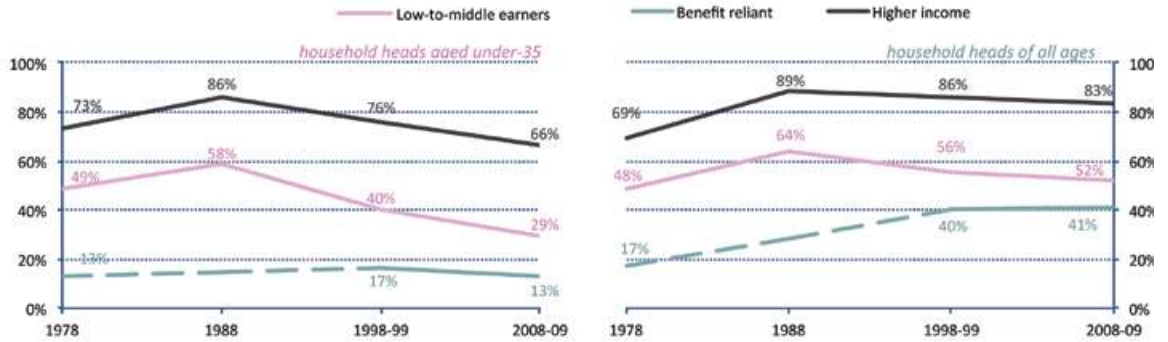
Source: Resolution Foundation analysis, Communities and Local Government data for average first time buyer deposit in England; Family Resources Survey

Figure 37 looks at the long term consequences of these trends for the home ownership profile of different income groups in the period since 1978. Not surprisingly, ownership has been consistently highest among those in the top half of the income distribution and lowest among those at the bottom. But there are also important differences in patterns of ownership across the three income groups. Among younger households (those with heads aged under-35), home ownership increased between 1978 and 1988 in the low-to-middle and higher income groups before declining in the period to 2008-09. The rate of decline among people on low-to-middle incomes was *far* steeper than those either above or below them in the income spectrum; the proportion of young people on low-to-middle incomes who own their own home *halved* from 1988 to 2008-09, from 58 percent to 29 percent. Among benefit-reliant households the pattern was different, with a fall in ownership in the decade to 1988 followed by a rise in the period to 1998-99 and a further slight fall by 2008-09.<sup>75</sup> Taking the period as a whole, the low-to-middle income group experienced by far the steepest declines. This picture will not yet capture the negative impacts of the recent downturn.

It will take longer for these effects to feed through into patterns of home ownership for households of all ages. However, while the fall in ownership between 1988 and 2008-09 in the right hand chart (showing all age groups) was smaller in magnitude for both low-to-middle and higher income households, it was again sharper for the low-to-middle group. There was also an increase in the proportion of home owning benefit-reliant households between 1978 and 1998-99, meaning that the gap in home ownership rates between this group and people on low-to-middle incomes narrowed markedly. In 1978 the 'home ownership gap' between people on low-to-middle incomes and the benefit-reliant group was 31 percentage points. In 2008-09 it had fallen to 11 percentage points. In terms of access to home ownership, in 1978 people on low-to-middle incomes looked more like higher income people; today they look more like the benefit-reliant.

75. Definitions of the 'higher income' and 'benefit-reliant' groups can be found on page 8.

**Figure 37: The slump in home-ownership among young people on low-to-middle incomes**  
Proportion owning a home by income group, UK 1988 - 2008-09

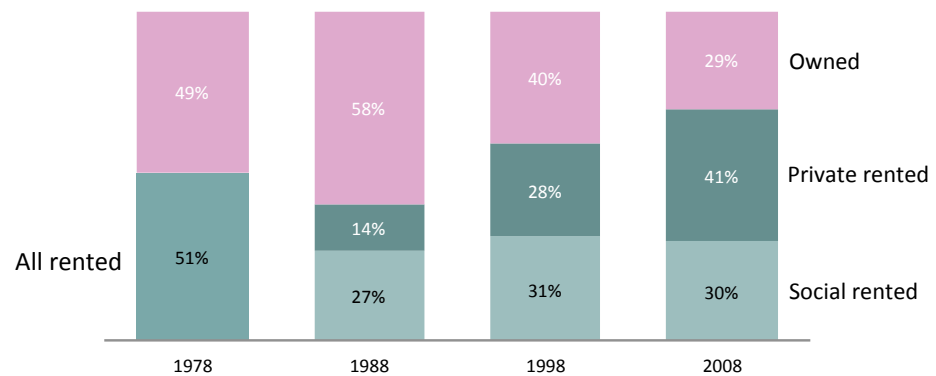


Source and notes: RF analysis of DWP, Family Resources Survey; and ONS, Family Expenditure Survey; 'Homeownership' refers to households either owning their home outright or buying it with a mortgage. 1988 data for the benefit reliant group is excluded due to a small sample size in that year.

Figure 38 shows the fallout of these trends in home-ownership on the overall tenure mix of low-to-middle income households. It reveals that the decline in homeownership in the group in the period from 1988 has been almost entirely offset by an increase in private renting, with rates of social renting remaining relatively flat. The proportion of young low-to-middle income households living in private rented accommodation almost trebled from 1988 to 2008-09 from 14 percent to 41 percent. This dramatic rise in the significance of the private rental sector to the living standards of people on low-to-middle incomes is yet to be reflected in government policy priorities which, outside of the social rented sector, remain defined by the goal of home-ownership.

**Figure 38: The shift from home-ownership to private rental sector**

Housing tenure among low-to-middle income households with heads aged under-35



Source and notes: RF analysis of DWP, Family Resources Survey (various); RF analysis of ONS, Family Expenditure Survey (various); The data split for rented properties in 1978 differs from that provided in subsequent survey years. Therefore, all rented data is grouped together in this year.

Have these trends in the housing circumstances of people on low-to-middle incomes been driven by changing attitudes? Data on home ownership aspirations by income group is limited, but at the headline level home ownership aspirations are as strong as at any time on record.<sup>76</sup> In 2011, 86 percent of under 30s identified home ownership as a key life goal (by comparison, 57 percent said higher disposable income was a key life goal). 90 percent say they would not be happy with a lifetime of renting.<sup>77</sup> Income analysis of the British Social Attitudes Survey tells us that 81 percent of people on low-to-middle incomes still believe that owning a home is,

76. Improving attitudes to home-ownership, CML Housing Finance Issue 01 2007, analysis of BMRB Omnibus Survey

77. ComRes Homebuyers survey, 2011

over time, less expensive than renting, a figure that is largely unchanged since the mid-1990s. Put together these trends suggest that the group still aspires to home ownership despite facing long periods, if not lifetimes, of private renting.

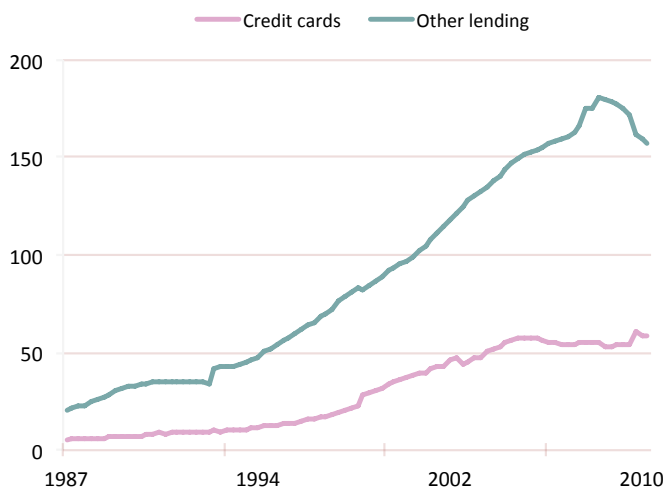
### Unsecured credit

It is widely known that the use of unsecured debt by UK households grew dramatically in the past 20 years. As Figure 39 shows, total unsecured lending (credit that is not secured against collateral such as property, for example personal loans) grew dramatically from the early 1990s. In 2008 the UK savings ratio (not shown in this chart) became negative for the first

time since 1958. Britain's households were, on average, spending more than they earned.<sup>78</sup> Data on the distribution of debt can help us to draw out some of the characteristics of this rise in credit and its relevance to living standards. From 1995 to 2005, evidence suggests that the expansion of unsecured credit was not driven principally by *more people* taking on debt but by rising debt burdens among indebted people. Figure 40 compares unsecured debt levels across income groups in the period between 1995 and 2005. Among low-to-middle income households the proportion with outstanding balances remained relatively flat, increasing from 56 per cent in 1995 to 58 per cent in 2000, before falling to 54 per cent in 2005. Borrowing among higher income households followed a similar pattern (although at a slightly higher level) while the proportion of benefit-reliant households reporting unsecured debts fell between both 1995 and 2000 (from 53 per cent to 45 per cent) and between 2000 and 2005 (to 43 per cent).

**Figure 39: The rise of unsecured lending**

Total lending, £bn, UK 1987-2010



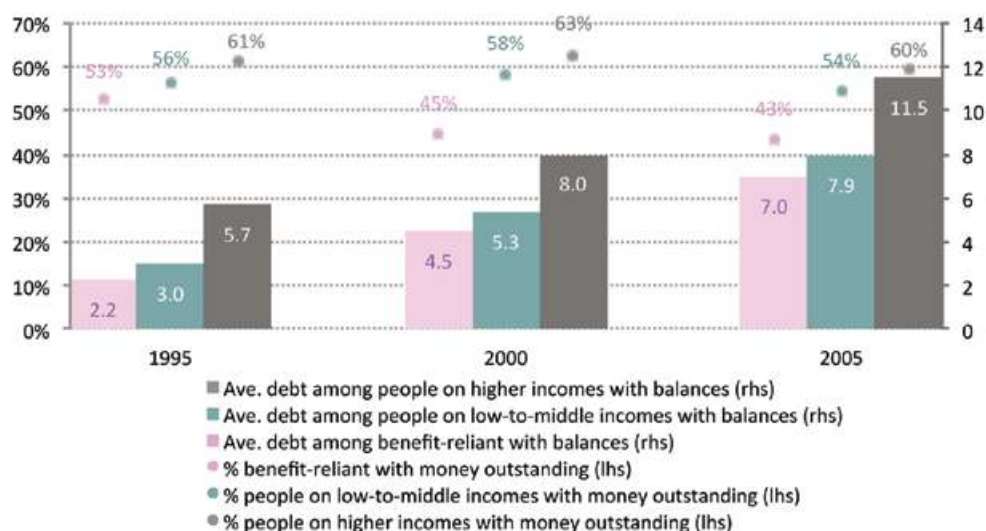
Source: ONS, Bank of England

Although the proportion of low-to-middle income households with debt changed little over the period shown, the average amount borrowed by indebted households rose significantly in real terms across all three income groups. The average was consistently highest among higher income households, but the rate of growth was stronger among the two lower income groups. While average debt among higher income households with outstanding balances increased by a factor of 2 in real terms, from £5,700 in 1995 to £11,500 in 2005, the average among low-to-middle income households increased by a factor of 2.7, from £3,000 to £7,900.

78. UK ONS, household savings ratio



**Figure 40: The same proportion of borrowers – but much more being borrowed**  
 Outstanding unsecured debts among households by income group, £k 2009 prices



Source and notes: RF analysis of ONS, British Household Panel Survey (various); the proportions shown relate only to those households containing respondents who answered the relevant question about unsecured debt. Those refusing to answer are excluded. Debt figures exclude amounts paid off at the end of the month (e.g. non-revolved credit card balances). Figures adjusted using GDP-deflator.

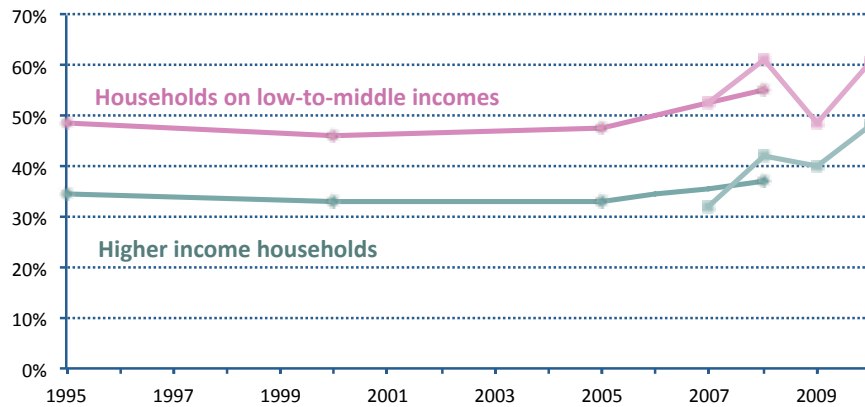
These trends are consistent with the view that indebted people in the low-to-middle income group were, in this key period in the run up to the crisis, finding themselves ever more reliant on debt to prop up their living standards. That said, it is important to consider the dynamics that underlie these figures. People move into and out of debt just as they move up and down the income spectrum, so the population of borrowers in the above data is unlikely to be consistent over time.

We already know that the increasing indebtedness outlined above took place in an environment of relatively benign interest rates and increasingly loose conditions on borrowing. Evidence also suggests that despite a rising debt burden, households were not feeling significant additional *pressure* from debt until more recently. Figure 41 compares the proportion of low-to-middle income households and those on higher incomes that reported finding their unsecured debt repayments to be a financial ‘burden’ (either ‘somewhat’ or ‘heavy’) in selected years in the period from 1995. It shows that people on low-to-middle incomes have consistently been more likely to view credit repayments as a burden than their higher income counterparts, with the gap between the two income groups remaining broadly constant.

But despite rising indebtedness the proportions who were struggling in both income groups remained relatively flat for much of the period, falling slightly over the first ten years in reaction to falling interest rates. A sharp increase in the proportion of households viewing repayments as a burden did not occur until the onset of the credit crunch in 2007, when the positive effects of a falling base rate were outweighed by restrictions in credit supply and a weakening labour market. In 2010, 61 per cent of low-to-middle income households reported their debt repayments as a burden, up from 49 per cent in 1995. Among those on higher incomes the proportion who were struggling increased from 34 per cent to 48 per cent.

**Figure 41: Recent increases in the burden of debt**

Proportion of households with unsecured debts who find repayments a burden, 1995 – 2010



Sources and notes: The proportions shown relate only to those respondents who had unsecured debts at the time of the survey. Results from the two surveys are not directly comparable. However, the relevant question was asked in a consistent manner and the income groups shown have been determined on the same basis; RF analysis of ONS, British Household Panel Survey (various); RF analysis of Bank of England, NMG survey, (various)

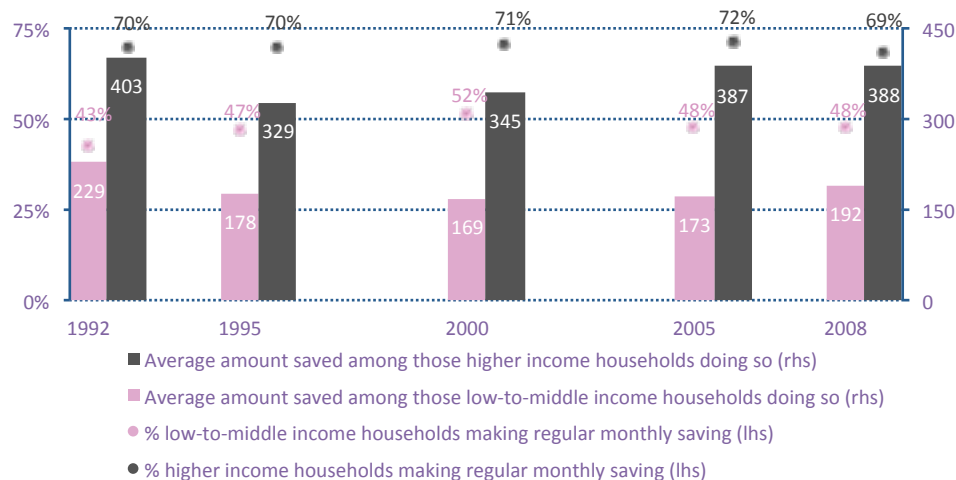
### Savings and pensions

Non-physical assets, like savings and pensions, provide the remaining part of the picture. If the housing tenure shift outlined above becomes permanent for a large proportion of people, these other forms of assets will become ever more important to financial security. We already know that over half of all households on low-to-middle incomes have less than half a month's income in savings.<sup>79</sup> So how has the savings behaviour of the group performed over the long-term?

Figure 42 shows that the proportion of low-to-middle income households that make regular monthly savings rose slightly over the last two decades, from 43 per cent in 1992 to 52 per cent in 2000, before falling slightly to 48 per cent in 2008. But among those making savings in each income group, the average value of savings *fell* in real terms between 1992 and 2000, before rising slightly in the subsequent decade, but remaining below previous levels. In 2008, among the 48 per cent of low-to-middle income households undertaking any saving, the average monthly amount saved was £192, down over 16 percent since 1992's value of £229. As would be expected, stark inequalities in savings rates persist.

**Figure 42: Regular monthly saving among households by income group**

Amount saved and percentage making a regular saving, £ 2009 prices, GB 1992 – 2008



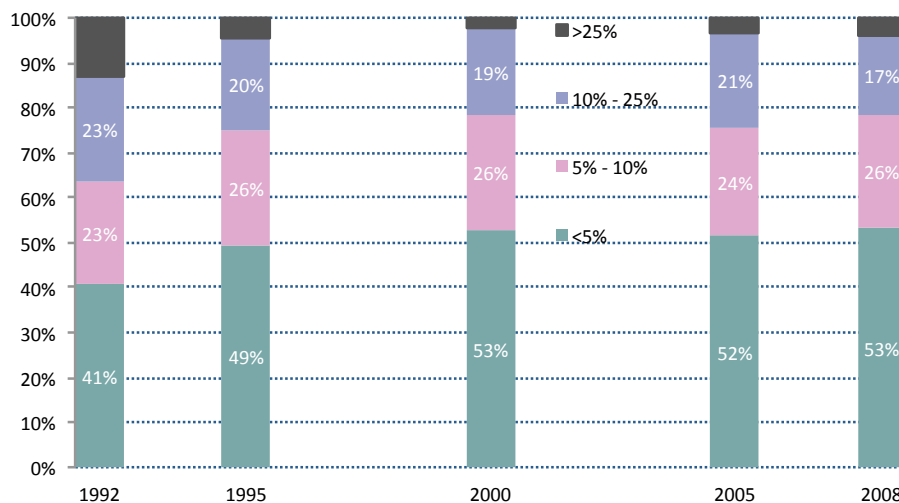
Source: RF analysis of British Household Panel Survey (various)

79. Whittaker (2010a)

Figure 43 confirms that the amounts saved by low-to-middle income households have not kept pace with increases in incomes. Of the 48 per cent of households on low-to-middle incomes who save regularly, 53 per cent now put aside less than 5 per cent of their income, up from 41 per cent in 1992. By contrast, the proportion saving more than 10 per cent of their income fell from 36 per cent in 1992, to 21 per cent in 2008, or just 10 per cent of all low-to-middle income households. These figures may be explained in part by interest rate effects, as households found saving less attractive in the low interest environment of the late 1990s and 2000s. Nonetheless, they present a bleak picture of the likely asset-position of low-to-middle income households in coming years, and are all the more concerning given the above-outlined trends in home-ownership rates.

**Figure 43: Low-to-middle income households saving less of their income**

Proportion of income saved by low-to-middle income households who make a regular saving



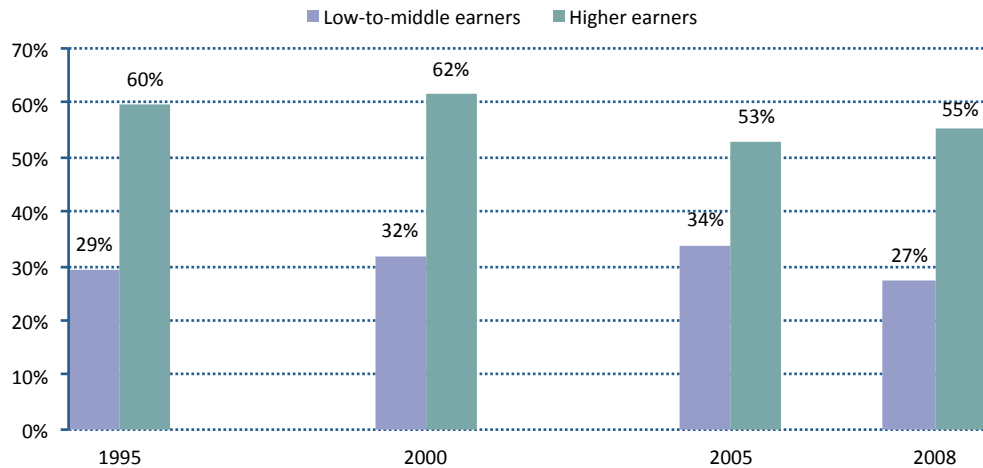
Source: RF analysis of ONS, British Household Panel Survey (various)

Pensions-saving does not appear to be stepping in to fill the gap. Figure 44 sets out the proportion of working-age people living in low-to-middle and higher income households who report holding some form of private pension (occupational or personal) in the period from 1995 to 2008. For members of both income groups, ownership increased slightly during the 1990s, before declining somewhat by 2008. Pension ownership among those on low-to-middle income has consistently run at around half the rate of the higher income group. In 2008, just over one quarter of people on low-to-middle incomes reported holding a pension, compared with just over one half of those on higher incomes. We also know that for the general population pension participation rates are far worse for women than for men.<sup>80</sup> The picture is likely to be even worse for women in the low-to-middle income group.

80. See for example, Frericks et al. Pension Reforms, Working Patterns and Gender Pension Gaps in Europe (2009)

**Figure 44: Pension ownership by income group**

Proportion of individuals with some form of private pension, GB 1995 – 2008



Source and notes: Includes occupational pension and personal pension; RF analysis of ONS, British Household Panel Survey (various)

As a whole these trends paint a bleak picture of assets and debts and their implications for living standards. Further work in the coming months will develop a clearer view of the extent to which debt propped up living standards in the run-up to the crisis. In housing the picture is already stark. Even as interest rates fell throughout the 1990s and 2000s, an increasing proportion of people on low-to-middle incomes appear to have been paying higher proportions of their income in mortgage repayments.

This presents a particular challenge in the light of existing inequalities in wealth, and their implications for the distribution of unearned income (that is, income from sources other than employment, such as asset appreciation or interest). As the National Equality Panel has shown, UK inequalities in wealth are far greater than for earnings or income. The 90:50 ratio for wealth (comparing the 90th percentile to the median) is 4.2, twice the ratio for full-time weekly earnings.<sup>81</sup> This further confirms the importance of well functioning asset and credit markets to the prospects of people on living low-to-middle incomes.

81. p.60, An Anatomy of Economic Inequality in the UK, National Equality Panel (2010)



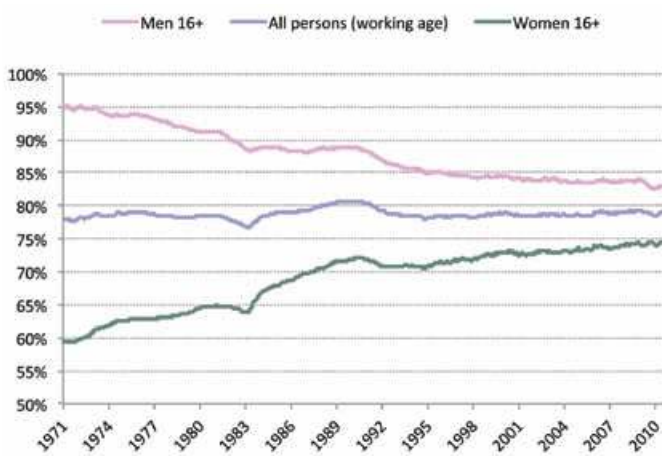
## Chapter 7 – New support needs arising from modern working patterns

This final chapter considers the relevance of changing working patterns to living standards. We discuss this issue separately for two main reasons. First, and most straightforwardly, new patterns of working have been a critical driver of rising living standards in recent decades, over and above trends in individual wages. As we saw in Chapter 5, the entry of more women into the labour force has made dual-earning households more common, making households better off. In particular, women now work more consistently throughout their childbearing years (albeit often shifting to part-time work). More recently, as life expectancy has risen and society has aged, people have begun to work into the later years of life.

These trends are all helping to raise the material wellbeing of households. But they also have an important second implication: if growth in living standards depends on new ways of working, then it also depends on the structures that make those new ways of working possible. Dual-earning families need childcare, working parents need flexible employers, and older workers need an environment that supports them to be productive into later life. As a result, we are now asking far more than ever of the ‘tessellation’ between people’s lives outside of work and the demands of work itself. In the coming years supportive public services like childcare and elderly care are likely to be key determinants of whether living standards rise in the coming years, as are other aspects of the work-life environment, such as flexible working arrangements.

This chapter looks first at new working patterns, second at the particular vulnerability of people on low-to-middle income to these trends, and third at the implications for the *kinds* of support that will be important to living standards in the decades ahead.

**Figure 45: The falling gender gap in participation**  
Economic participation, UK 1971 – 2010



Source: ONS economic participation by gender

### Changing working patterns

The proportion of women in the UK who are economically active rose from 59 percent in 1971 to 74 percent in 2010 (Figure 45). Over the same period, the proportion of men who are economically active fell from 95 percent in 1971 to 83 percent. As a result, in the last thirty years of the century there was a dramatic levelling of the participation rate across genders: while the overall participation rate remained remarkably steady at around 78 percent, the gap between the male and female participation rates fell from 36 percentage points in 1971 to 9 percentage points in 2010. The same trends are evident across advanced labour markets, to greater and lesser degrees.<sup>82</sup>

As a result of this levelling of the participation rate, official estimates suggest that as many as two thirds of two-adult households may now be dual earning, though time series data on working patterns at the

household level are less easily available.<sup>83</sup> In 39 percent of low-to-middle income households all adults are in employment of some kind (this includes both single adults in work and couples both in work), and in 27 percent of such households all adults are in full-time work.<sup>84</sup>

82. See for example, Bloom et al. Fertility, female labor force participation, and the demographic dividend (2009)

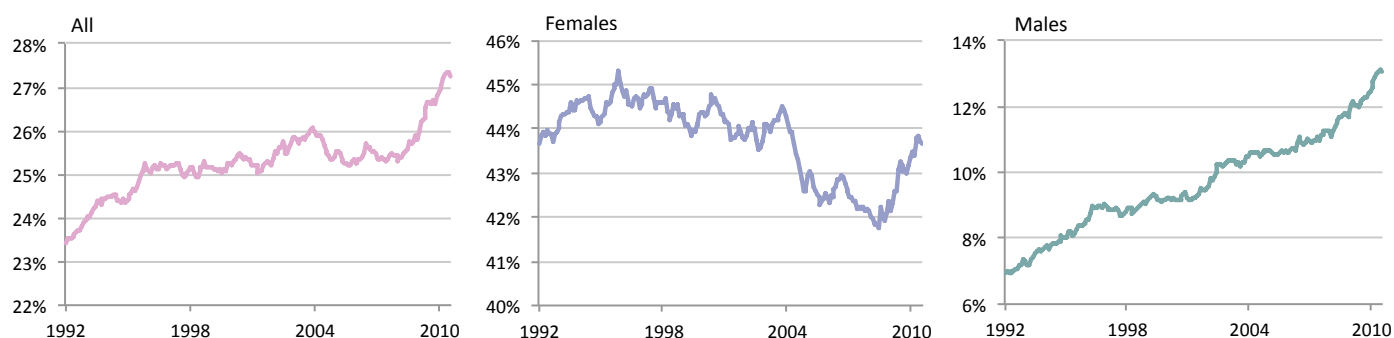
83. Working Families, Emerging themes for work-life balance (2010)

84. Resolution Foundation analysis

The changing composition of the UK workforce has run hand in hand with a transformation in the nature of work. Shifts in the sectoral make-up of UK employment, away from agriculture and manufacturing jobs towards jobs in the services sector, have helped to drive a shift toward part-time work. In the last 20 years the proportion of workers in part-time roles has risen from 23 percent to 27 percent (Figure 46). While part-time work among women has fallen marginally, from a high base, to around 44 percent, the proportion of male workers in part-time roles has nearly doubled, from 7 percent to 13 percent over the period. Although some of the shift towards part-time working took place in the aftermath of the 2008-09 recession, and so is likely to be involuntary, experience from the 1991 recession suggests that the underlying increase may well endure, even once the economy has returned to sustained growth.

**Figure 46: The rise of part-time work**

Proportion of people in work who work part-time, UK 1992 – 2010



Source: ONS, part-time working by gender

As well as a move to more part-time work, atypical working hours are now a standard feature of life in the UK labour market. Despite much debate in this area, there is little robust evidence to show that atypical hours are now more common than they used to be. We do know, though, that more people in the UK work *longer* hours than anywhere else in the EU, and that the proportion doing so has been steadily rising.<sup>85</sup> In part, these dynamics have been self-reinforcing, with longer working hours pushing businesses in the services sector to adopt hours that fit around a long working week, and so requiring service workers to work hours outside of these times. Connolly et al. find that around 90 percent of dual-working families now contain adults who work at least some atypical hours, defined as work falling outside of 8am to 7pm, Monday to Friday. Around 80 percent of working fathers in couple families, and around half of all working mothers (when single-parent households are included) do so.<sup>86</sup>

Alongside changing working patterns at the household level there have also been significant shifts in the pattern of economic activity throughout the life course. Figure 47 shows the percentage of males and females who were economically active, by age, for four different years. For males, a long-term trend toward earlier retirement has recently reversed; in the period from 1975 to 1995, participation rates fell for those in their 50s as men took up earlier retirements; the period from 1995 to 2005 saw a precise reversal of this trend, with the pattern of retirement reverting to its shape in 1985. One would expect this new direction of travel to continue, with people working into older age as the state retirement age rises in the coming decades.

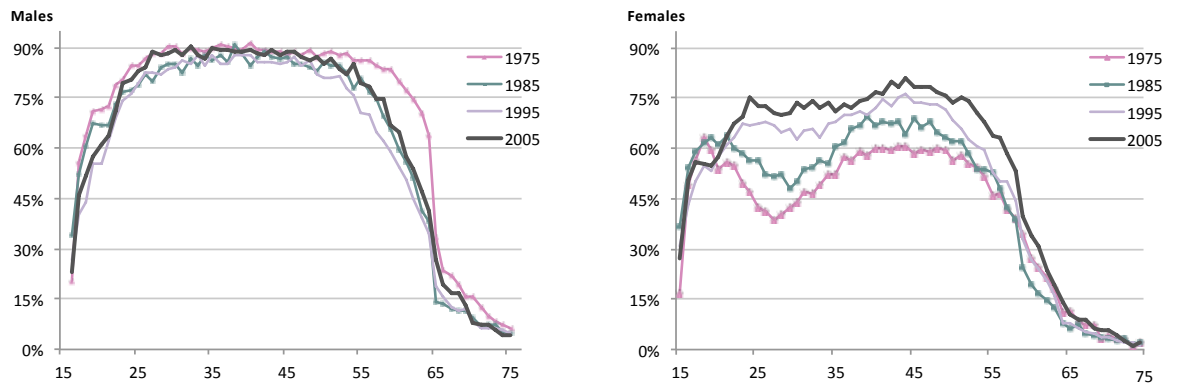
85. Causa, The policy determinants of hours worked across OECD countries (2009)

86. Barnes et al. (2006)



For females, by contrast, participation has increased consistently across the life course, with the exception of women in their late teens and early 20s. This increase in participation has been the most significant for women of childbearing age. The impact of childbirth is now far less apparent than it used to be in terms of the pattern of women's economic participation throughout the life course. That said, there remain severe and enduring wage penalties for women in the aftermath of child birth, particularly for those who move to part-time work, many of whom are forced to downshift in terms of job quality and pay.<sup>87</sup> The trade-offs between family and work remains stark, particularly for women.

**Figure 47: Economic participation across the life-course**  
Percentage economically active by age, UK 1975 – 2005



Source: Blundell and Etheridge (2009)

Trends towards older working are particularly striking when considered alongside the caring implications of the ageing society. As the baby boomer generation reaches old age more and more people in their 50s (precisely those who had formerly been the beneficiaries of a trend towards earlier retirement) will face caring responsibilities for elderly relatives. By 2040, 13 percent of people in the UK will be over 75 and four percent over 85.<sup>88</sup> The trends outlined in Figure 47 suggest that the overwhelming majority of the children of this generation will still be economically active.

### Why people on low-to-middle incomes are peculiarly vulnerable to these pressures

In important respects people on low-to-middle incomes live at the sharp end of the pressures that arise from these new working patterns. On the one hand, the group are in work but are modestly paid; 76 percent are employed, yet most typically live on narrow margins from week to week and so are highly dependent on their existing patterns of employment.<sup>89</sup> Households that are dual-earning can typically ill afford to become single-earning, for example as a result of new caring responsibilities. Likewise, those who are engaged in full-time work can ill afford to move to part-time.

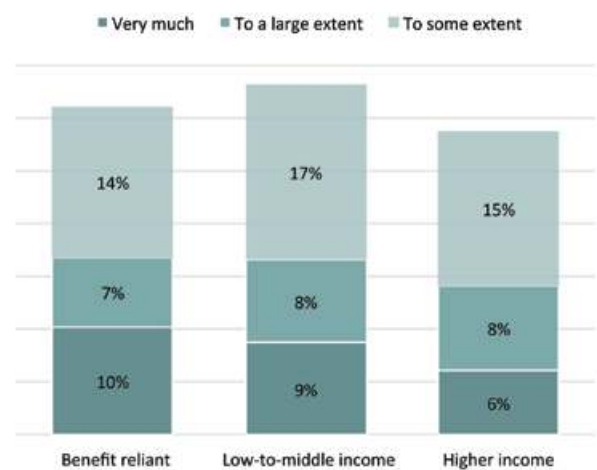
87. Smeaton, D. (2006)

88. Resolution Foundation analysis, ONS

89. 2008-09, people on low-to-middle incomes defined here on the basis of the full Resolution Foundation definition: working age people living in households in income deciles 2 to 5 who do not receive more than 20 percent of their income from benefits

**Figure 48: Caring responsibilities**

Proportion not pursuing activities they would like to because of the need to care for others



Source: Resolution Foundation analysis, British Social Attitudes Survey



On the other hand, many in the group find it difficult to access the services that families use to manage these kinds of pressures. Flexible, high quality childcare and social care, for example, are out of the reach of many families on low-to-middle income, particularly in high cost regions of the country.<sup>90</sup> At the same time many families in the income group have historically found themselves above cut off points for mean-tested aspects of government support, particularly in the case of social care.<sup>91</sup> With living standards now more dependent on dual-earning and on more consistent and longer work throughout the life course, low-to-middle income workers are set to become more vulnerable to these risks.

Caring pressures are a good example of the difficulties faced by households that are headed by dual-earners or working single parents on modest pay. Evidence from the British Social Attitudes survey suggests that, while intensive caring responsibilities fall most heavily on those with the lowest incomes, more modest caring responsibilities fall just as heavily on people on low-to-middle incomes (Figure 48). The group works longer hours than those on the lowest incomes and so has less time to undertake its own caring responsibilities, yet its members also have less disposable income to spend on formal caring services than those above them. This ‘pinch’ from the dual demands of working and caring may help to explain the widespread perception that family life is now more under pressure than it used to be, even though on average, those in employment now in fact work fewer hours than in the past.<sup>92</sup>

### The significance for public services

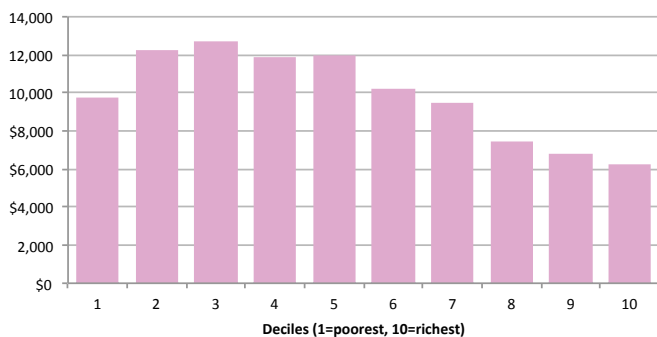
In the long run the importance of new working patterns to living standards has several significant implications. As a first resort it means that people living on low-to-middle incomes may prove ever more reliant on informal networks for caring support. In reality though, these support structures are already weakening, with families now more stretched in terms of

geography, making free informal care less easy to access than it used to be. Many of those on low-to-middle income will therefore rely ever more heavily on formal care in the years ahead, in particular forms of care subsidised or provided by government.

The use of formal care has already risen dramatically in recent years. The proportion of three and four year olds enrolled in school rose from 21 percent in 1970/71 to 63 percent in 2008/09, while the number of state nursery schools rose from 723 to 3,209 over the same period. In the private sector the UK nursery market quadrupled in size from 1990 to 2006.<sup>93</sup> Historic trends suggest that low-to-middle income households will be the main beneficiaries of such services in the coming years. The group has long been heavily reliant on public

services. Although it is difficult to allocate the benefits of public service spend, Figure 49 reflects a fairly widespread view that people in income deciles two to five benefit the most from spending on public services in cash terms.<sup>94</sup> It is worth noting that because of their greater use of education and healthcare families with children are particularly significant beneficiaries.

**Figure 49: The benefits of public services by decile of household income**  
£ annual cash equivalent gain



Source: Horton (2010)

90. Netmums childcare survey, Daycare Trust childcare costs survey

91. Social care costs and cut-offs – cutting off people on middle incomes

92. The average worker now works around 1.4 fewer hours per week than the average worker in 1992. ONS average actual weekly hours of work for all UK workers in main and second job (hours worked by male workers fell by 2.2 hours over the period, while average hours worked by women remained constant).

93. p. 28, ONS, Social Trends 40 (2010). The rapid growth of the private childcare market has been supported significantly by the growth in government support for childcare costs, particularly through the childcare element of the Working Tax Credit and direct support through the 3 and 4 year old offer.

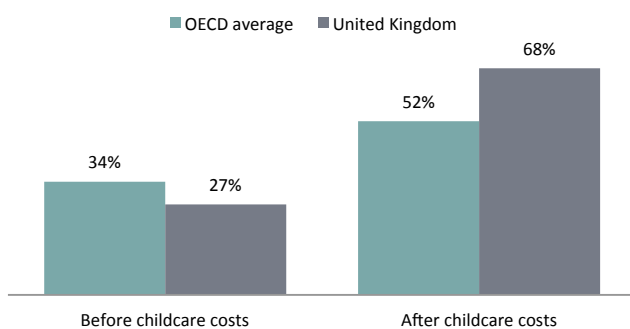
94. See, for example, The Distributional Impact of Public Spending in the UK, Cormac O’Dea and Ian Preston (2010) for an explanation of the challenges of allocating the benefits of public spending.

As we saw in Chapter 4 (Figure 28) spend on public services has been a significant contributor to trends in the living standards of people on low-to-middle incomes in recent years, when their value is understood in terms of benefits-in-kind. New working patterns suggest that public services are set to become even more important for wider reasons. A full understanding of the value of public services today needs to go far beyond a simple 'benefits-in-kind' allocation of government spend and include the increasing reliance of those on low-to-middle incomes on public services to enable them to raise their living standards through work.

### A new balance?

To date work in this area is underdeveloped, suggesting that political debate over public services may be overweighted towards more traditional 'core' public services, as opposed to 'new frontier' public services, such as childcare. These trends also raise important questions for government, not least: if certain services are becoming more important determinants

**Figure 50: The impact of childcare on work incentives**  
Effective tax rate on second income, 2008



Source: OECD Doing better for families (2011)

of household living standards, how does that change the right balance between raising people's living standards directly through the tax-benefit system, and helping families to raise their own living standards through spend on 'enabling' services?

The potential importance of dual-earning to living standards also makes it more important than ever that the tax-benefit system helps rather than hinders households that are seeking to make the transition from single-earning to dual-earning status. As Figure 50 shows, childcare costs in the UK represent a significant barrier to households seeking to raise their living standards by taking on a second income. The OECD calculates that while the effective tax rate on a second income for the average UK family is lower than the OECD average, at around 27 percent, once

childcare costs are included, it rises to 68 percent, more than 2.5 times as high, and significantly above the OECD average.<sup>95</sup> This figure increases even further, to 88 percent, for families with one median wage earner and one earner on a lower income.<sup>96</sup>

Finally, these trends suggests the increasing importance of workplace culture and employment legislation fit for a working population that includes a growing number of people formerly considered to be of retirement age. That is likely to put pressure not just on government, but also on employers' attitudes towards older workers, as well as increasing the need for more high quality, part-time opportunities.

95. OECD Doing better for families (2011)

96. *ibid*



## The nature of the challenge

This report has surveyed the long term trends that are shaping the living standards of people on low-to-middle incomes. In the aftermath of recessions it is natural for there to be concern about living standards. In the UK today the reasons to worry are even stronger than normal; disposable incomes are falling, credit remains unusually constrained, unemployment is high among key groups, and long standing elements of government support are being scaled back. The evidence on economic performance following recessions characterised by a credit crisis is bleak: extended periods of anaemic growth are the historical norm.

Given this, it is hardly surprising that today's defining political challenge is framed simply in terms of securing a steady recovery: how best can the UK return to sustained growth? The trends outlined in this report do nothing to undermine that challenge, or to question the importance of growth; it is, quite simply, a prerequisite to rising living standards. But a significant additional lesson does emerge from this report: on its own, *growth may not be enough*. In fact, a singular focus on growth obscures a more difficult question: growth is necessary for rising living standards, but what *sort* of growth should we be seeking? Is it really safe to assume that economic recovery in the coming years will lead directly into gains at the household level, or are other conditions also required – and, if so, what are they?

This report has set the scene for a major program of work on this issue. It steps back from today's immediate economic challenges to look over the longer term at the forces that have been driving the living standards of people on low-to-middle incomes. It has covered five areas of particular importance to material wellbeing: the changing pattern of wages and the jobs market, trends in household incomes, pressures from the rising cost of living, the importance of housing, assets and debt, and the rise of new working patterns and their implications for public services. The evidence set out here is conclusive: the living standards of those on low-to-middle incomes were already faltering prior to the recession, when economic growth was still strong. Today's pressures on this group aren't just the result of a post-recession hangover, they are long-term and structural.

Looked at from another angle, the report suggests that the rising living standards enjoyed by Britain's workers in the latter half of the twentieth century weren't the product of a cast iron rule that says 'living standards always rise when the economy grows'. Instead they were contingent on the characteristics of the economy at the time and, specifically, a series of successive social and economic 'waves' that, in different ways, made sure that growth fed through into prosperity. In the post-war decades new technologies interacted with the labour market overall in such a way as to replace low-skilled jobs with higher-skilled ones. Together with the widening of educational opportunity this helped to lift wages. In the 1970s and 1980s female participation in the labour market rose rapidly, becoming a powerful driver of household incomes. Then, from the late 1980s onwards, financial deregulation resulted in credit becoming far more freely available to those on modest incomes. That served to prop up living standards as well as fuel a housing boom. Into the 2000s an expanding system of tax credits boosted the incomes of those in work on modest pay.

For a variety of reasons, each of these waves is no longer boosting the living standards of ordinary workers to the same degree. In fact, the upward march of living standards had already started to flatten out prior to the recession, as these major drivers of living standards petered out. To answer the title question posed by this report: it is no longer safe to assume that a return to growth will lead to gain.

The challenge this raises for our politicians and policy-makers is far from trivial. Many of our most practiced political dictums rest heavily on the assumption that growth is all we need. Today, the idea that economic growth begets prosperity will ring hollow to the millions of people who experienced five years of stagnant wages from 2003 to 2008, while the economy boomed. A mantra of ‘high-tech, high-skill employment’ simply doesn’t speak to the millions of employees who see their future panning out in Britain’s expanding low-skill, low-tech, non-tradable, service sectors. Likewise, a singular focus on home-ownership just won’t connect with a generation in which more than two in five of those on low-to-middle incomes under 35 live in the private rental sector, many of whom have little prospect of owning.

As the first report to the Resolution Foundation *Commission on Living Standards* this document doesn’t intend to provide a set of policy responses for this new world. Instead, it has sought to clarify the nature of the challenge and to set the scene for more detailed work. This will include work on the key questions that emerge from this report, each of which will be critical to solving the living standards challenge in the decades ahead:

- + **The economy and jobs market** – is the ‘decoupling’ of economic growth from gains in living standards for people on low-to-middle incomes a feature of all 21<sup>st</sup> century advanced economies, or is it specific to particular countries, and can it be mitigated by economic policy and certain labour market institutions?
- + **The tax-benefit system** – what would our tax-benefit system look like if it was designed to improve the economic position of those on low-to-middle incomes over the long-term? How would we prioritise efforts, for instance, between in-work support via tax credits and reform of the tax system through tax rates and thresholds?
- + **The cost of living** – which price pressures are most keenly felt by low-to-middle income households, and what can and can’t be done about the ‘new inflation’ hitting family budgets?
- + **Housing, assets and debt** – given the fallout from the financial crisis and recession what are the longer term prospects for savings, credit, and debt for those on low-to-middle incomes, and where are our efforts best targeted when it comes to housing policy for this group?
- + **Working patterns** – what sort of support is needed to help more people – such as older workers, and those with young children – to raise their living standards through work; and in doing so, what is the right balance between supporting incomes through tax credits, and investment in services like childcare?

The Commission will be working with a wide range of organisations in developing answers to these questions and the major, strategic challenges they raise for government, business and civil society organisations. If you are interested in contributing to that work please do get in touch at: [commission@resolutionfoundation.org](mailto:commission@resolutionfoundation.org)

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