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

## Chapter 2 Stagnation

# Chapter summary

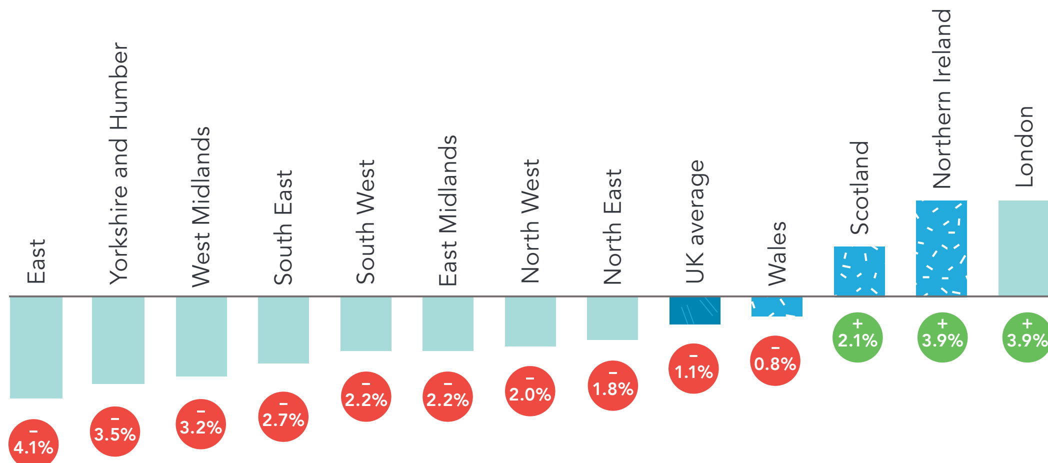
- The incomes of low to middle income households grew by just 0.3 per cent a year from 2003 to 2008 even while the UK economy grew at 1.4 per cent a year.
- This income stagnation was caused by flat-lining wages for both men and women leaving tax credits as the only source of income growth among this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

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

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

Since the recession of 2008–09 there has been an unprecedented decline in the real incomes of those in low to middle income households (Figure 2.1). Yet as we saw in Chapter 1, this period has been hard partly because incomes for low to middle income Britain were already stagnating in the pre-crisis period from 2003 to 2008, with an average annual growth rate of just 0.3 per cent from 2003-04 to 2008-09.[1] This was despite a broadly benign macroeconomic environment in this period, with UK per capita GDP growing by 7 per cent as a whole, an average annual rate of growth of 1.4 per cent.[2] Inflation was modest, though not as low as it had been in the late 1990s, while overall employment levels were relatively strong.

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




Source: ONS, Gross Disposable Household Income per head

**This was driven by weak or negative growth in earnings**

The key cause of low-income growth in this period was stagnant earnings. A middle earner in 2008 did not earn noticeably more than a middle earner in 2003. Median hourly earnings for men grew by 0.1 per cent a year in real terms from 2003 to 2008 while weekly earnings fell 0.2 per cent. For women hourly pay rose by 0.7 per cent a year but weekly pay rose by only 0.3 per cent a year.[3] Even this short-term period of weak wage growth had a big effect. If wages had kept growing at the same pace as they did from 1977 to 2003, a typical middle earner would have entered 2008 being paid over £2,000 more a year.[4]

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

## In depth 2.1: Low to middle income households in recession

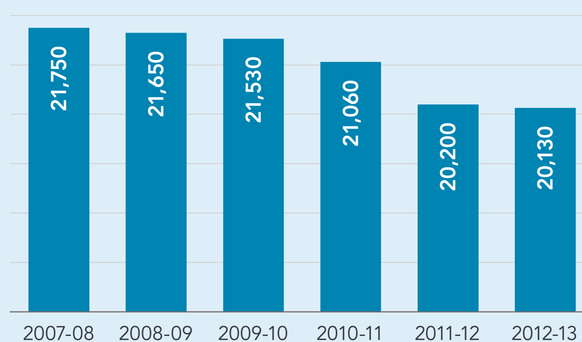
Since the financial crisis fed through to the real economy in 2009, employment has fallen and wages have failed to keep pace with inflation across much of the earnings distribution. While increased state support in the early stages of the recession offset falling earnings, significant cuts to tax credits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

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

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

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

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




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

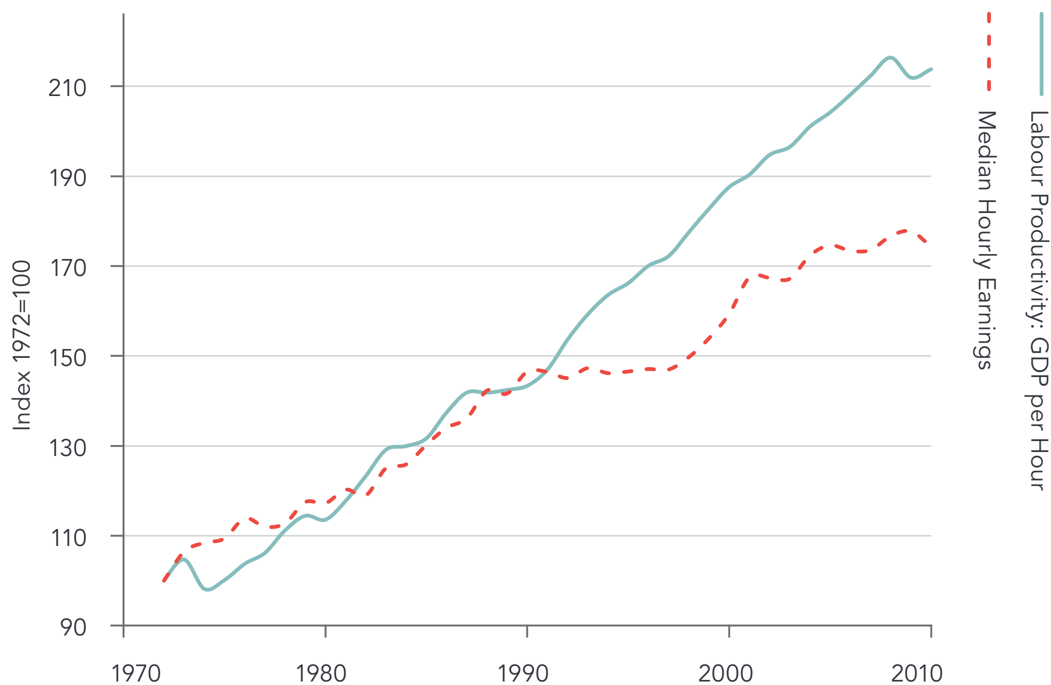
[5] Low to middle income workers are significantly over-represented in the five occupational categories elementary occupations, sales and customer services, personal services, process and machinery operatives and skilled trades. Together, these categories accounted for three-quarters of the overall increase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

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

As a result, the wage slowdown proved to be a troubling decoupling of overall economic performance from the financial health of households. Figure 2.3 illustrates the relationship between productivity and median wages, showing the widening gap from the early 2000s. By the time the 2008 crisis struck, median earnings for all workers had already begun to lag markedly behind GDP per hour worked.

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

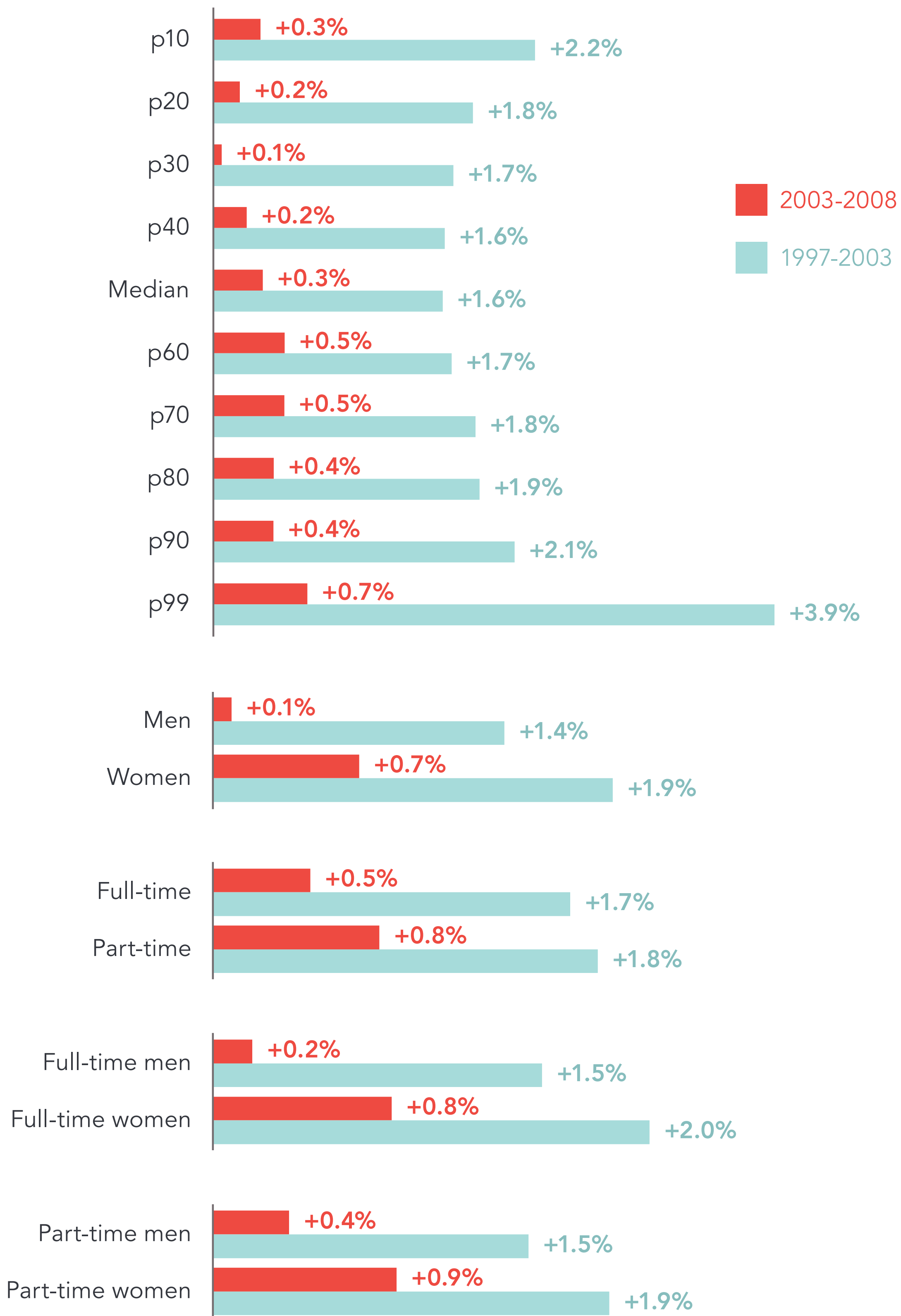
**Figure 2.3: UK trends in hourly earnings and labour productivity, 1970–2010**




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

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

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




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

### The male employment rate declined

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

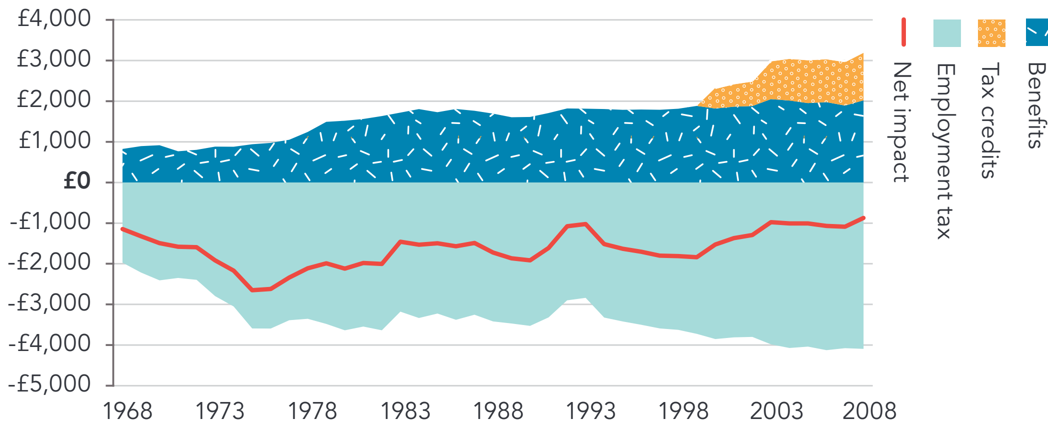
With earnings growth faltering, income growth came from tax credits, benefits and hours worked by women

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

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

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

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



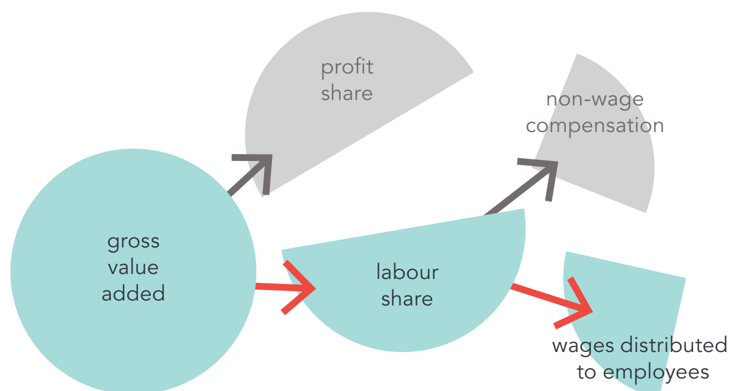

Note: Tax includes Income Tax, employee National Insurance and Council Tax. Source: Resolution Foundation analysis of data provided by Institute for Fiscal Studies (IFS)

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

# 2b Where did the money go?

The combination of growth and stagnation in this period presents a conundrum. If growth was not feeding through to those in the bottom half, where did the value being created in the UK economy go? We can answer this question specifically for this period by breaking down the path from GDP to wages into three stages: the growth that flows to all workers as compensation (the labour share) versus the portion that goes to capital as profits (the profit share); the labour share that goes directly into wages (the wage share) versus non-wage compensation like employer National Insurance Contributions (NICs) and pension contributions; and the wages that go to employees in the bottom half rather than those in the top half (the distribution of wages) (Figure 2.6).

**Figure 2.6: How GDP flows into wages**




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

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

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

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

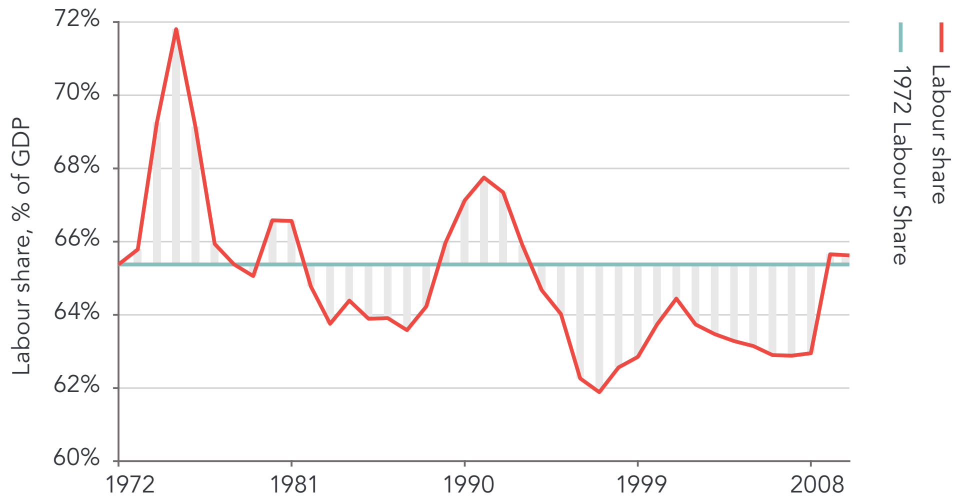
This long-run fluctuation of the labour share around a steady average fits economic theory, which suggests that the labour share acts in a counter-cyclical fashion, with profits rising in boom years, reducing the labour share, only to return in times of contraction.[16] The difference between this and other accounts that show a long-term steady decline in the UK labour share is that we control for self-employment. This rose strongly in the 1980s and (because self-employment income is classified in the profit share) can be misconstrued as a fall in the labour share of income.

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

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

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

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

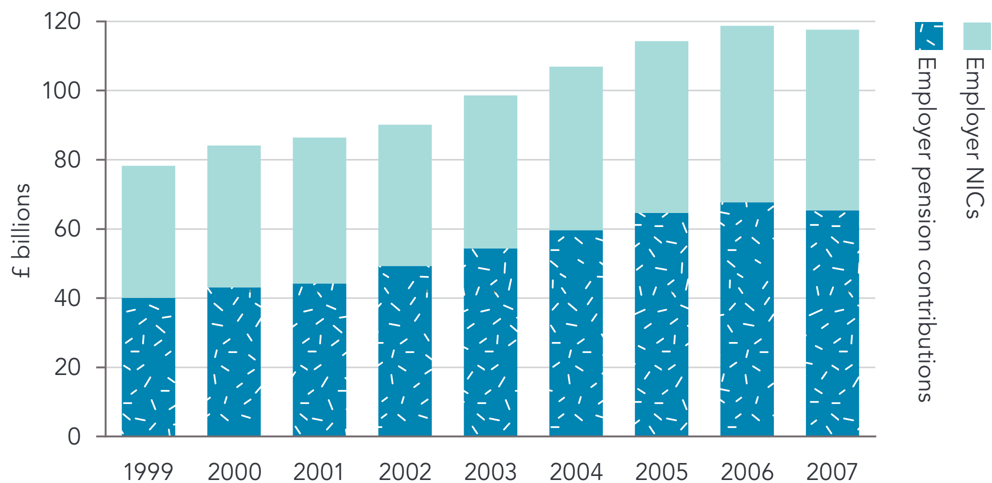



Note: All measures controlled for self-employment. Source: Analysis from Pessoa and Van Reenen, Decoupling of Wage Growth and Productivity Growth?;[17] ONS, Organisation for Economic Co-operation and Development (OECD); and EU KLEMS

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

At the same time as the labour share fell, so did the portion of compensation going into wages. Figure 2.8 illustrates this decline, showing how the value of the two key components of non-wage compensation changed between 1999 and 2007. Employer NICs grew by 37 per cent from £38 billion to £52 billion in real terms from 1999 to 2007[21] while employer pension contributions grew 63 per cent from £40 billion to £65 billion in the same period. It is therefore pension contributions that explain most of the decline. Their strong growth in this period in part reflects a growing pensioner population but also the fact that employers were making catch-up payments to reduce deficits in pension schemes.[22] It may also reflect a range of new legislation that affected pension schemes in the 1990s.[23]

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




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

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

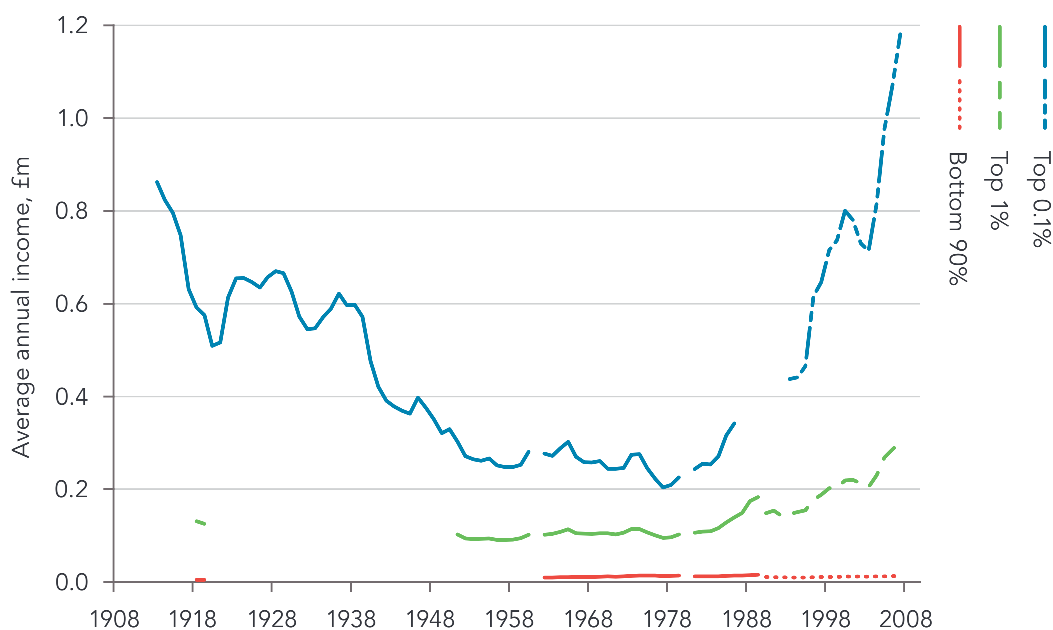
There is reason to believe that at least part of this trend will continue. Inflationary pressure on non-wage compensation is closely linked to our ageing society, whether through pension contributions or healthcare costs. In the case of pension contributions, rising life expectancy forecasts, combined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

The trade-off between National Insurance and wages raises bigger questions about the size and role of the state, beyond the scope of our work. Yet our research also shows that non-wage compensation has risen in almost every advanced economy for which there is data over the past 30 years, suggesting that new pressures on the wage share may be a reality of life in a 21st-century economy as the UK makes up for years of under-saving and adapts to the need to support a larger older population from a relatively smaller working-age population.

### Soaring incomes at the top may have had some effect

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

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




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

Although this highly skewed growth affected wages at the median, the top income group ultimately makes up a small portion of overall income. At its peak in 2007, the top 0.1 per cent accounted for around 6 per cent of all UK income. While grossly disproportionate, its impact on wages in the bottom half is likely to be far smaller than the impact of the more general growth in inequality that occurred in the 1980s. It also seems likely that extreme income growth at the very top requires different explanations to inequality more generally. For example, research in the US suggests that for much of the 20th century pay in the finance sector was broadly equivalent to what would be predicted by employees' levels of skills and employment risk.[26] In just two periods, pay in finance has diverged sharply from the rest of the private sector, suggesting pay over and above market rates (in technical terms, rent seeking behaviour): from the mid-1920s to the mid-1930s and from the mid-1990s to 2006. Other work suggests that similar dynamics have taken place in the UK.[27]

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

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

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

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

**Tax credits are unlikely to have significantly depressed wage growth**

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

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

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

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

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

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

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

These findings make sense because of the design of the current system. Because tax credits are targeted at low and modest income households (rather than low-paid workers) – as is also the case with the forthcoming Universal Credit – their effect on pay is thinly spread.[33] Payments are also no longer visible to employers so it is hard to consciously pay recipients less. Since the National Minimum Wage is also much stronger in the UK than in the US, it seems likely that any effect of tax credits on wages will continue to be small.

**Others have claimed that rising immigration has held down wages**

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

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

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

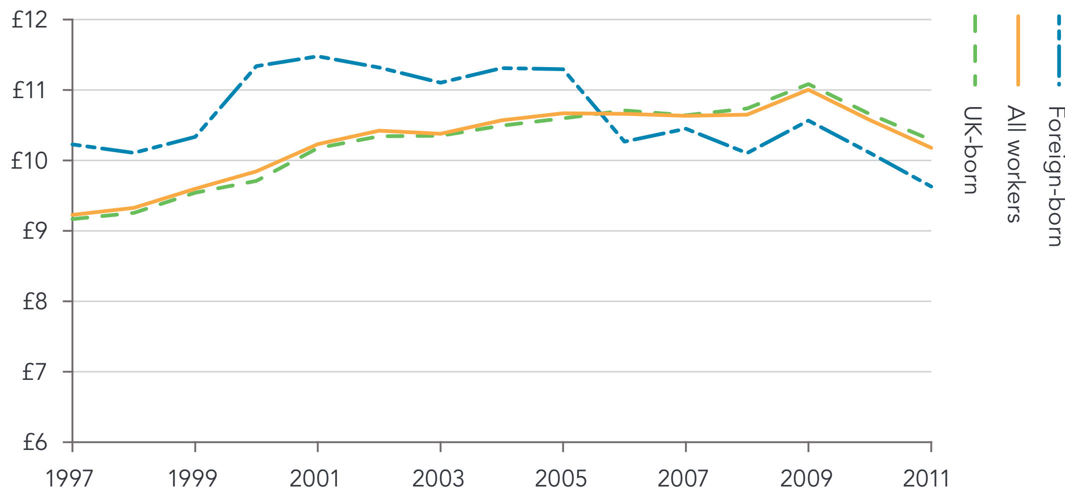
workers nor on the overall level of unemployment, findings which hold both nationally and in local labour markets.[35] The most detailed study to date finds no impact from A8 migration on either unemployment or wages at any point in the wage distribution or for any subgroup, including the young and low skilled.[36] The largest effect found in any study suggests that a 10 percentage point increase in the share of immigrants working in semi and unskilled services – care homes, bars, shops, restaurants and cleaning – is associated with a 5 per cent reduction in pay.[37] Given the weight of the literature, this seems likely to be an extreme upper bound.

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

There are a number of reasons why increased immigration doesn't have the effect on wages one might expect.[38] The UK has a large and diverse traded sector and doesn't contain a fixed number of jobs, so increased immigration is likely to affect the mix of output rather than the level of employment.[39] It also seems that there is relatively little substitution between the immigrant and native workforces. To the extent there is an effect on wages, it likely limits the wages of other immigrants.[40]

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

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




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

So particular parts of the policy environment, from tax credits to immigration, account for at most a small part of the faltering of wages. This is not to say that policy in general plays no role. As we will see in Section 2, the policy environment helps to explain why some countries do better than others in mitigating international trends.

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

# 2d The build up of household debt

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

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

### The stock of UK household debt has soared

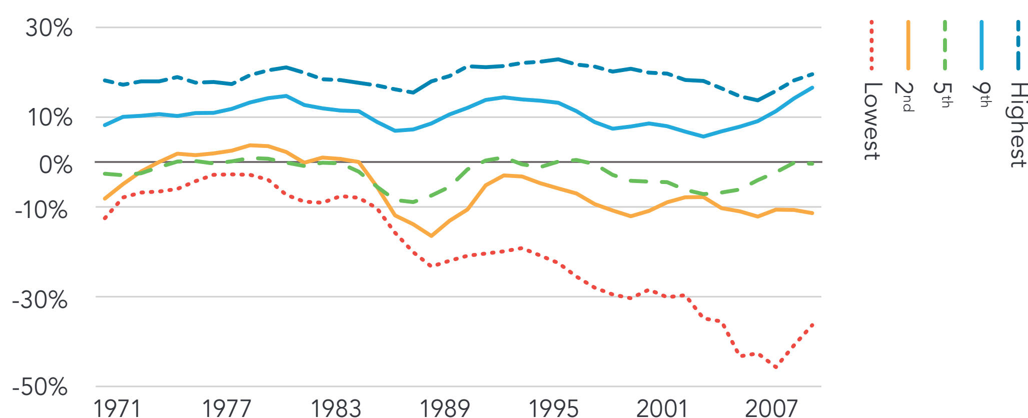
However, this is different from saying that the increase in household debt before the crisis was the result of unsustainable consumption. Certainly the stock of UK household debt rose sharply in the run up to the crisis with the household debt to income ratio growing from 93 per cent in 1995 to 143 per cent in 2010. However, as economic commentators have pointed out, nearly all of this rise is accounted for by mortgages and secured loans. Only a small fraction of the increased stock of debt is made up by unsecured personal loans and credit cards, that more directly finance consumption.

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

### The distribution of debt could mean that many households face difficulties

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

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

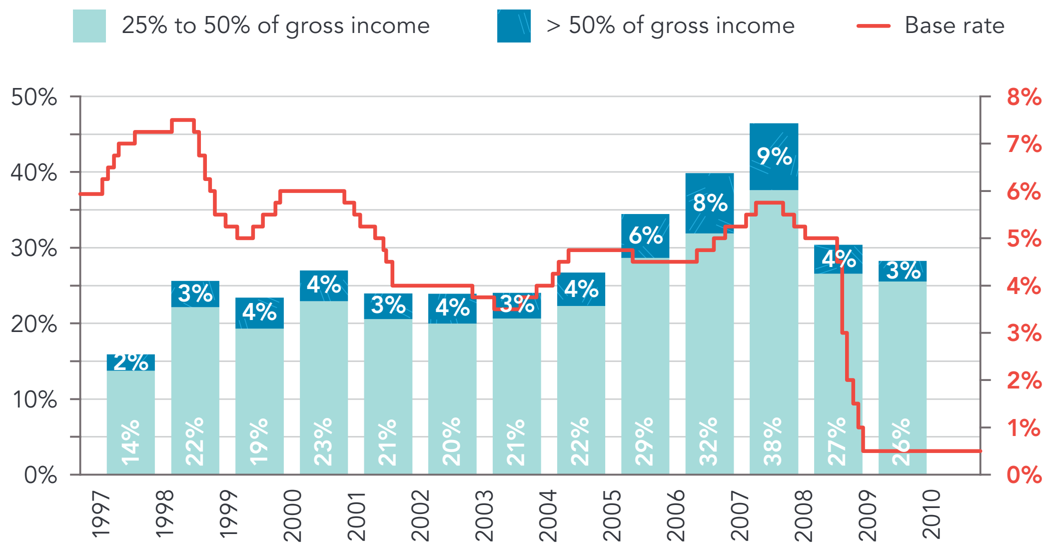



Notes: Figures reported are plutocratic saving ratios. Plutocratic measure reflects the fact that rich households contribute far more than other households to total saving and so are given a higher weight in the average. Source: Estimated from the Family Expenditure Survey (FES), 1971–2010; and NIESR,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

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

Either way, the distributional aspect of this story will be key. The rise of mortgage debt in the build up to 2008 was heavily supported by loose credit: in 2006-07, 20 per cent of low to middle income first-time buyers bought with a 100 per cent mortgage.[46] Importantly, our analysis shows that even as interest rates have fallen to historic lows, the reported burden of mortgage repayments for low to middle income households is *higher* than in the mid-1990s when the Bank of England base rate stood at 7 per cent (Figure 2.12). In the medium term, households in the bottom half are likely to face a painful combination of weak income growth, high debt to income ratios, high loan to value ratios, and rising interest rates, all starting from a position in which debt servicing costs are *already* proving burdensome.

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




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

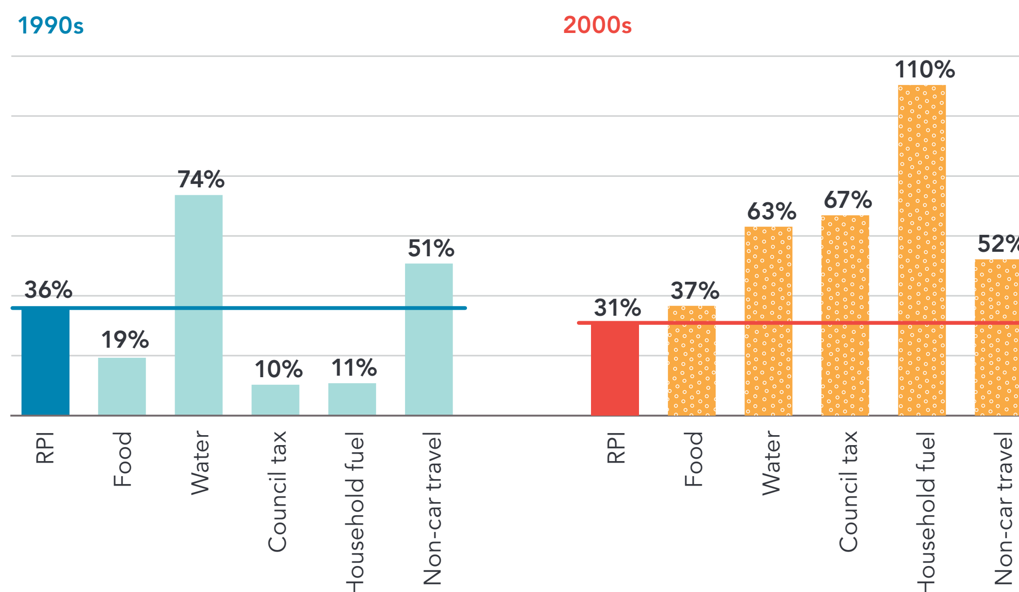
# 2e The soaring cost of essentials

The rising price of essentials aggravated the squeeze on real incomes

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

Even without these extra costs, recent trends in prices alone have disadvantaged lower income households. Although all of the above analysis has controlled for inflation, changes in relative prices that affect lower income households are not picked up in headline measures of inflation, which are based on the average shopping basket.[49] This is important because from the early 2000s, the cost of basic goods, including staple foods, household fuel and Council Tax, rose far faster than headline inflation (Figure 2.13). This sharply eroded the purchasing power of low to middle income households, who spend a larger proportion of their budgets on essential goods than higher income households.

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

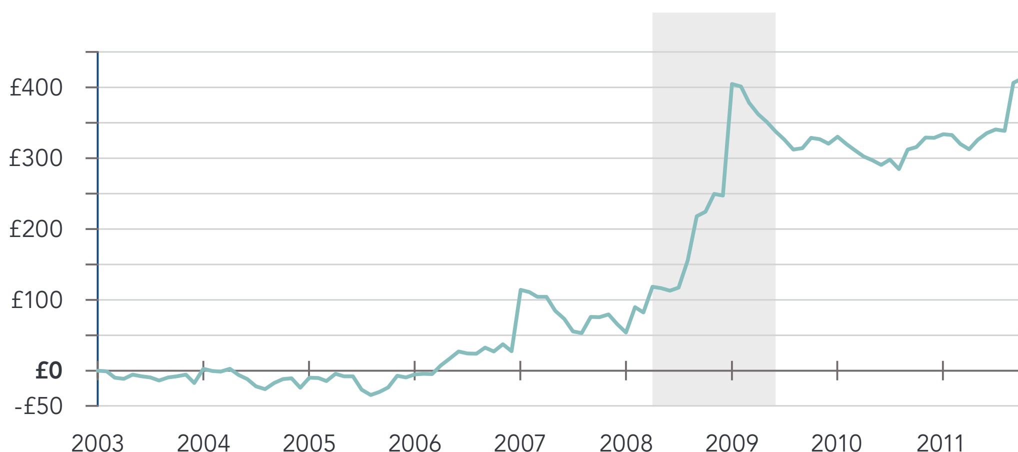



Note: 1990s = April 1990 to April 2000; 2000s = April 2000 to April 2010. Source: ONS category-level price inflation, Hirsch, Plunkett and Beckhelling Priced Out[50]

Although often missed from our public debate, the impact of this relative shift in prices has been substantial. Consumer price indices constructed specifically for low to middle income and higher income households on the basis of their consumption patterns show that prices were broadly in line for the two groups up to 2006 but then began to diverge, particularly in 2008 and 2009.[51] At its peak in 2009 the real inflation rate experienced by low to middle income households was more than an entire percentage point (1.1 per cent) higher than the inflation rate experienced by higher income households. The cumulative impact of these different inflation rates was that at their peak in 2009 the typical basket of goods for a low to middle income family cost £400 more than it would have if inflation had been at the level experienced by the higher income group since 2000 (Figure 2.14).[52]

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

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




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

It is very hard to predict whether such price rises will continue. It is reasonable to think that some of their underlying drivers, such as the growth of emerging economies, will do so.[53] This is not to say that policymakers are powerless; the way these trends impact on Britain's households is shaped by UK markets, so the government may be able to make a difference at the margins. It is also the case that some categories in which there have been particularly strong price rises – particularly work-related costs like transport and childcare – depend on mostly domestic factors and are therefore more tractable for UK policymakers.

## 2f Conclusion

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

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