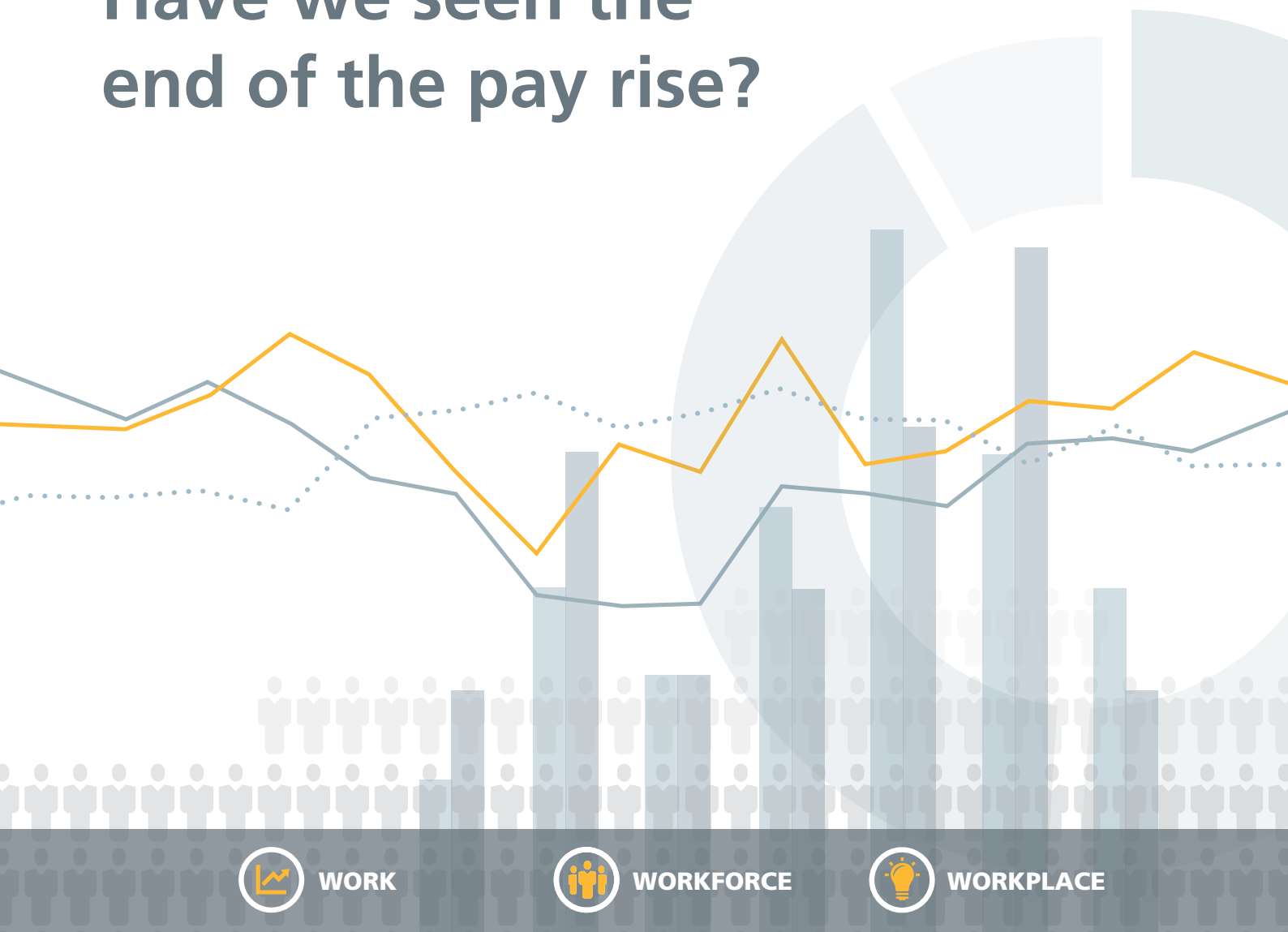


# MEGATRENDS

The trends shaping work and working lives

## Have we seen the end of the pay rise?



WORK



WORKFORCE



WORKPLACE

# Championing better work and working lives

The CIPD's purpose is to **champion better work and working lives** by improving practices in people and organisation development, for the benefit of individuals, businesses, economies and society. Our research work plays a critical role – providing the content and credibility for us to drive practice, raise standards and offer advice, guidance and practical support to the profession. Our research also informs our advocacy and engagement with policy-makers and other opinion-formers on behalf of the profession we represent.

To increase our impact, in service of our purpose, we're focusing our research agenda on three core themes: the future of **work**, the diverse and changing nature of the **workforce**, and the culture and organisation of the **workplace**.

## WORK

Our focus on work includes what work is and where, when and how work takes place, as well as trends and changes in skills and job needs, changing career patterns, global mobility, technological developments and new ways of working.



## WORKFORCE

Our focus on the workforce includes demographics, generational shifts, attitudes and expectations, the changing skills base and trends in learning and education.

## WORKPLACE

Our focus on the workplace includes how organisations are evolving and adapting, understanding of culture, trust and engagement, and how people are best organised, developed, managed, motivated and rewarded to perform at their best.

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The CIPD is the professional body for HR and people development. We have over 130,000 members internationally – working in HR, learning and development, people management and consulting across private businesses and organisations in the public and voluntary sectors. We are an independent and not-for-profit organisation, guided in our work by the evidence and the front-line experience of our members.

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#megatrends



# Megatrends

## Have we seen the end of the pay rise?

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# MEGATRENDS

## Have we seen the end of the pay rise?

### Foreword

In our recent *Megatrends* publication, we set out some of the big economic and social trends that have helped to shape work and working life in recent decades, such as de-industrialisation and demographic change. While the future is uncertain, it seems likely that many of these trends will continue to have an impact for years or even decades to come. Equally, past trends can stop having an impact – or even go into reverse – and new trends will emerge.

In this turbulent and changing environment, organisations need to be agile – to spot changing trends affecting them, work out how to respond to them and, by doing so, make them work to their benefit and thus maintain an advantage on the competition.

In *Megatrends*, we identified four potential emerging trends – issues where the data suggest there might have been a shift in practice, attitudes or outcomes that would have a significant impact on work and working lives. However, precisely because these are relatively new developments, it is still unclear whether these really are new trends or whether they are short-term disturbances to established patterns due to factors such as the economic difficulties that the UK and many other countries have faced in recent years.

In this series of publications, we take each of these four potential emerging trends and review the relevant evidence, discuss the potential explanations and explore the potential implications for work and working lives – including for business, for HR practice and for policy-makers. The aim is to draw the attention of our stakeholders to these issues, present the relevant facts and provide a platform for further discussion.

This third publication in the series tackles one of the ‘facts of working life’ in the UK, namely the long-term trend for pay to rise faster than prices. Since 2009, this trend has come to a halt. Depending on the measure of inflation used, average regular weekly earnings (excluding bonuses) are now between 8% and 10.4% lower in real terms than in January 2009. This has not happened before for at least half a century and quite probably much longer.

The deepest recession in the post-War period started this process but this was not the cause by itself. Employers had to take tough decisions and wages were often frozen, or even cut, in order to preserve jobs. More competitive markets meant the ability of labour market insiders to maintain the real value of wages has diminished. Labour productivity fell and is still nearly 4% below its pre-recession peak.

The medium-term outlook for earnings depends on what happens to productivity and whether the recession has had a temporary or semi-permanent effect on the UK economy. Combined with longer-term questions about our growth potential, there is a real possibility we might be in for a sustained period of little or no growth in real earnings. This is not a flight of fancy. The average full-time worker in the USA earns no more in real terms now than they did in 1979.

Such a scenario would present profound challenges for employers, employees and policy-makers. The expectation that employment equals steady (even if modest) improvement in living standards is deeply engrained. The psychological contract would need to be redefined and employers would have to rely more on other forms of motivation that do not involve a regular pay rise. Individuals would need to adjust their consumption, borrowing and retirement patterns. Policy-makers would face a dilemma – how to increase wages without sacrificing jobs.

These difficult choices can be avoided if we can raise UK productivity. This is about making smart investment choices and getting the best from all our assets – including our people.

In this publication, we provide more evidence on these issues as the basis for a strategic conversation. We encourage every reader to say what you think.



A handwritten signature in black ink that reads "Peter Cheese". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

Chief Executive, CIPD

## Summary of key findings

- For most of the post-War period, average earnings have increased faster than prices, meaning real terms increases in average earnings.
- However, since January 2009, average weekly earnings (excluding bonuses) have fallen by 8% if the Consumer Price Index (CPI) is used as the measure of inflation and by 10.2% if the Retail Price Index (RPI) is used as the measure of inflation.
- Such a deep and prolonged period of falling real average earnings is unique in the post-War period.
- The same pattern is found if other data sources are used or if different measures of pay are used.
- This pattern is widespread across the workforce, affecting men and women, public and private sectors, all parts of the UK and most industries. The drop in real earnings has been slightly greater at the top of the earnings distribution than at the bottom.
- The self-employed have seen an even bigger drop in their real average earnings – by 25–30% in the three years to 2010–11.
- Increased employer pension and social security contributions mean that the impact on total reward might not have been as intense – but this effect is not enough to change the overall picture.
- The 2008–09 recession and its aftermath have seen an increase in the frequency of pay freezes in both private and public sectors and some nominal wage cuts. Employers have also used other techniques to target reward more effectively, such as freezing or cutting starting salaries or paying non-consolidated bonuses rather than increasing pay scales.
- Falling real earnings are not unique to the UK. Nominal wage cuts were common in a number of countries badly affected by the recession, including Ireland and the Baltic States. Between 2008 and 2012, annual average earnings fell in real terms in five other OECD countries where data is available. In the USA, real earnings for the median full-time worker were no higher in 2013 than they were in 1979.
- The most severe recession in the post-War period provided the impetus for real wage reductions. Many employers and employees said this was the reason why pay had been frozen or failed to keep pace with inflation.
- However, this did not happen in the recessions of the early 1980s and early 1990s. What had changed was the context. In particular, the UK appears to have seen a decline in ‘insider power’ – the ability of those in secure employment to protect their wages at the expense of the unemployed or those in less secure employment. This has meant that more employers have made choices over pay, hours and other conditions that have created or preserved jobs – sometimes with the assent, and even encouragement, of employees.
- The recession also saw a sharp fall in labour productivity – the amount of value added/created per hour worked. The exact causes are still uncertain but less productivity has meant less money available for wages.
- Average earnings continue to lag behind inflation. In the short term, this looks set to continue. Most employers do not expect an increase in average earnings growth in the coming months.
- As economic growth consolidates, forecasters expect average earnings growth to increase, but there is uncertainty whether this will produce real-terms growth. A lot depends on how quickly labour productivity – which is still nearly 4% below its pre-recession level – recovers.
- Employee satisfaction with pay has held up remarkably well, but this may change with stronger economic growth. Employers may need to adapt engagement and motivation strategies if they cannot deliver (implicit) assumptions of steady increases in real pay.
- In the long term, real earnings growth can only continue if we see sustained growth in labour productivity. A wide range of government policies can have a positive (or negative) influence on productivity, meaning there is an important role for public policy as well as business.

# What does the evidence say?

## What has happened to average earnings?

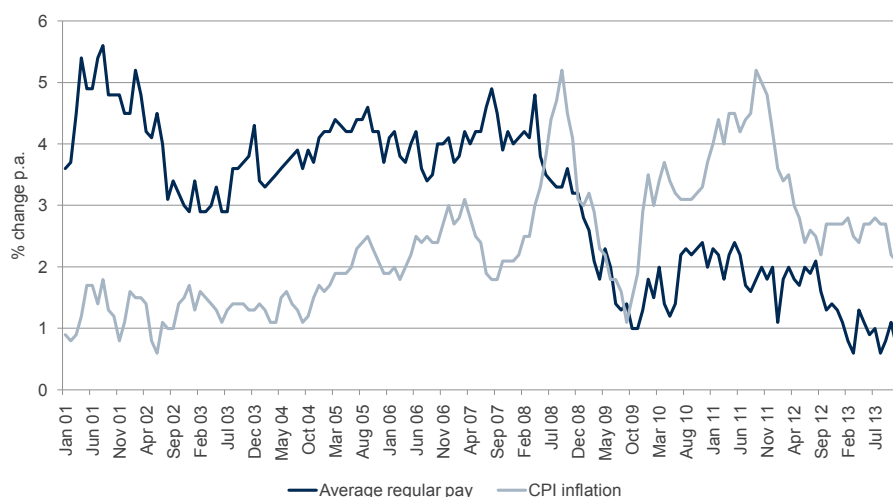
Between January 2001 and May 2008, the growth rate of average weekly earnings (excluding bonus payments)<sup>1</sup> consistently exceeded the official measure of consumer price inflation, meaning that average earnings increased in real terms throughout this period (see Figure 1).

During 2008 and 2009, average earnings growth fell from nearly 5% a year to just 1% a year. Inflation

peaked at 5.2% in September 2008 but then fell to just 1.1% by September 2009. The result was a period where inflation tended to grow faster than average earnings – meaning reductions in real terms – but 2009 did also see months when inflation was falling faster than earnings. However, since September 2009, inflation has consistently exceeded average earnings growth.

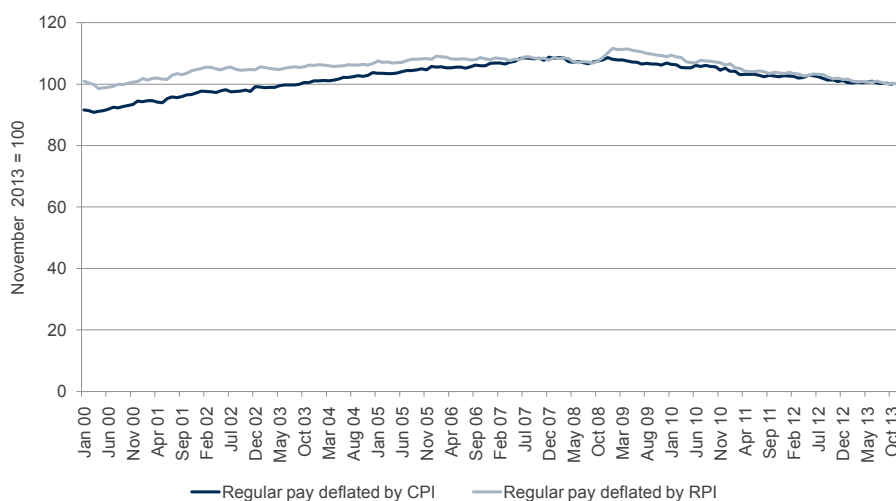
The size of the fall in the real value of average earnings depends on which measure of inflation is used (see Figure 2). Using the CPI, real average weekly earnings reached their peak in January 2009 and by November 2013

**Figure 1: Average earnings growth and CPI inflation, 2001–2013**



Average earnings data are Average Weekly Earnings (excluding bonus payments), GB, seasonally adjusted  
CPI data are UK, seasonally adjusted  
Source: Office for National Statistics

**Figure 2: Real average weekly earnings, 2000–2013**



Regular earnings data are Average Weekly Earnings (excluding bonus payments), GB, seasonally adjusted  
CPI and RPI data are UK, seasonally adjusted  
Source: Office for National Statistics

had fallen by 8% to just above their level in October 2003. If, instead, the RPI is used as the deflator, real average earnings also peaked in January 2009 but have fallen since by 10.4%, standing currently just above their level in September 2000. The choice of inflation measure is a matter of debate (see the box on page 7).

The Annual Survey of Hours and Earnings (ASHE), which collects more detailed pay data each April, shows a similar pattern: median weekly earnings for full-time employees peaked in real terms in 2008 and by 2013 had fallen by 7.7% if deflated by the CPI (see Figure 3).

This pattern applies for all measures of pay chosen. The fall in median hourly earnings (including or excluding overtime pay) is not much smaller (6.3%) than the fall in median weekly earnings.

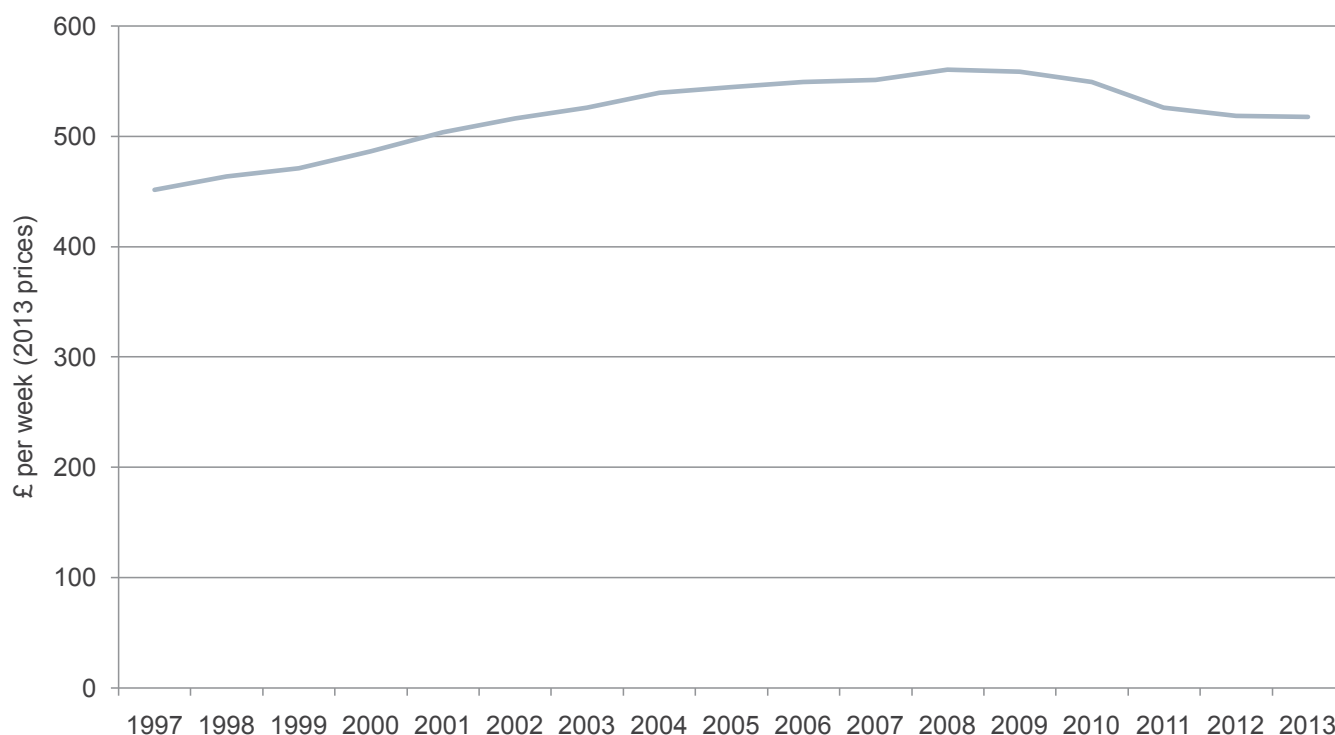
The current official series on earnings do not extend back beyond the late 1990s. However, some insight on earlier trends can be obtained from analysis of the Average Earnings Index (AEI), a series used to track short-term earnings growth that was published monthly between 1963 and its discontinuation in 2010. Note that

the Office for National Statistics (ONS) warns there are discontinuities in this series: in particular, the pre-1990 data were not revised to take account of changes to methodology made as a result of the 1999 review of the AEI.<sup>2</sup> Long-term trends in real earnings can be measured using the RPI measure of inflation because the CPI is not available before 1988 (see Figure 4, page 7).

The period from the 1960s to the end of the 1980s saw much greater variation in both wage growth and inflation than we have seen since the early 1990s (we believe this is a real feature of the data, coinciding with the introduction of inflation targeting, rather than the result of statistical discontinuities).

Although wage growth generally exceeded inflation, there were occasional episodes when inflation exceeded wage growth. During the 1970s, the gap between inflation and wage growth was dramatic at times – in June 1977, average earnings growth was 7.4% but RPI inflation was 17.7%, a gap of over 10 percentage points. These very large real-terms reductions occurred in periods when various policies to restrain wages meant that earnings growth slowed more quickly than inflation.

**Figure 3: Real average weekly earnings, 1997–2013**



Median full-time gross weekly earnings, UK, April of each year, deflated by the CPI.  
Source: Annual Survey of Hours and Earnings (ASHE).



## Which measure of inflation should be used to deflate earnings?

The CPI is the official measure used for international comparisons and for inflation targeting.

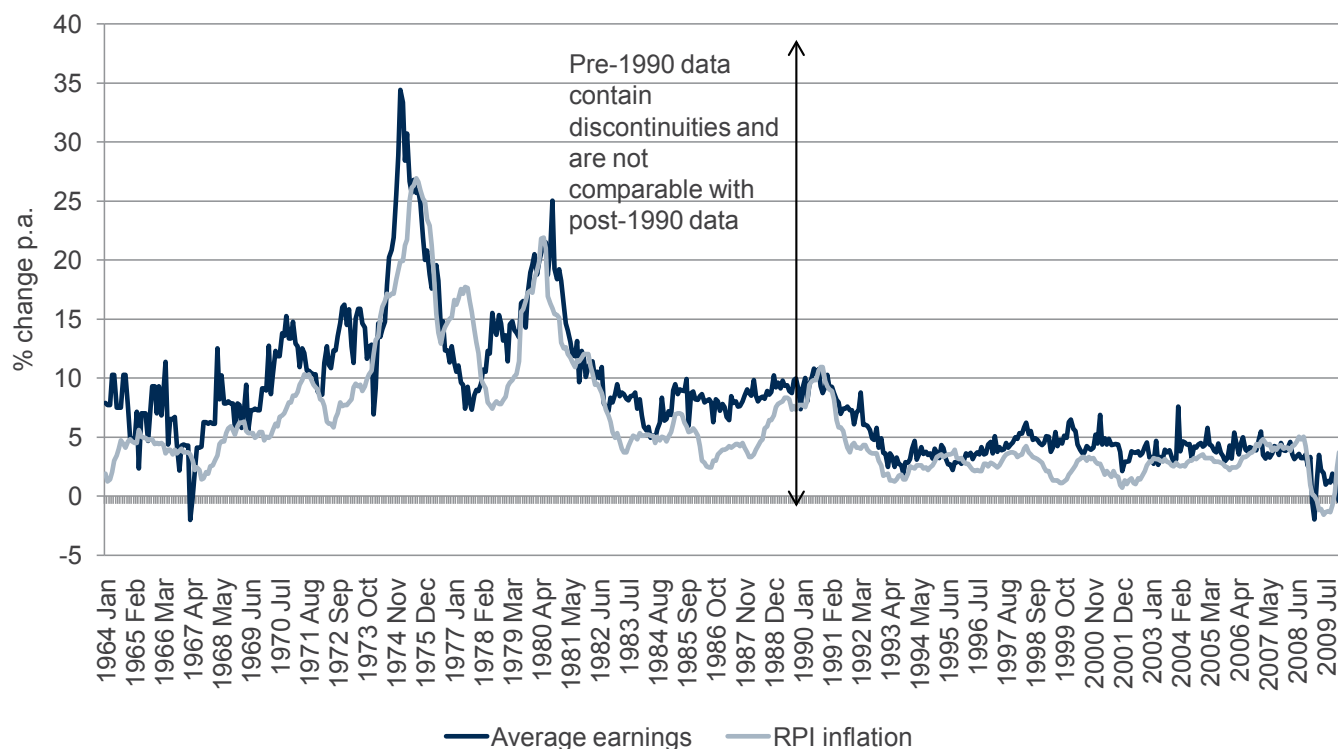
A recent survey of pay professionals by Incomes Data Services confirmed that RPI remains the measure of inflation most commonly referred to in making pay decisions. The RPI includes mortgage payments, whereas the CPI excludes the costs of owner-occupied housing.

The IFS state in their Living Standards Report for 2013 that the RPI ‘...is generally agreed to overstate inflation’. In addition, the RPI does not meet the technical standards required of a national statistic. The

ONS have produced two experimental series that fit somewhere between these two measures. CPIH is a series based on the CPI methodology but including the costs of owner-occupied housing. RPIJ is a series based on the RPI but with an adjustment so that it conforms to international standards for inflation measures.

Historically, RPI inflation has tended to exceed CPI inflation. Thus real average earnings deflated by the RPI show a slower rate of increase during the period between 2001 and 2009 and a faster rate of decrease in the period between 2009 and 2011. To give an example, using the three years’ data from December 2010 to November 2013, average regular pay fell by 4.4% in real terms if deflated by the CPI, compared with a 5.8% fall using the RPI, a fall of 4.1% using RPIJ and a fall of 3.8% using CPIH.

**Figure 4: Average earnings growth and RPI inflation, 1964–2010**

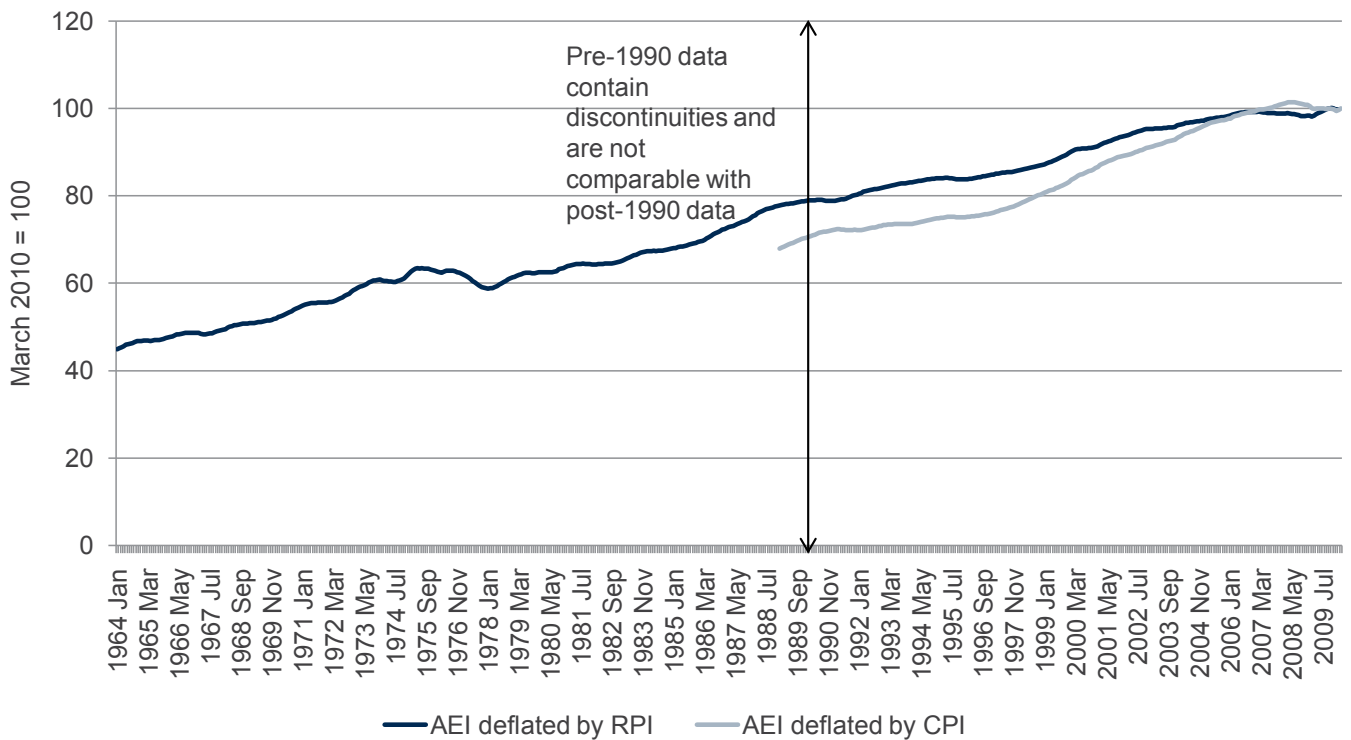


Average earnings data are the Average Earnings Index, GB, not seasonally adjusted, including bonuses.

RPI data are UK, seasonally adjusted.

Source: Office for National Statistics

**Figure 5: Real average earnings, 1964–2010**



Average earnings data are the Average Earnings Index, GB; a 12-month moving average is used to correct for seasonality and the timing of bonus payments.

RPI and CPI data are UK, seasonally adjusted.

Source: Office for National Statistics

In other periods, inflation increased more quickly than wages. However, wage levels typically 'caught up' with inflation very quickly. Periods when average earnings fell in real terms were relatively rare, typically brief and almost always shallow (see Figure 5).<sup>3</sup>

As before, real growth depends upon the measure of inflation used, with slower real earnings growth if the RPI is used as the deflator.

Between 1973 and 1995, there were seven periods when real average earnings – deflated by the RPI – fell for a noteworthy period (that is, for more than a single month or two). In all but one case, the peak-to-trough drop in real earnings was less than 2% and real earnings fell for less than one year. The exception was the period August 1976 to January 1978. During this 17-month period, average earnings fell by 6.5% in real terms and they did not regain their August 1976 (real) value until September 1980. Nevertheless, this is still a less pronounced and less prolonged fall in real wages than we are seeing at present. Indeed, this is probably the most sustained period of falling earnings that we have seen in the post-War period, possibly for considerably longer.

## What has happened to the process of pay determination?

The previous section reviewed trends in the aggregate data. Beneath this, we have seen changes in the make-up of earnings and how organisations determine pay.

*Megatrends* highlighted the decline we have seen in the extent of collective employment relations in the UK over the last three decades. One facet of this has been less collective bargaining over pay. In the private sector, collective bargaining has been in retreat for the last three decades, as documented in the periodic Workplace Employment Relations Study (WERS) surveys.<sup>4</sup> We have seen the virtual disappearance of multi-employer wage bargaining in the private sector (applying to just 2% of workplaces in 2011). Where collective bargaining remains, it is at a firm or plant level. In 2011, 31% of private sector employees were in workplaces where unions were recognised and just 16% of employees were covered by collective bargaining. In the public sector, recognised unions are still ubiquitous (present in workplaces covering 96% of employees in 2011) but less than half (44%) of public sector employees had their pay determined by collective bargaining. The latter was

a sharp fall on the equivalent figure for 2004 (68%) and was accompanied by an increase in the coverage of pay review bodies and ad hoc methods of pay determination (such as individualised pay-setting).

Since its introduction in 1999, the National Minimum Wage has introduced an additional external influence on wage determination in low-paid sectors, influencing the size of pay settlements in a third of private sector workplaces in 2011.

Regardless of whether or not employees are involved, most (larger) employers do have a formal process for reviewing pay, often including other forms of reward. This remains annual in most cases, although the percentage of workplaces where pay is reviewed on a less frequent basis has increased modestly over time (up from 6% of workplaces in 2004 to 10% in 2011 in the private sector and up from 8% in 2004 to 16% in 2011 in the public sector).<sup>5</sup>

The composition of earnings has changed over time. Some forms of supplementary payments associated with manual, industrial work, such as overtime payments and shift premia, have declined in importance.<sup>6</sup> However, broader measures of variable payment suggest there

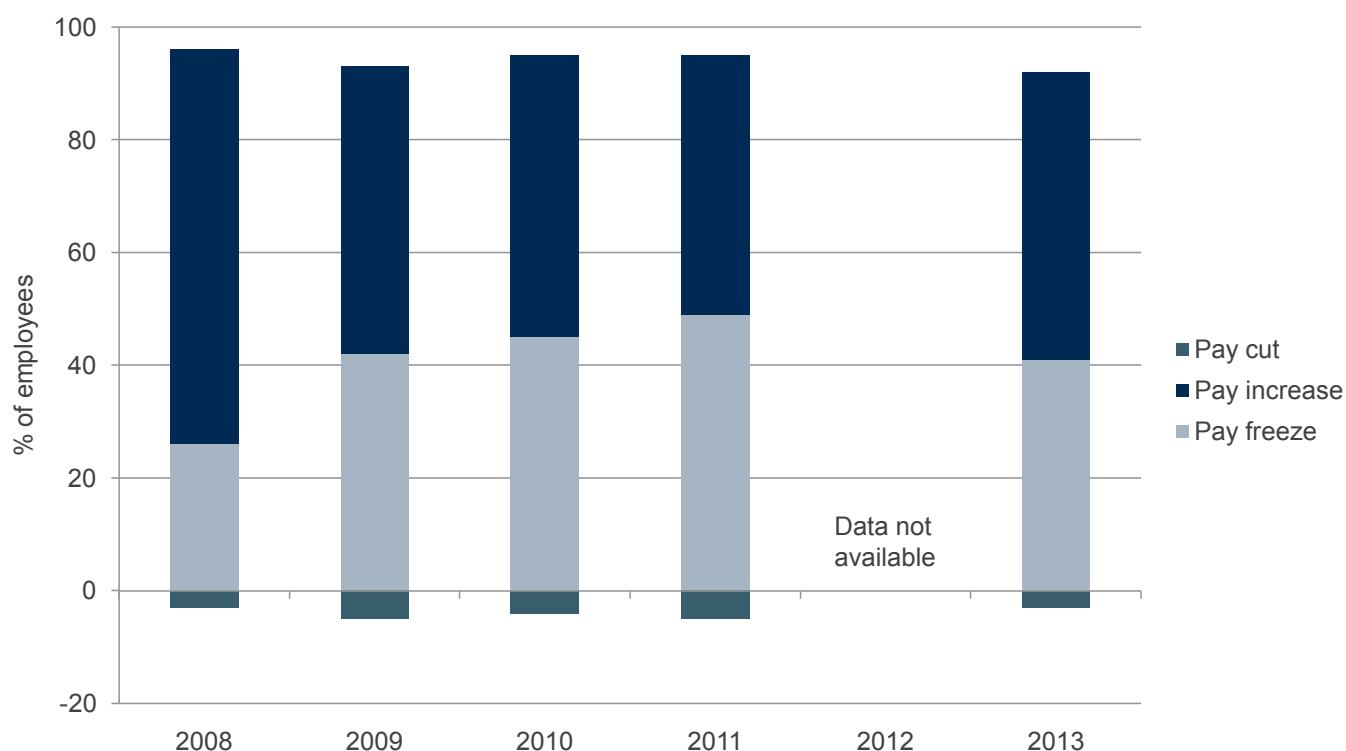
has been an increase in the proportion of employees whose earnings involve a variable or performance-related component or incentive scheme alongside a fixed wage. In 2011, 59% of workplaces in WERS 2011 used one or more of merit pay, performance-related pay (individual or group-based), profit-related pay or employee share ownership. A fifth (20%) of employees said they received performance-related pay in addition to their wages.

The use of these types of incentive appears to have stabilised in recent years – at least in the private sector. The main motivations behind their use have been retention, employee engagement and productivity improvement. Nevertheless, they can also provide a degree of cost flexibility relative to fixed pay (while profit-related pay and share ownership schemes provide a degree of economic hedging from the employer's perspective).

The recession and its aftermath have clearly increased cost pressures on employers. More employers have decided to freeze pay (and thus reduce its value in real terms) and some have even cut nominal pay.

CIPD surveys of employees have, since 2008, asked employees whether or not they received a pay increase in the previous 12 months (see Figure 6).

**Figure 6: Changes in the nominal pay of employees in the previous 12 months, 2008–2013**



Excluding don't know/can't remember responses.

Respondents were instructed to exclude promotions, demotions, re-grading and new jobs.

Sources: CIPD *Employee Attitudes to Pay* surveys, 2008–11 and CIPD *Employee Outlook* survey, winter 2013/14.

The data show that less than 10% of employees each year said their pay had been cut. There was a substantial fall in the proportion of employees who said their pay had increased between 2008 and 2009, with many more employees saying their pay had remained the same, and it appears the proportions saying they received pay rises and pay freezes each year have not changed greatly since. There are differences in when the pay squeeze affected private and public sectors. Between 2008 and 2009, 58% of private sector employees saw pay frozen or cut, whereas 76% of public sector employees got a pay increase. However, by 2011, public sector pay constraints meant that 70% of public sector employees said their pay over the last year had been frozen.

When pay was frozen, it was not necessarily on a one-off basis. In the winter 2013/14 CIPD *Employee Outlook*, 41% of employees said their pay had been frozen during the previous 12 months. Of these, 13% – or 5% of all employees – had not had a pay increase since 2009 or earlier.<sup>7</sup>

The recession has led to pay freezes and reductions in pension contributions and other non-wage benefits (see Figure 7). Pay freezes, in particular, have been a very

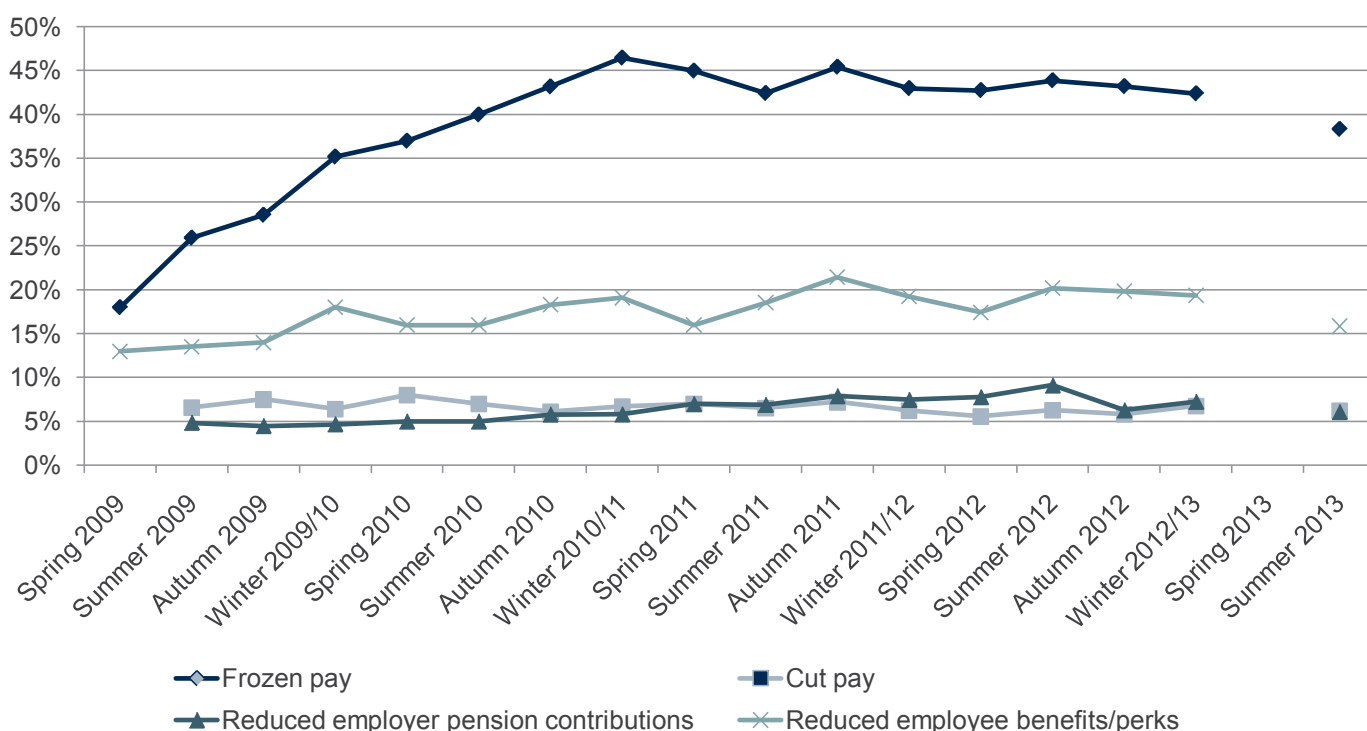
common response: for three years between summer 2010 and spring 2013, over 40% of employees said the downturn had resulted in a pay freeze at their workplace.<sup>8</sup>

These data are broadly consistent with the 2011 WERS, which found that, as a result of the recession, wages were cut or frozen in 30% of workplaces with five or more employees, while 19% of workplaces reduced paid overtime and 7% reduced non-wage benefits.<sup>9</sup>

Employers have also taken other, more specific, steps to contain employment costs. According to the autumn 2013 CIPD/Success Factors *Labour Market Outlook*, 86% of employers had frozen or lowered starting salaries, which can be a way of generating cost savings without the potentially de-motivating effects of changing the salaries of existing employees. A recent survey by Incomes Data Services found that 26% of those respondents who had frozen pay scales had nevertheless implemented some form of increase (such as bonus or one-off payments).<sup>10</sup>

Analysis of individual-level data by the Institute for Fiscal Studies suggests that nominal wage cuts are less unusual than might be expected.<sup>11</sup> In each year during the 1990s

**Figure 7: Impact of the economic downturn on pay and rewards, 2009–2013**



Base: all employees, including employees who did not think their workplace had been affected by the recession and don't know responses.

Employees could select more than one impact from a range of responses.

Source: CIPD *Employee Outlook* surveys.

and the 2000s, about 20% of employees who stayed in the same job saw their nominal hourly earnings fall compared with the previous year. The period from 2009 to 2011 saw a small increase in the proportion whose earnings fell in nominal terms and a slightly higher percentage (more than doubling from around 5% to just over 10%) where hourly earnings remained unchanged. In 2009, just 30% of employees saw their hourly pay rise in real terms (using the RPI as the measure of inflation).

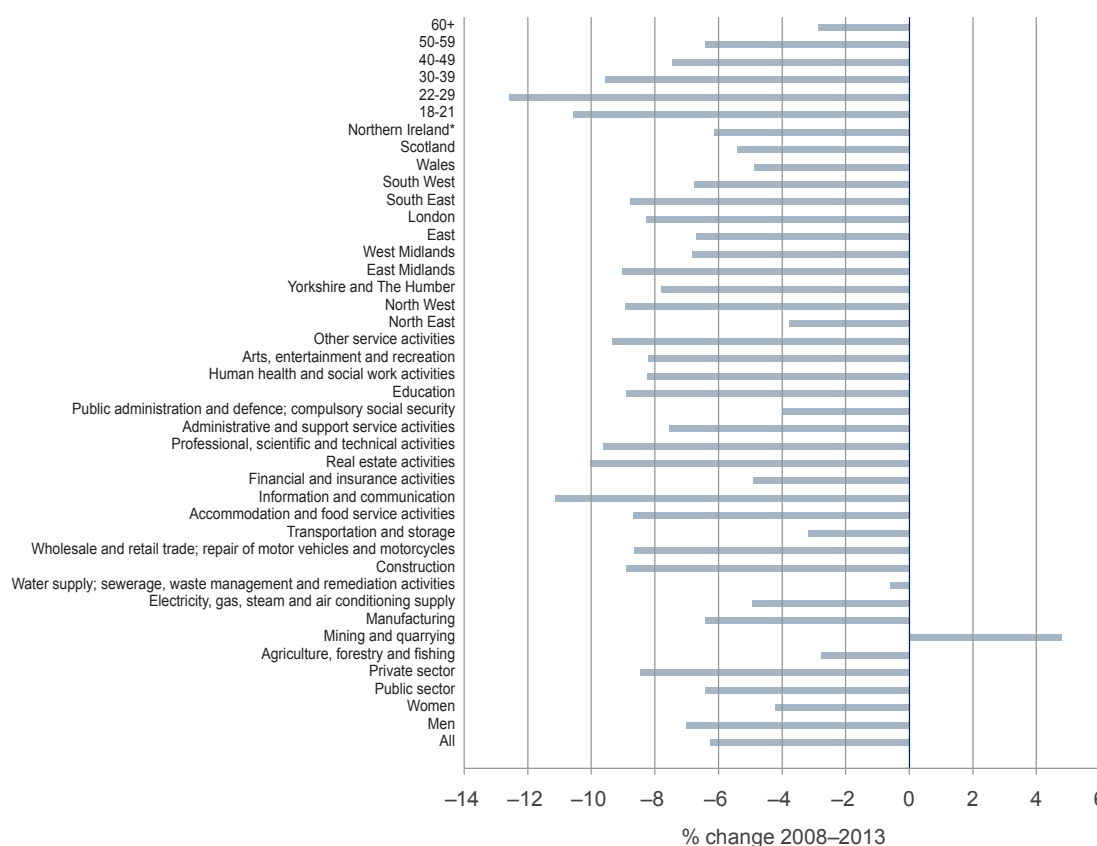
## What has happened to the distribution of earnings? Who has done best – and who has done worst?

Within the context of average earnings falling in real terms, some people have done better than others. Nevertheless, among full-time employees at least, there are few large differences across the workforce (see Figure 8). Real median

hourly earnings fell slightly more for men than they did for women between 2008 and 2013. Over this period, they also fell less in the public sector than in the private sector. One small industry, mining and quarrying, saw a real-terms pay increase whereas real earnings fell in all other industries, with information and communication and real estate activities seeing the largest fall. There is relatively little variation by region but there are substantial differences across age groups, with employees under 30 seeing much larger falls in real earnings than those in the oldest age groups.<sup>12</sup>

Both low-paid and high-paid employees have seen real earnings fall since 2009 (see Figure 9 on page 12). Among full-time employees, real earnings have fallen faster in the top half of the earnings distribution than they have towards the bottom of the distribution (real hourly earnings at the 90th percentile fell by 8.8% between 2009 and 2013 compared with a fall of 7.7% at the 10th percentile).<sup>13</sup> Although the National

**Figure 8: Change in real median hourly earnings by personal and job characteristics, 2008–2013**

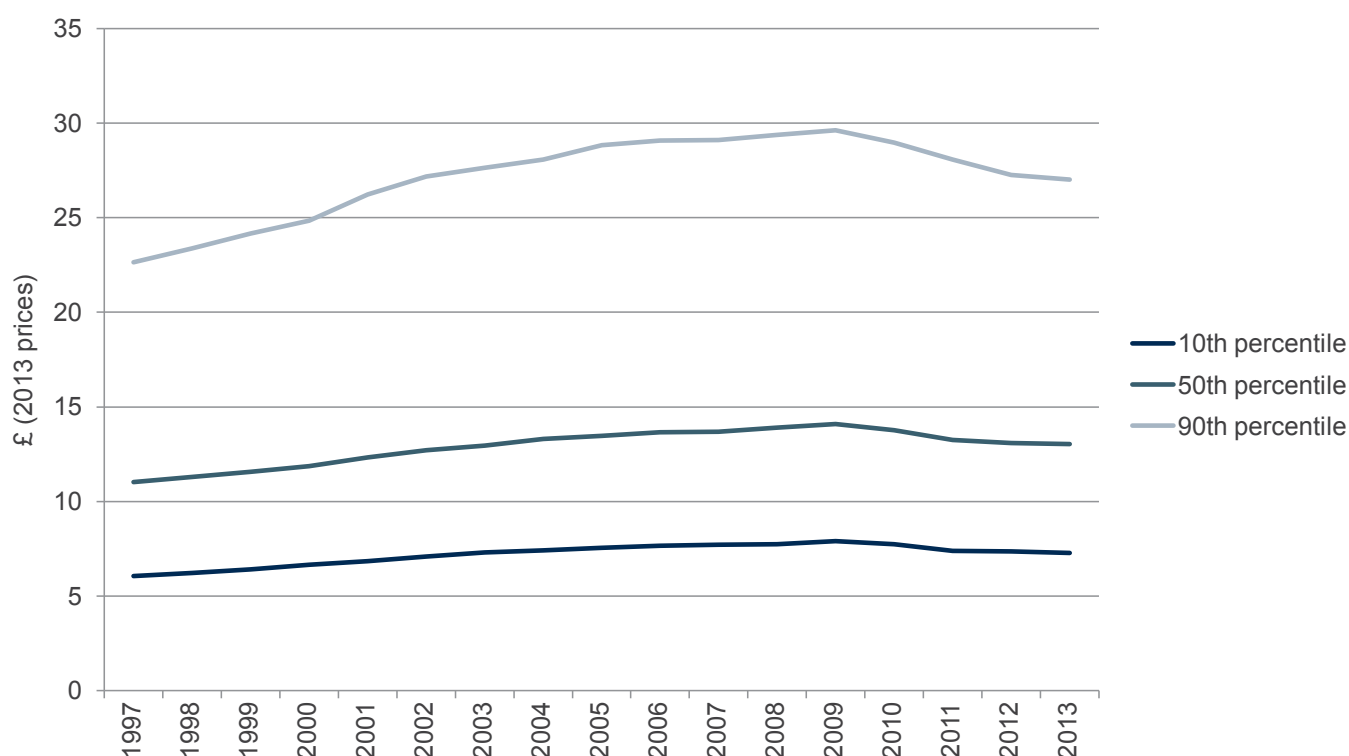


Median hourly earnings excluding overtime for full-time employees whose pay was not affected by absence, UK, April of each year, deflated by the CPI.

\* Data for 2008–12

Source: Annual Survey of Hours and Earnings

**Figure 9: Distribution of real hourly earnings for full-time employees, 1997–2013**



Hourly earnings excluding overtime for full-time employees whose pay was not affected by absence, UK, April of each year, deflated by the CPI.

Source: Annual Survey of Hours and Earnings.

Minimum Wage has failed to keep pace with inflation since 2008, the cumulative increase has marginally exceeded that of average earnings. As a result, the distribution of earnings has narrowed since 2009.

This is a break with the widening of the earnings distribution that we have seen since the end of the 1970s, which was mainly the result of earnings among the top 10–20% increasing by far more than the earnings of those in the bottom half of the distribution.<sup>14</sup>

## What has happened to total reward?

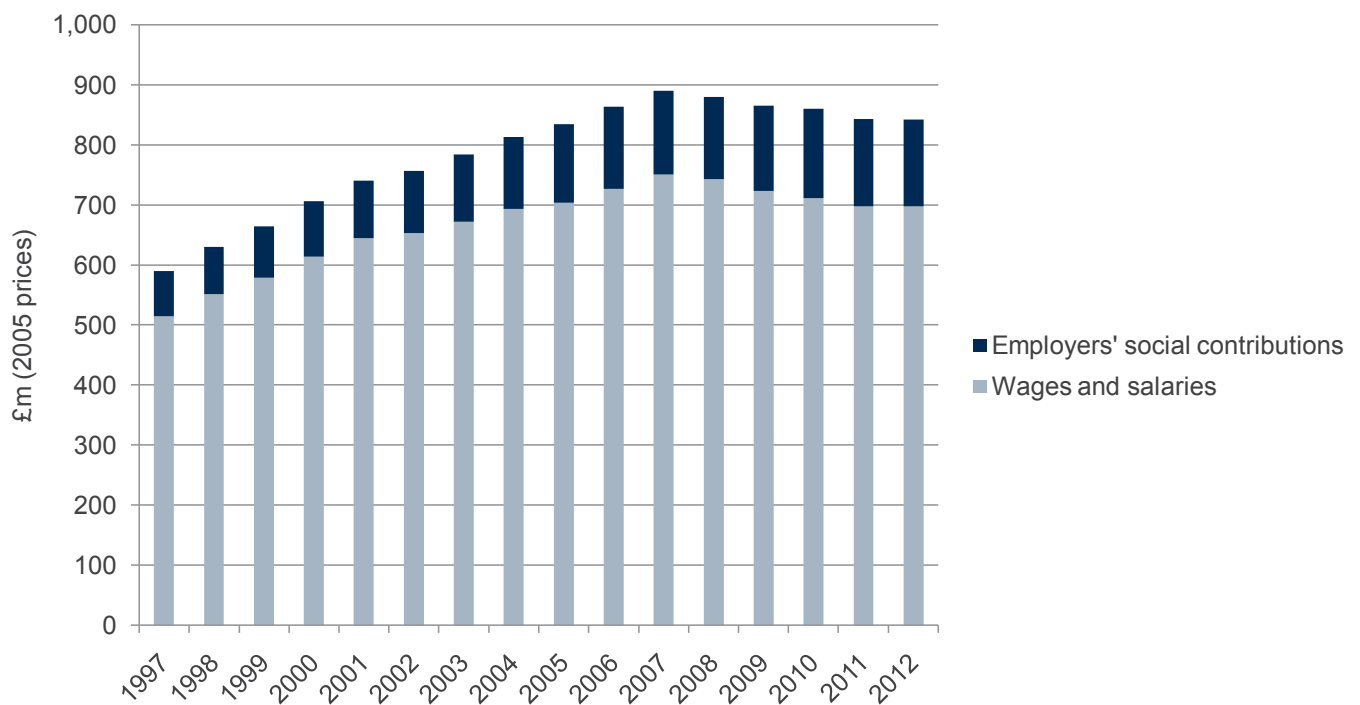
Pay is only part of the total reward package. The CIPD's 2013 *Reward Management* survey documents a vast array of other benefits provided by employers. Among the most significant in terms of cost to employers (and benefit to employees) are access to a pension scheme (provided by 91% of employer respondents), free or subsidised on-site parking (77%), a car allowance (57%), a company car (39%), private medical insurance (55%) and an employee

assistance programme (59%). Many employers also provided employees with terms and conditions in excess of the statutory minimum (such as paid annual leave or paternity and maternity provision). Not all of these probably would be seen by employees as part of the pay and reward package. In some cases, such as company cars or private medical insurance, access was only for certain employees, typically depending on grade or seniority. As just 15% of employers said they provided statements of the total rewards provided, many employees may have little information on whether the total value of all benefits received was changing by more or less than pay.

It is not possible to judge whether, in total, non-pay benefits also fell in real terms. One component of non-pay reward, employers' contributions into pension schemes and National Insurance Contributions, has become more significant, increasing from 13% of total employee compensation in 2002 to 17% by 2010 (see Figure 10).

Effectively, a greater proportion of employee compensation was being channelled into future saving via occupational and state pension schemes. Changes

**Figure 10: Real employee compensation, 1997–2012**



Employers' social contributions include employers' National Insurance Contributions, contributions to occupational pension schemes and 'imputed social contributions' (public sector implied contributions to unfunded pension schemes), deflated using the CPI.

Source: Office for National Statistics.

to legislation and declining expectations for future returns created deficits in pension funds that employers had to meet, even with changes to pension schemes such as closure of many defined benefit schemes. It is a matter for debate whether many employees (or employers) would regard employers' National Insurance Contributions as employee 'reward' rather than payroll taxation given the porous funding arrangements for the state pension and welfare benefits.

The net effect is that employee compensation has fallen by less in real terms than wages and salaries. Between 2009 and 2013, total wages and salaries fell by 3.6% using CPI inflation as a deflator. Including social contributions reduces the fall to 2.7%.<sup>15</sup>

A minority of employers and employees report reductions in non-wage employee benefits and employer pension contributions because of the recession (see Figure 7 on page 10). It is not clear if this means the real value of these benefits held up by more or less than pay.

## What about people working for themselves?

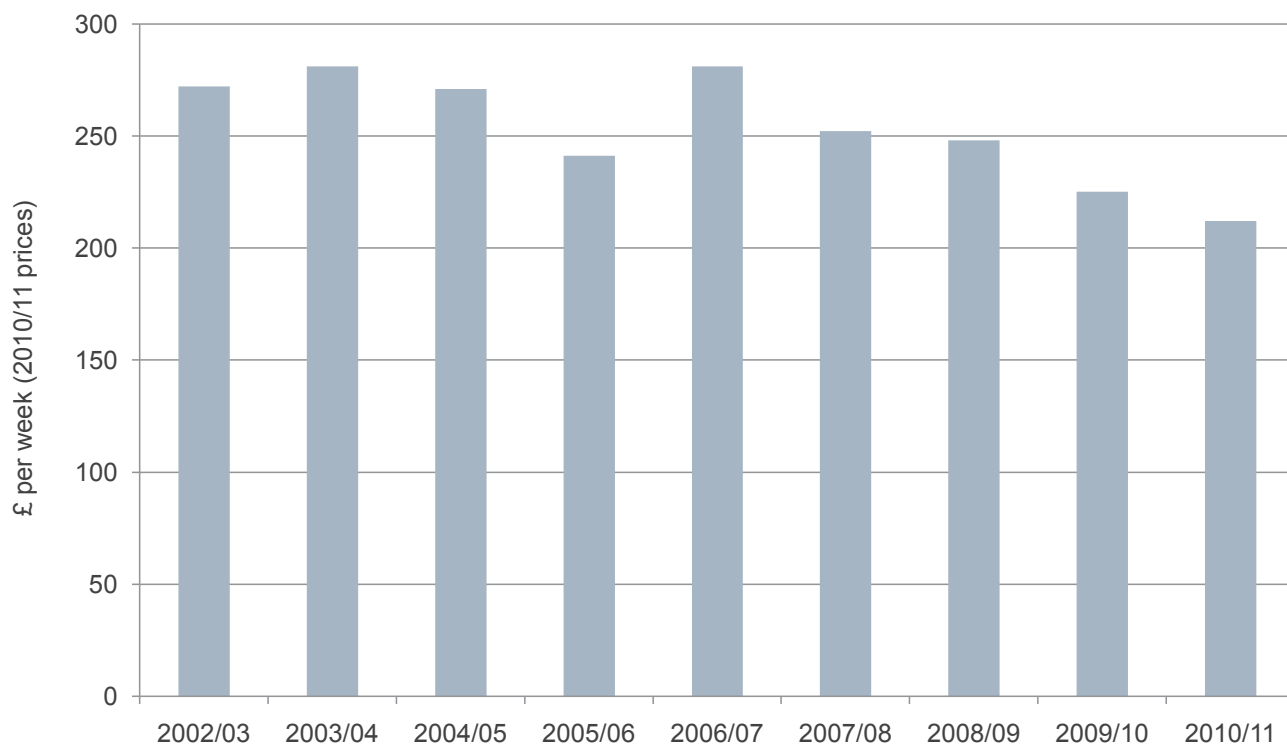
According to the ONS, 4.36 million people identified themselves as self-employed in September–November 2013, just over one-seventh of the workforce. Self-employment has increased by just over 10% in the last five years. The data sources reviewed above do not cover the self-employed. However, over 5 million people report income from self-employment to HMRC, so their earnings comprise a significant and growing proportion of total earnings from employment.

Real median income for those people identifying as self-employed increased marginally between 2002/03 and 2006/07 but then fell by 25% in the four years to 2010/11 (see Figure 11 on page 14).

Among the self-employed, there is a small proportion with very large incomes and a lot of people who report very small incomes from self-employment (less than £2,000 a year). A more detailed analysis using HMRC data and excluding these two groups found that real average earnings of



**Figure 11: Real median income from self-employment, 2002/03–2010/11**



April–March values of the CPI were used as a deflator.

Source: Family Resources Survey, Department for Work and Pensions.

the self-employed (deflated using the CPI) increased by a little over 10% in the period from tax year 1999/2000 to 2007/08. In the three years from 2007/08 to 2010/11, however, their average earnings fell by over 30%.<sup>16</sup>

Since 2008 part-time self-employment has increased from 24% to 28% of total self-employment. This explains only a small proportion of the fall in average earnings. Those working for themselves appear to have seen a much greater reduction in their livelihoods than those in dependent employment.

## What has this meant for living standards?

Falling real earnings means that the purchasing power of average earnings – in terms of the basket of goods and services it can buy – has been reduced. However, other changes have taken place that affect disposable income. In the early stages of the recession, tax cuts and changes to benefits and tax credits sustained purchasing power even after real wages began to fall. It is only as these unwound from 2010 onwards that real disposable incomes fell. Other sources of household income (such as returns from savings or dividends from share holdings) will also be significant for some households. Changes in

the employment rate affect the proportion of households receiving income from employment.

Both sets of official statistics on household incomes point to a reduction in real median household income between tax years 2009/10 and 2011/12 (see Figure 12)

The reduction in real average disposable incomes since 2009 has been accompanied by a reduction in income inequality, which follows a long period when inequality tended to rise.<sup>17</sup> Earnings from employment have fallen in real terms for both high- and low-income groups, allowing cash benefits and taxation to effect some redistribution of income.<sup>18</sup>

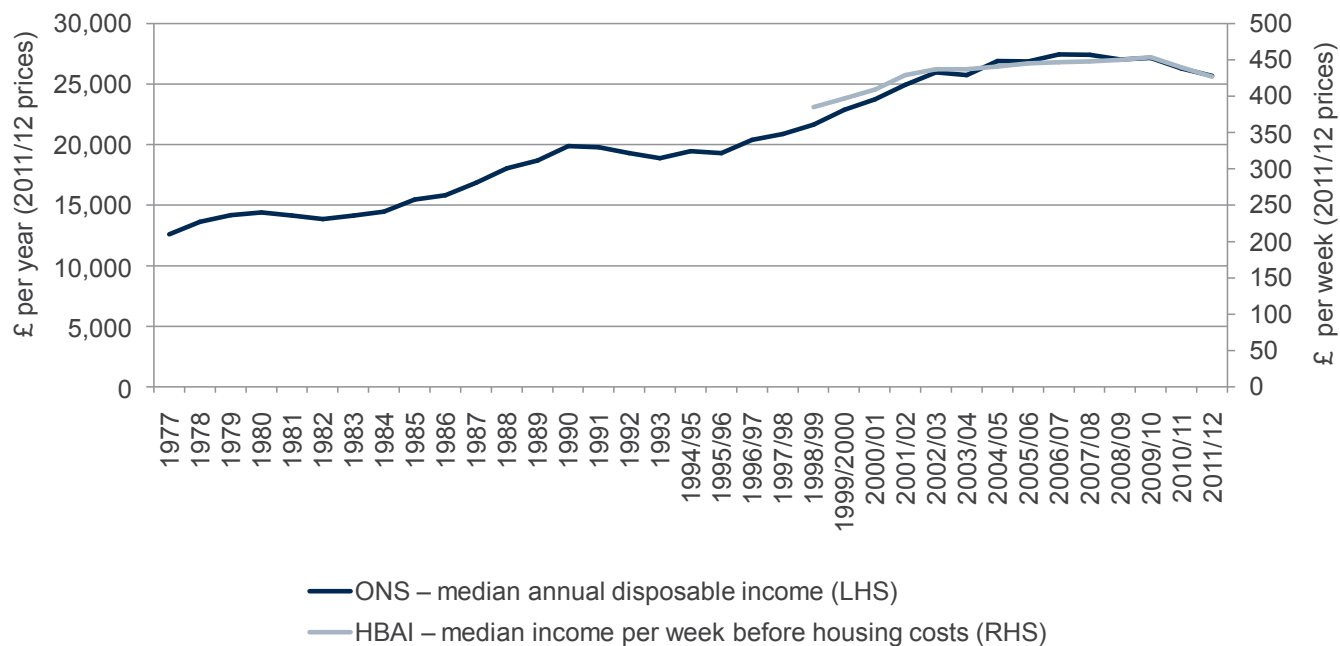
## What about other countries?

The UK is not unique in seeing average earnings fall in real terms.

International comparisons of earnings, income and labour cost are affected by fluctuations in exchange rates as well as different inflation rates. The data presented in this report are adjusted onto a purchasing power parity (PPP) basis. This can be thought of as measuring earnings in terms of the basket of goods and services it can buy. We need to be



**Figure 12: Real median disposable income, 1977–2011/2012**



Incomes have been 'equivalised' to correct for household size. ONS data are for non-retired households only.  
Sources: Office for National Statistics, Department for Work and Pensions

aware that PPP-based analyses can produce results quite different from analyses using a common currency (such as the dollar or the euro) based on current exchange rates.

As we have seen, real earnings in the UK started falling in 2009. Employees across much of Europe were similarly affected (see Figure 13).

**Figure 13: Changes in salary, 2009–2010**



Source: European Working Conditions Survey, 2010.

Employees in a large number of European countries were asked whether they had seen their salary increase, stay the same or fall between 2009 and 2010. In all three Baltic States, more than half of employees said their salaries had been reduced, with the proportion reaching 71% in Latvia. Almost half (48%) of employees in Ireland also said they had taken a pay cut. In contrast, 61% of employees in Sweden and 59% of employees in Norway reported a pay rise. The proportion of employees in the UK saying their pay had risen (36%) was well above the EU average (26%), with the proportion saying their pay had fallen slightly below the EU average (14% compared with 16%).

The question did not ask explicitly whether a change in pay was due to a change in the hourly rate or because of a change in the number of hours worked. Furthermore, this is a snapshot measure. The recession hit the Baltic States and Ireland hard and early and the feed through to wages was equally sharp and swift. In some other cases, such as Greece and Cyprus, the recession had an impact at a later time or over a longer interval.

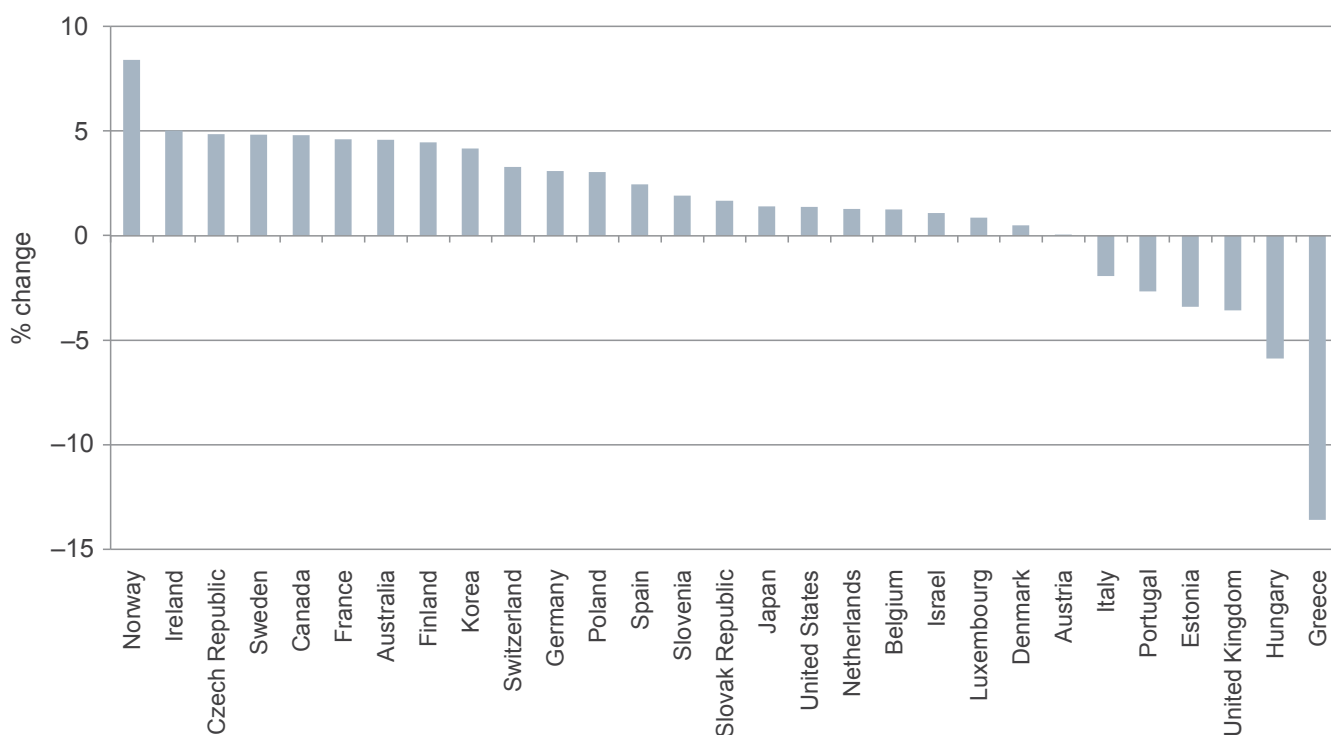
Over the four-year period from 2008 to 2012, the real value of average annual earnings fell in five other countries in addition to the UK, although only Greece and Hungary have seen larger falls (see Figure 14).

There is also one economy – the USA – where real earnings for the average worker have been squeezed over a much longer period (see Figure 15). Indeed, real usual weekly earnings for the median full-time worker were lower in the third quarter of 2013 than they were in the first quarter of 1979.

Real earnings fell during the early 1980s recession and it was the best part of 20 years before there was any significant increase. These real increases petered out following the US recession of 2001. Since peaking in 2009, real earnings have fallen by almost 3%. Hourly employee compensation (including healthcare and other benefits) has been flat in real terms since 2004 (see Figure 16).

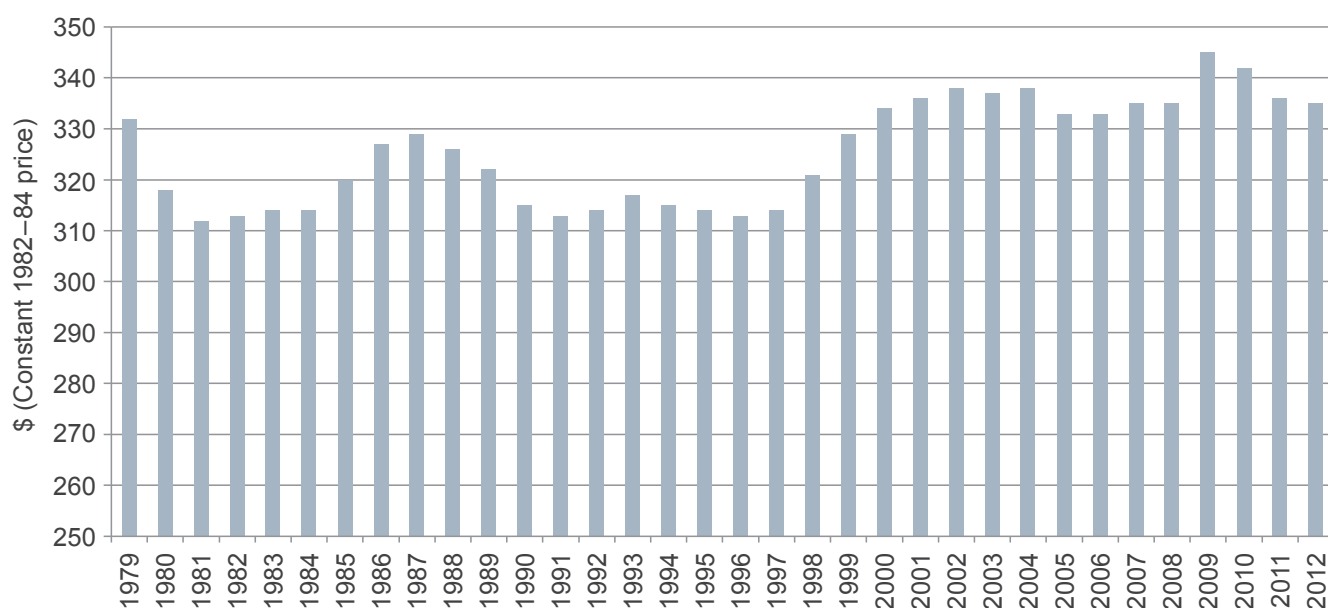
Note this is the position of the median worker. Wage stagnation in the USA has been accompanied by a very significant increase in wage inequality – much greater than seen in the UK. One study has estimated that, between 1979 and 2012, real average hourly wages fell by 5.9% for those at the 10th percentile of the earnings distribution whereas they increased by 31% for those at the 90th percentile.<sup>19</sup>

**Figure 14: Changes in real average annual earnings, 2008–2012**



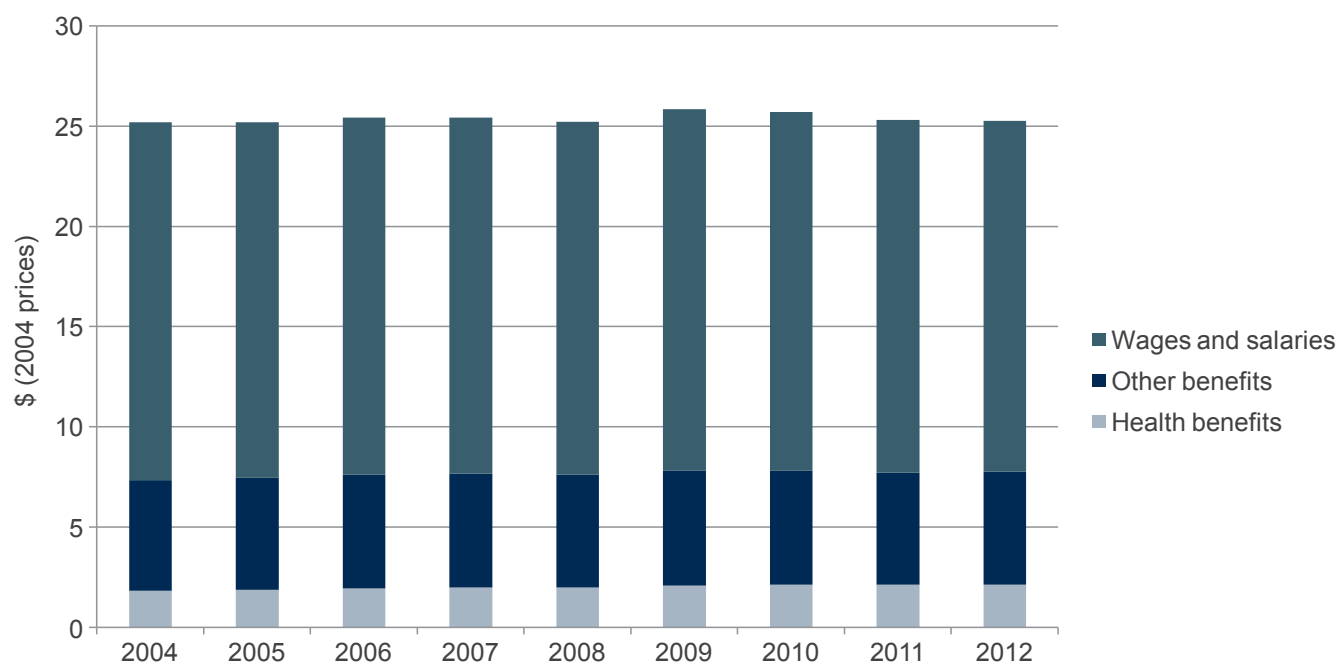
Annual average earnings for full-time equivalents in US PPP and at constant 2012 prices.  
Source: OECD

**Figure 15: Real median weekly earnings for full-time workers in the USA, 1979–2012**



Usual average weekly earnings for all workers aged 16+, annual average, seasonally adjusted series.  
Source: US Bureau of Labor Statistics, Current Population Survey.

**Figure 16: Real employee compensation per hour in the USA, 2004–2012**



Employee compensation data deflated using the US CPI.  
Source: US Bureau of Labor Statistics, Employer Cost Index.

## Conclusions

The period since 2009 has seen a fall in real average earnings in the UK that has been unprecedented for at least half a century – quite probably for a much longer period. Depending on the measure of inflation used, the fall in real average weekly earnings has been between 8% and 10.4%.

In terms of process, most employees' pay is reviewed formally, typically on an annual basis. But this is now much less likely to involve any element of collective bargaining than it would have done 20 or 30 years ago. For most private sector employees, the outcome of the pay review is determined unilaterally by the employer. If a pay increase used to be the default option, this is no longer the case. The recession and its aftermath have seen pay freezes become more common and, in a small minority of cases, pay has been reduced in nominal terms. A real-terms pay increase has been the exception rather than the rule.

Employers' pension and social security contributions have increased over time relative to wages and salaries but this does not make a material difference to the conclusion – the real value of employee reward still appears to have fallen.

Reductions in taxes and increases in cash benefits and tax credits at first offset falling real earnings but, since 2010, real disposable income has also fallen.

Many employees across Europe saw their pay frozen or cut during the recession, especially in those countries worst affected, such as Greece and the Baltic States. There were relatively few countries where real earnings did not fall at some stage (such as Sweden and Norway). Nevertheless, OECD data suggest that, between 2008 and 2012, only Greece and Hungary saw larger falls in the real value of average annual earnings.

In the USA, in contrast, real earnings for the average worker have changed little since the end of the 1970s.

# What are the potential explanations?

In this section we identify potential explanations for this sharp (and unusual) decline in real earnings and consider their validity.

## Is it the recession?

As we saw in the preceding section, the recession prompted many employers in both private and public sectors to cut costs. Workplaces where the recession had the most severe impact were more likely to freeze or cut pay in response.<sup>20</sup>

However, the recession *by itself* cannot be the reason for the sustained fall in real wages – for the simple reason that this did not happen in previous recessions:

*'In periods of recession output falls, but employment has tended to fall to a similar or slightly greater degree, leaving productivity broadly stable and in turn real wages broadly stable. As unemployment then falls back during recovery, growth feeds into wages to a greater degree than employment. This is the normal pattern that we*

*have got accustomed to. ... These patterns have looked radically different in the last decade, however. The UK has endured a very severe recession, but unemployment has not increased by as much as might have been expected. In contrast, real wages appear to have been more negatively affected than during previous downturns.'*<sup>21</sup>

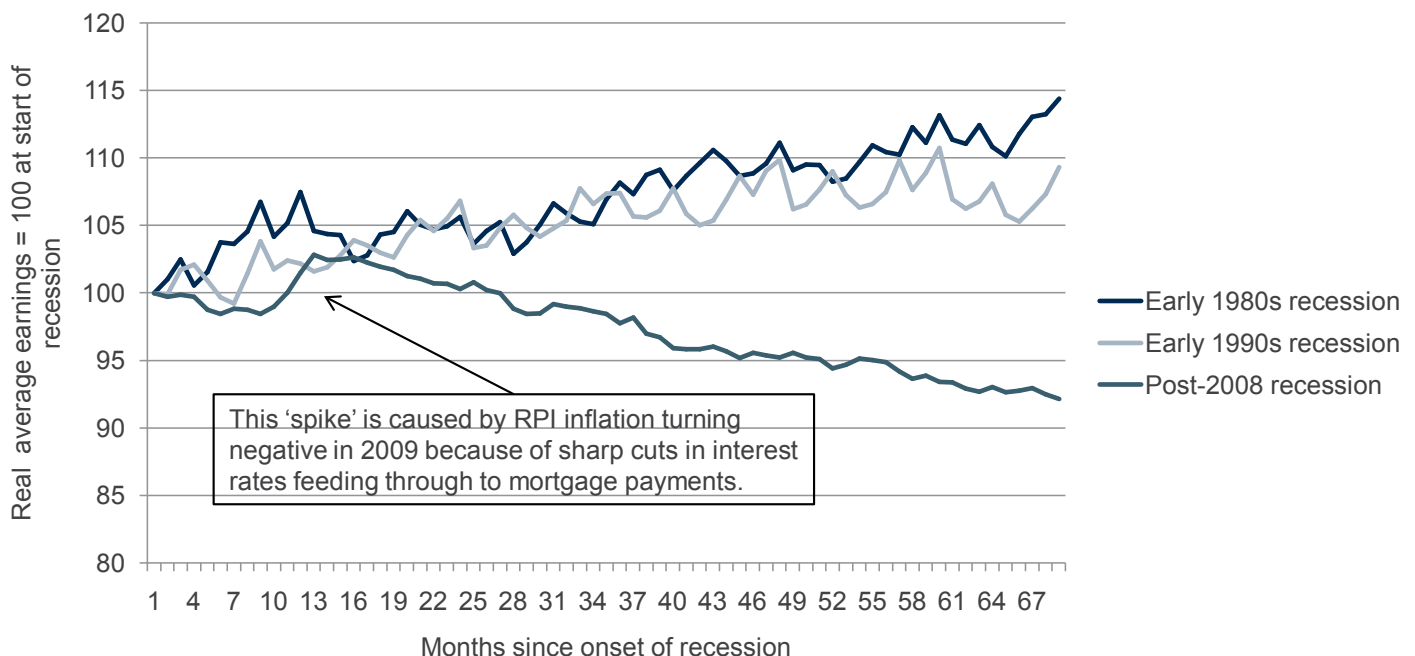
In both the early 1980s and early 1990s recessions, average hourly earnings increased in real terms year on year, whereas they have now been falling in real terms for over four years (see Figure 17).<sup>22</sup>

So why have real earnings responded differently this time round? What else has changed?

## Changes in workforce structure?

Structural change is a possible explanation. The argument here is that technological change and globalisation have been behind a restructuring of employment in most advanced economies. While there has been a shift in demand in favour of the highly

**Figure 17: Real average earnings in the last three recessions**



Earnings data used are the Average Earnings Index (not seasonally adjusted) for the early 1980s and early 1990s recessions and the average weekly earnings (regular pay), GB, seasonally adjusted, for the post-2008 recession. All three series are deflated by the RPI. The starting points for the recession are based upon the start of the quarter when UK GDP (chain measure) began to fall, namely January 1980, April 1990 and January 2008. Source: Office for National Statistics.

skilled, many relatively well-paid (often unionised) jobs in intermediate skilled occupations have disappeared. In contrast, technology and trade have posed less threat to relatively low-paid jobs in the non-tradable service sector (such as in retail, hospitality and care services). The result has been termed a 'hollowing out' of the labour market or the 'hourglass effect'.<sup>23</sup> Depending on the balance between jobs lost and jobs gained, this could move the average wage in either direction.

Pre-recession evidence for the 'hourglass effect' was mixed.<sup>24</sup> Recent IFS analysis suggests that the net effect of structural change has been to raise the average productivity (and earnings potential) of employees, not reduce it. However, the period between 2007 and 2010 saw a sharp fall (compared with the pre-2007 period) in the wage returns to characteristics such as education and occupation.<sup>25</sup> Thus structural change is not a direct explanation for the current fall in real average earnings.

## Changes in the distribution of income?

Another possibility is a shift in the distribution of income between labour and capital and/or between the vast

majority of workers and those at the very top of the income distribution. If capital, or those at the very top, gain a higher proportion of income, less is available for rewarding the vast majority of employees.

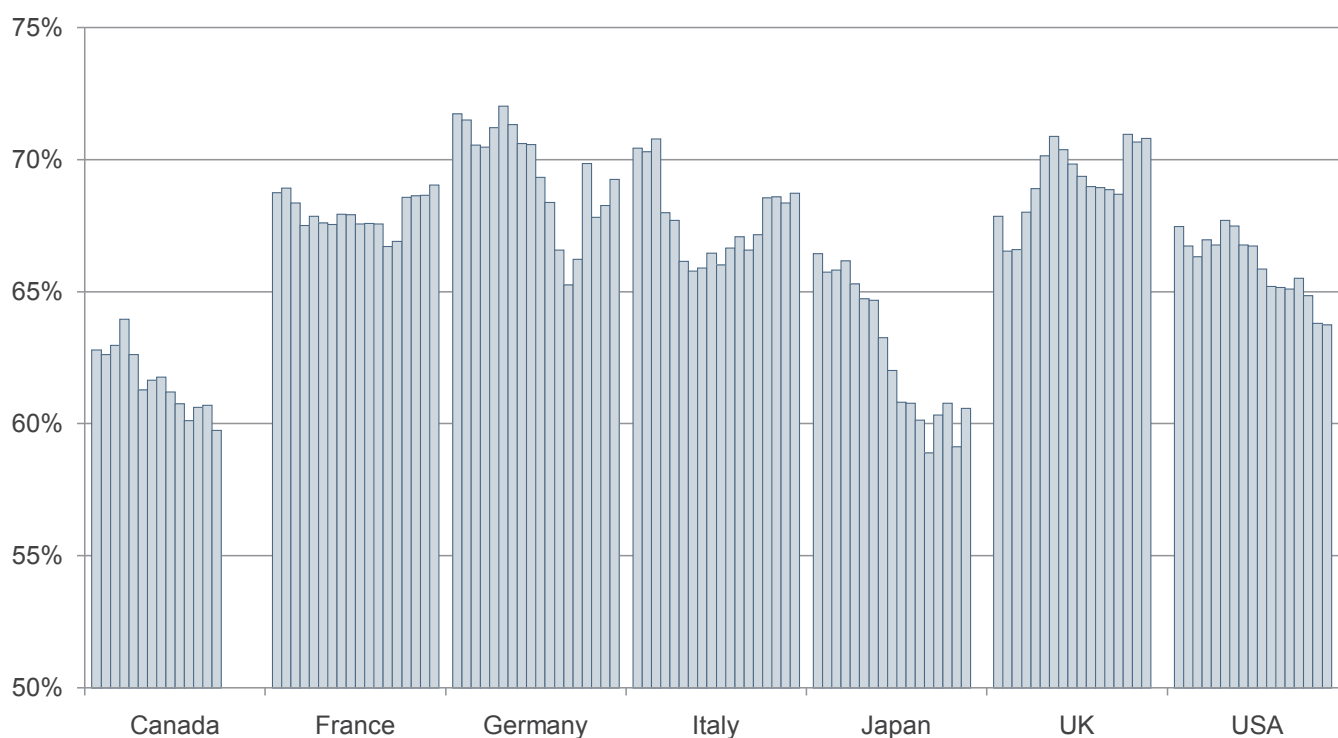
The share of national income going to labour through wages, salaries, and so on, has been falling in a number of the G7 economies (see Figure 18). The falls over time in the labour share in the USA and Japan explain, at least in part, the degree of long-term wage stagnation seen in these countries. However, in the four European G7 members, the labour share has increased since 2008. The UK labour share has been just over 70% since 2009, among the highest in the OECD.<sup>26</sup>

Similarly, although the share of income in the UK going to the top 1% of the earnings distribution increased during the 1980s and 1990s, it appears to have peaked around the middle of the last decade before starting to fall.<sup>27</sup>

## A decline in insider power?

Real wages in the UK have in the past been characterised as relatively inflexible. When business conditions were difficult, employers and those in work preferred to maintain the purchasing power of wages even if the

**Figure 18: Labour income shares of G7 economies, 1995–2012**



Wages and salaries as a share of GDP.  
Source: OECD.

The bar for each country shows the time series behaviour of the labour share between 1995 and 2012.

## Why has insider power declined?

There are a number of reasons why insider power might have declined in the UK, making real wages more responsive to demand and supply conditions in the labour market (in particular, to the level of unemployment):

- Changes in wage-setting mechanisms – as discussed earlier, the prevalence of collective bargaining between employers and trade unions (jointly or individually, nationally or locally) has fallen significantly in the private sector and in some parts of the public sector. There is often no collective employee participation in the wage determination process. This does not eliminate insider power but it makes it more difficult to organise. Even where unions remain influential, they may be readier to trade off pay and jobs (the 2011 WERS found that 55% of pay cuts and freezes had occurred with the agreement of recognised unions, although unionised workplaces were still less likely to see a pay freeze or pay cut).
- Greater competition in product markets – insider power is strengthened when product markets are not competitive. There are economic surpluses ('rents') that go to owners and managers (in dividends and bonuses) or to workers (through higher wages). UK competition policy is generally regarded as having improved in effectiveness over time and UK product markets are among the most lightly regulated in the OECD. Hence the scope for this form of pay increase (at the expense of consumers) will have fallen over time.
- Greater competition in labour markets – a long series of reforms to labour market policies beginning in the mid-1980s has made unemployed people and those claiming out-of-work benefits more competitive in the labour market by increasing their job search and making them more plausible candidates for the jobs that are available. This in turn means that employers need to offer less, especially in a downturn, in order to fill vacancies. Increased in-migration potentially offers another channel for such competition, although the evidence to date suggests that increased migration into the UK has not had a significant impact on the wages of UK-born workers. This appears to be because migrants typically complement UK-born workers – and thus raise everyone's productivity – rather than being direct competitors.

result was increased unemployment. This has been contrasted with some other European countries, where 'solidaristic' wage bargaining meant that bad times led to greater wage moderation.

One possible explanation for this is that wage levels depend on the degree of 'insider power' in the labour market. By this we mean the extent to which wages are set with reference to the interests of the typical 'insider' – someone already in employment and with relatively little fear of being made unemployed – rather than the interests of the typical 'outsider' – someone who is unemployed or in employment but with a high risk of being made unemployed (such as someone with little experience or recently hired, and thus vulnerable to 'last-in-first-out' firing rules). Other things equal, insiders prefer high wages – even if it means less employment – whereas outsiders might prefer slightly lower wages and a higher level of employment (and hence greater job security). While this theory was developed in the context of wage bargaining between unions and employers, the idea can be applied to wage-setting more generally. Employers who set pay unilaterally may still give greater weight to the reaction of long-serving existing employees (insiders) because they are more expensive to replace and the cost of their discontent is likely to be higher. In making their pay decisions, employers are also likely to be influenced

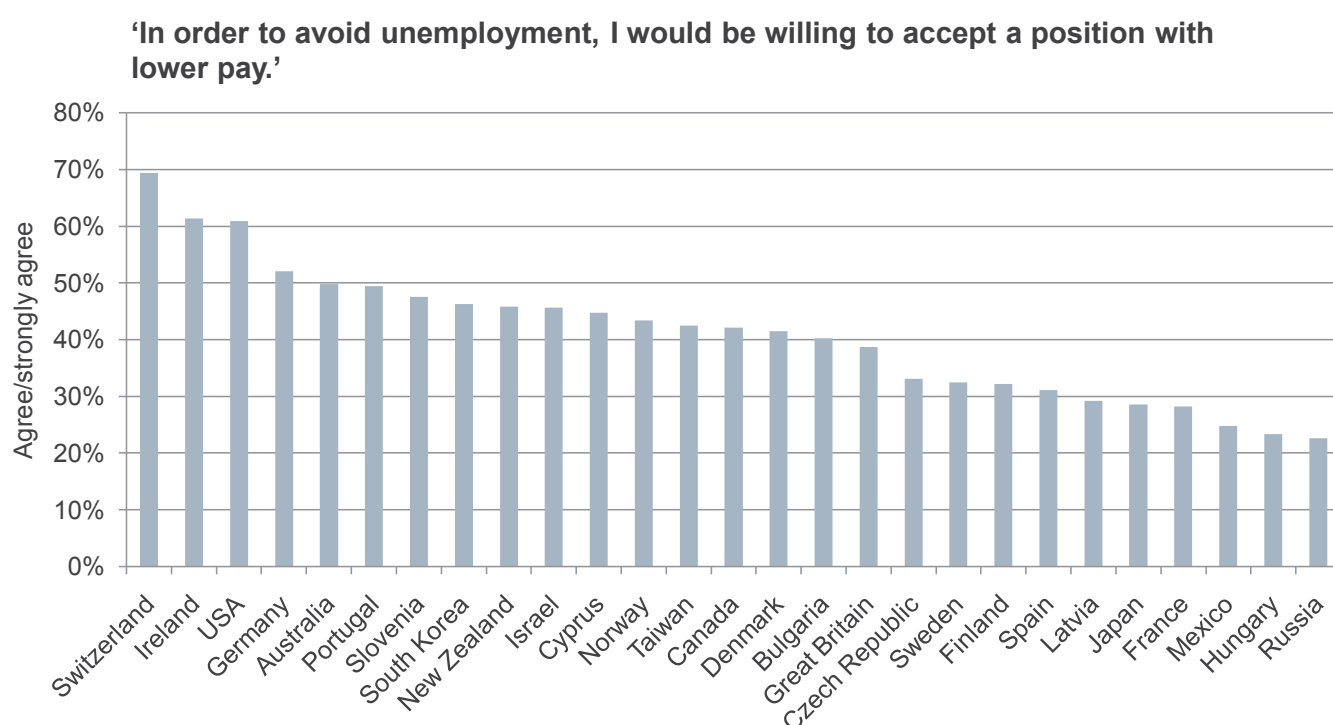
by the pay decisions of other employers – who may be unionised – through their perception of the 'going rate' for the sector, occupation or local labour market.

The UK has been characterised as an economy which had relatively high insider power. From the 1940s to the 1970s, governments attempted to influence this process and remind employers, employees and their representatives of the aggregate consequences of their actions through exhortation, indicative planning or statutory wage restraint, with 19 separate interventions being documented.<sup>28</sup> However, any impact was at best short term and all efforts were ineffective in the medium term.

There appear to be differences across countries in the willingness of employees to trade the likelihood of being unemployed against taking a less-well-paid job (see Figure 19). In 2005, 39% of British employees agreed they would take a less-well-paid job in order to avoid unemployment, whereas the comparable proportions were over 60% in Switzerland, Ireland and the USA.

However, recent evidence suggests that UK wages have become more responsive to both national and local unemployment rates. A study by Paul Gregg and Stephen Machin for the Resolution Foundation suggests that the (negative) impact of unemployment on real wages was

**Figure 19: International comparisons of employees' wage flexibility, 2005**



Source: International Social Survey Programme, 2005

much stronger in the period 2003–10 than it was in the period 1986–2002.<sup>29</sup> If the national unemployment rate rises, this lowers real average earnings. This effect takes place across the earnings distribution, although the impact on lower-paid workers is greater, presumably because the unemployed will typically find it easier to compete for a low-paid job than for a high-paid job.

So why has insider power declined? There are a number of potential reasons, discussed in the box on page 21. To a large extent, these can be seen as the cumulative impact of many policy decisions taken by successive governments since 1979 as well as external factors, such as international trade and technological change.

A decline in insider power would help explain the outcome we appear to have seen – an arguably more 'equal' sharing of pain between those in work and those out of work than seen in previous recessions. One result has been much lower unemployment than expected.

## A productivity slowdown?

In the medium to long term, labour productivity – the amount of output produced per person or per hour worked – is a critical variable affecting real earnings (see the box on page 23).

The (arithmetical) consequence of employment remaining unexpectedly high during and after the recession has been that labour productivity has fallen. This is not unusual in a recession. It can take time for businesses faced with a loss of demand to adjust their labour costs through reducing staffing levels and working hours. Some businesses might try to keep on skilled workers in order to avoid the costs of firing them (and rehiring workers when conditions improve). However, these are relatively short-term explanations and seem unlikely to be the entire explanation for such a sustained period of weakness in labour productivity, which is still almost 4% below its pre-recession level. In



## Pay and productivity: how are they linked?

Conventional economic theory identifies a causal link between labour productivity and pay. In this framework, the individual's wage is determined by their marginal revenue product, which can be thought of as the value of the additional output produced by their contribution. At the macro level, if one makes some simplifying assumptions – in particular, that the share of GDP going to wages remains constant over time – the growth rate of real earnings should match that of labour productivity.

There are numerous reasons why any individual's real wage – or the average real wage of a country – might depart from these principles. An economy may be out of equilibrium with excess demand or supply in the labour market. Individuals or groups might find their wages increased or decreased by union power or discrimination. But as a general principle this will tend to apply.

An individual can increase their productivity within a job, for example, by increasing effort, 'working smarter', coming up with new ideas for improving products or services or developing new skills. But their productivity will also be determined by factors over which they may have less control (such as business strategy, how work is organised and the capital equipment available). Organisations and countries have a much wider range of options available to them, although, again, these may not completely be within their control.

The relationship between pay and labour productivity works both ways. An increase in pay can lead to an increase in labour productivity. This generally happens through capital–labour substitution. If labour is made more expensive relative to other inputs (through a pay rise), employers will try to use a bit less labour and a bit more machinery or other input. A retailer, for example, might reduce the number of people working on the cash till and introduce more self-service checkouts. But this leads to a fall in employment and an increase in unemployment.

Can a pay rise increase productivity without reducing employment? This can happen for an individual firm. By raising the wage relative to competitors, it might be able to attract more-able employees and existing employees may work harder in order to keep their job. Turnover and sickness absence may both fall. Employee goodwill may produce better customer relations or generate new ideas for improving the way things are done. Market share (and output) may expand and thus productivity increases without reducing employment. Indeed, such effects have been reported by some of the companies that have (voluntarily) adopted the Living Wage. The CIPD/SuccessFactors *Labour Market Outlook* found that 67% of employers who said they had implemented the Living Wage were able to identify a benefit from its introduction; the most commonly reported were corporate social reputation (26%), employee satisfaction (25%) and employee loyalty/motivation (24%).

However, if other firms respond by raising wages, these benefits will be eroded, at least in part, so it is less clear that a virtuous circle of this kind exists for economy-wide wage increases.

addition, although labour productivity fell in most of the other leading economies, it recovered much more quickly in the USA, albeit at the expense of a relatively weak recovery in employment.

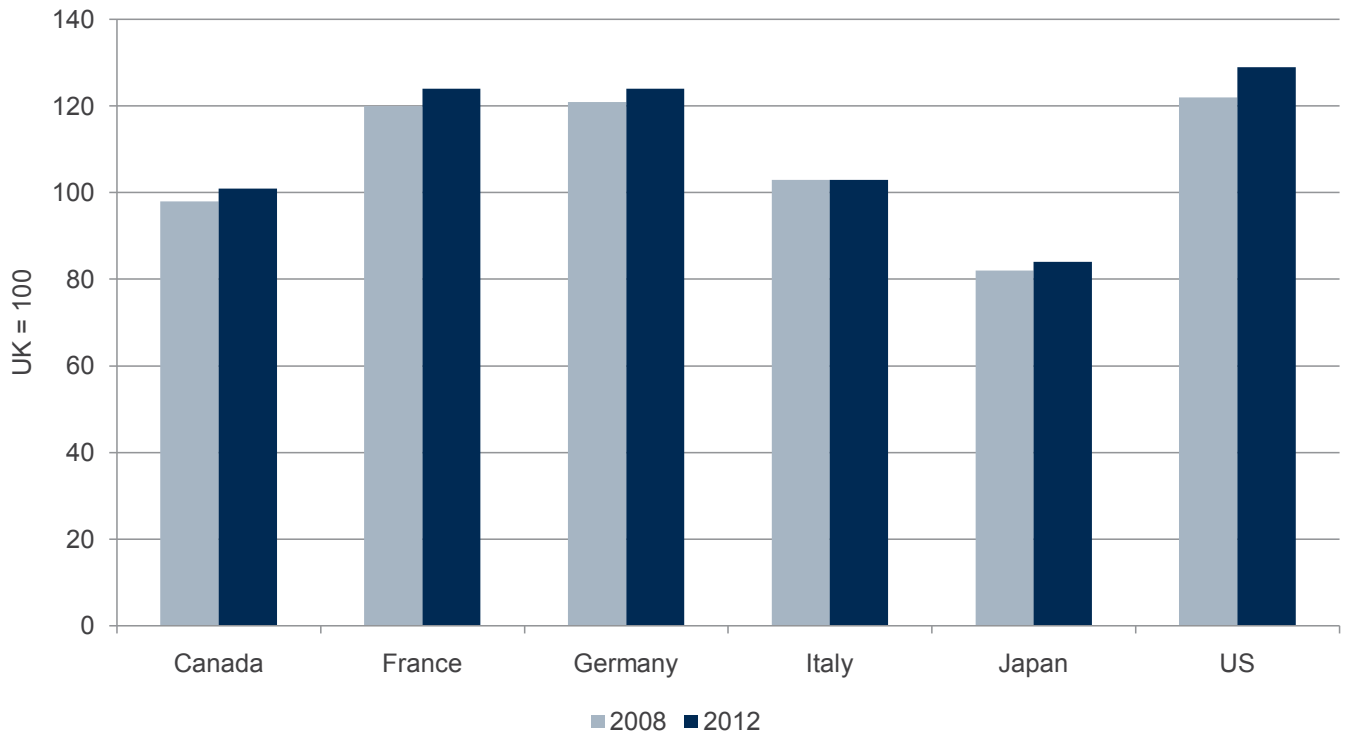
Labour productivity in the UK has therefore fallen slightly further behind its main international competitors (see Figure 20). This followed a long period, between 1979 and 2008, when the UK managed to make up some of its productivity gap with other countries, including the USA.<sup>30</sup>

Real average earnings and labour productivity in the UK have tended to track each other reasonably well since the 1970s and this did not change before and after 2008 (see Figure 21).<sup>31</sup>

Why did labour productivity fall by so much and why has it failed to recover? In part, this is because employment has proved to be unexpectedly resilient. As we have seen, strong competition in the labour market and the decline of insider power means that, across the economy, more choices were made – compared with previous recessions – that supported employment creation and preservation rather than increased productivity and wages.

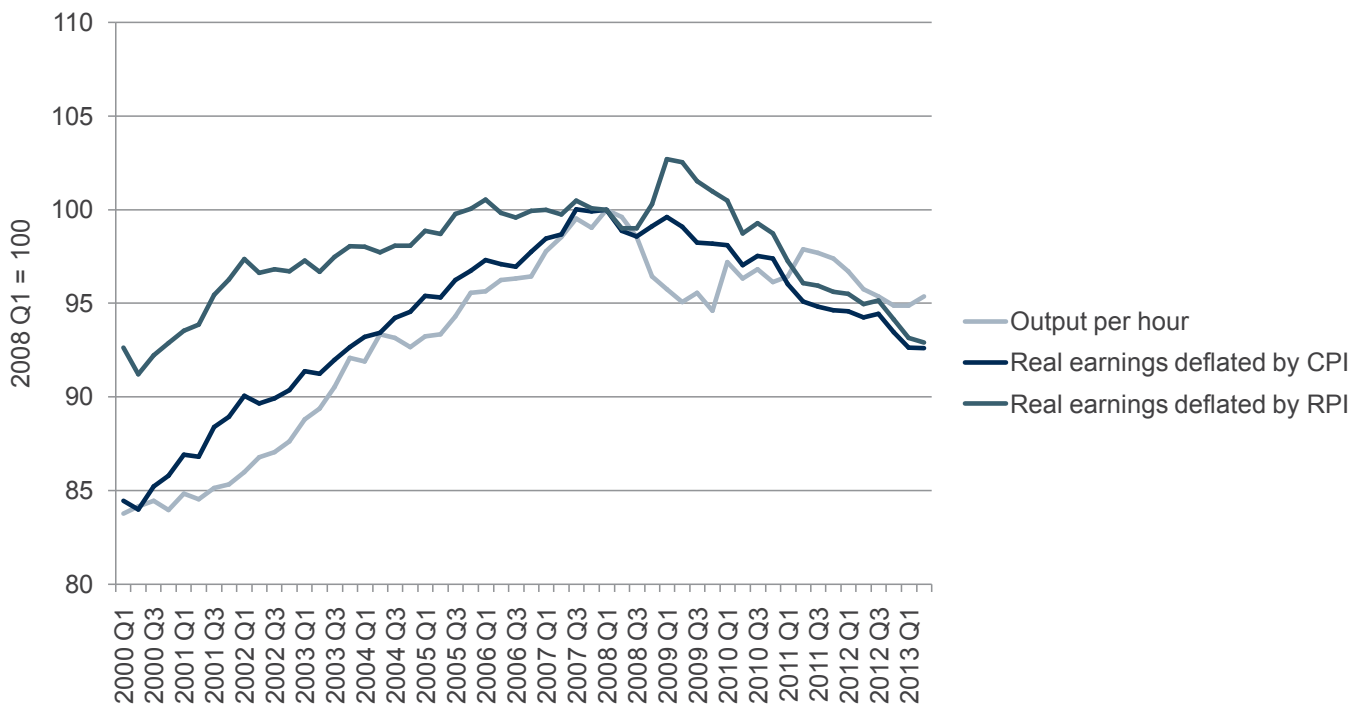
However, other factors may also have reduced labour productivity. Business investment has fallen sharply since 2008 and is still below pre-recession levels. This may have been due to the impact of the financial crisis. Banks sought to restore capital levels and became more risk-

**Figure 20: International comparisons of labour productivity, 2008–2012**



Productivity is measured by GDP per hour worked.  
Source: Office for National Statistics

**Figure 21: Real average earnings and labour productivity, 2000–2013**



Earnings data are the Average Weekly Earnings index, GB, seasonally adjusted. The middle month is used for each quarter, for example Q1 uses the February observation.  
Source: Office for National Statistics.

averse (for example, in terms of collateral requirements) and this meant that some businesses, especially small and medium-sized firms with few physical assets, found capital impossible to obtain at affordable rates. Of course, the very difficult sales outlook and the general air of uncertainty will also have made businesses of all sizes much less willing to invest. And some businesses may have chosen to retain profits or build up cash reserves as an insurance policy against a further credit crunch. Less investment means current and future productivity-enhancing projects are foregone or postponed.

With investment (even) riskier than usual, some businesses will have adapted by using slightly more labour-intensive ways of doing things ('capital shallowing' according to Pessoa and Van Reenen).<sup>32</sup> A business seeing an increase in demand for its goods or services, and not sure whether this will last, may well have preferred to take on a few extra pairs of hands (possibly on a temporary or casual basis or on zero-hours contracts) rather than spend a large sum upfront on machinery or ICT that may have little resale value.

A similar argument is that very low interest rates have enabled some low productivity businesses to stay afloat, paying off the interest on their debt, but not the principal. Banks have not had a strong incentive to foreclose on them because of the impact this would have on their balance sheets. In 'normal' times, these 'zombie companies' would have closed, with the capital and labour released finding more productive uses.

The problem is that no one is sure how much of the productivity slowdown has been due to general uncertainty about future prospects, which should clear as the economy recovers, and how much might be due to the recession having reduced the productive potential of the UK economy – which could have a medium- to long-term impact.

## Conclusions

The sustained fall in real average earnings since 2009 was triggered by the most severe recession in the post-War era. Output fell by some 7% in total. However, previous recessions in the early 1980s and early 1990s did not lead to this outcome.

It may be that the severity of this recession itself created greater pressure for wage moderation on the part of employers and employees – (more) desperate times created a demand for (more) desperate measures.

However, even compared with the situation in the early 1990s, the context had changed. Those remaining in employment have been less able or willing to protect their earnings at the expense of those losing their jobs and the unemployed. Employers may have been less willing to indulge insiders' preferences: *'Workers did the right thing in accepting lower nominal wage growth. ... Firms did the right thing in, wherever possible, holding onto valuable labour in the face of the pressure of profits and the severe nature of the crisis.'*<sup>33</sup>

In addition, the recession reduced the productivity of those hours spent in work, which compounded the downward pressure on real wages.

# What are the implications?

## What will happen to wage growth in the future?

Employers are not expecting wage growth to accelerate in the short term. The autumn 2013 CIPD/Success Factors *Labour Market Outlook* survey found that the mean basic pay award among employers expecting to review pay in the 12-month period to September 2014 was 1.6%. This measure of anticipated earnings growth has varied little over the past four years.

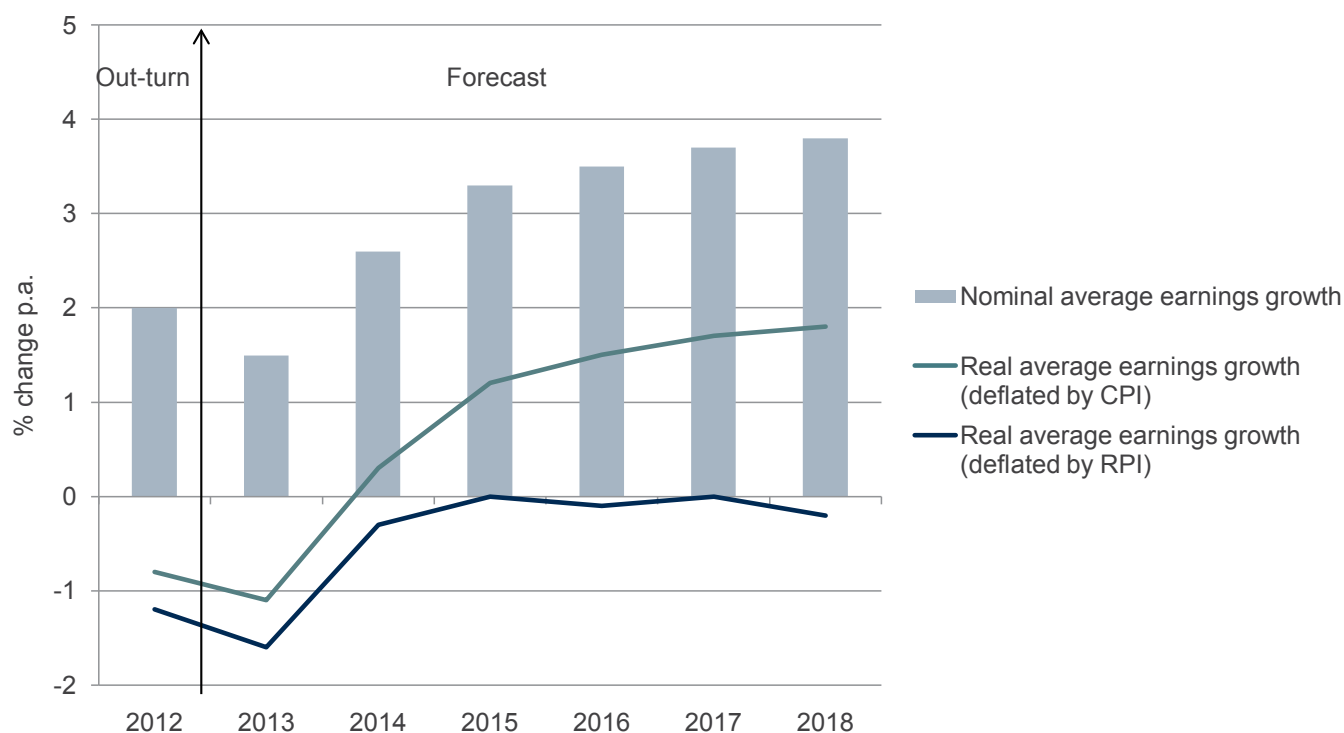
Nearly a fifth of employers in the private and public sectors, however, anticipated pay freezes even in the context of accelerating economic growth. And almost half (48%) of private sector employers did not feel able to predict whether a pay review would lead to an increase, decrease or freeze in pay. This suggests both considerable uncertainty and continuing variability in employer intentions.

In the winter 2013/14 CIPD *Employee Outlook* survey, 54% of employees said they expected a pay rise in the next 12 months, in other words, during 2014. A fifth (19%) thought

they would get a higher pay rise than in 2013. However, a third (34%) expected no pay increase at all. Employees' wage expectations for 2014 do not appear, in aggregate, to be much different from their experience of 2013.

The latest forecasts from the Office for Budget Responsibility (OBR) suggest that stronger economic growth (2.4% GDP growth in 2014 and rising marginally in the years to 2018) feeds through into increased average earnings growth (measured by total wages and salaries per employee). However, the impact on real average earnings depends entirely on the measure of price inflation used (see Figure 22). If the CPI is used as the inflation measure, 2014 is expected to see a slight increase in real terms, with the years to 2018 seeing stronger real growth of 1.5% or more each year. But if the RPI is used, average earnings growth remains negative all the way through to 2018. This is because there is a substantial gap between the forecasts of RPI and CPI inflation, presumably reflecting an assumption that interest rates will rise from their currently very low levels and feed through into mortgage payments. Note that, even using the CPI, the OBR forecast implies that

**Figure 22: OBR forecast of real average earnings growth, 2012–2018**



Average earnings is measured as total wages and salaries per employee.

Source: Office for Budget Responsibility, Economic and Fiscal Outlook, December 2013.

the real value of average earnings would still not have returned to pre-recession levels by 2018.

Given the extent to which low earnings growth seems embedded in current expectations, it seems quite possible that these forecasts might be optimistic – at least in 2014 and possibly for even longer.

What are the circumstances that might trigger a significant short-term increase in aggregate (rather than localised) earnings growth? One might be that strong demand causes recruitment and retention difficulties that are widespread and severe enough to require a generalised pay response (for example, because employers find the salaries required to hire or keep key staff are incompatible with existing pay structures and it becomes a question of either adjusting wages across the board or risk disengagement and exits from the rest of the workforce). Another would be if an unanticipated increase in inflation provided enough of a jolt for expectations to be reset.

Indications of recruitment intentions are currently very strong and reflect improved confidence in future demand. Investment should increase at some stage, especially with interest rates expected to remain low in the short term. Investment in new machinery, ICT or R&D, if accompanied by the right organisational changes and investment in people, will tend to increase labour productivity, meaning that extra output can be produced with the same (or fewer) people. This creates the possibility that continued output growth could eventually be accompanied by some deceleration in employment growth, matched by stronger productivity growth.

The autumn 2013 CIPD/Success Factors *Labour Market Outlook* found that many employers expected this to happen. When asked how they would respond in the face of steady 2% annual growth, just 17% said they would increase employment by 2% or more.<sup>34</sup> The majority (69%) said they would increase employment by 2% or less. In some cases this was because employers did not expect increased demand, or because of tight constraints on staff budgets, but employers (especially in the private sector) were expecting productivity to increase and absorb extra demand.

Of course, if there is a switch from an 'employment-rich' recovery to a 'productivity-rich' recovery, it is uncertain when this might happen and how much of a switch takes place. While the relationship between productivity and employment is arithmetical – output divided by employment must equal productivity – it is not fixed. Various factors can tip the balance either way.

Employment growth might continue to remain strong if the effective labour supply continues to increase, with more people looking for work and able to compete effectively in the labour market by having the skills, experience and attributes that employers are looking for – meaning that employers can find suitable people without having to raise wages across the board. Growth might also remain employment-rich if the financial crisis and its aftermath have a long-term negative effect on the ability of the financial system to channel investment funds to business.

On the other hand, future output growth could be accompanied by less employment growth if groups such as young people out of work and the long-term unemployed become disconnected from the labour market.

As the OBR states in its latest report: '*Productivity growth is the only sustainable source of real income growth in the long term.*'<sup>35</sup> The OBR forecast is based upon an eventual recovery in productivity growth. However, it is possible that productivity growth could remain below its long-term average for some years to come because of the damage to growth potential caused by the recession and the response to it.

Thinking further ahead – into the next decade and beyond – the scope for real wage growth depends on the long-term growth potential of the UK economy, which in turn will depend primarily on the innovation potential of not just the UK but advanced capitalist economies as a whole. Views here vary widely.

Some economists believe that the productivity benefits of technological change are set to increase even further due to automation and artificial intelligence – creating room for accelerated growth in living standards, although with huge uncertainties about how the rewards of technological change will be distributed.<sup>36</sup>

However, another scenario suggested by some leading macro-economists is that the advanced capitalist economies are set to enter – or, indeed, have already entered – a prolonged period of little or no productivity growth. This reflects a view that the innovation potential of the capitalist system has been weakened and that the massive gains in productivity seen through most of the nineteenth and twentieth centuries will not be replicated in the future.<sup>37</sup>

Regardless of future productivity increases, population ageing and the need to improve on current anticipated income levels in retirement mean we are likely to see further increases in the share of total reward accounted for by pension contributions. Other things being equal, higher

employer pension contributions would lead to a lower growth rate in earnings (higher employee contributions diminish take-home pay but not gross earnings).

## What are the implications for employers and employees?

Remarkably, this sustained period of falling real earnings does not appear to have adversely affected employee satisfaction with pay, which has remained relatively stable through the ups and downs of economic cycles over the last 30 years (see Figure 23). Indeed, WERS recorded an increase in satisfaction with pay between 2004 and 2011 in both public and private sectors.

The UK is also one of the countries with a relatively high proportion of employees who state they are well paid (see Figure 24). Countries with relatively high wages tend to have relatively high proportions of employees stating that they are well paid or paid appropriately.<sup>38</sup> Of course, it is possible these questions capture perceptions of whether the way in which individuals' pay is set is fair, as well as whether it represents a satisfactory return on effort.

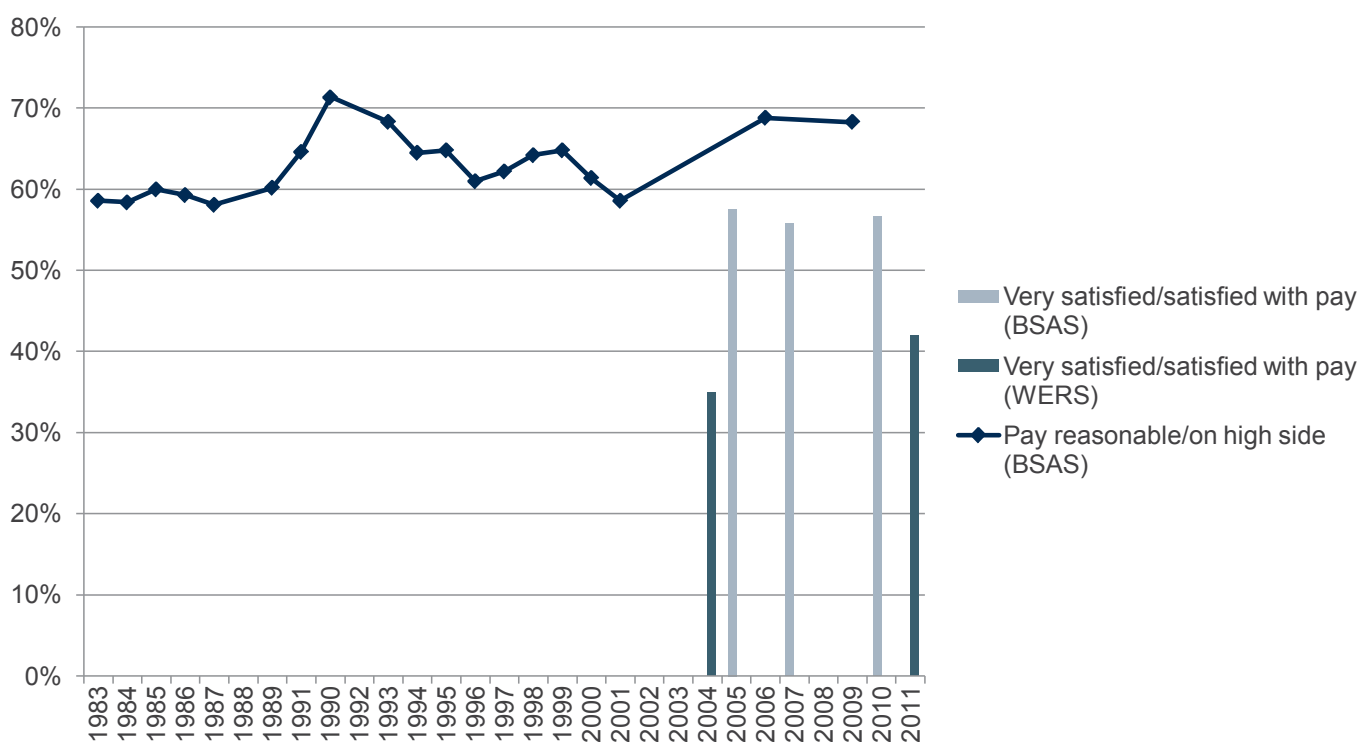
Many employees may already have felt reasonably well paid and the gravity of the economic situation would

have been understood. But employees may not see the situation in the same way if real earnings continue to stagnate during a period of economic recovery. Indeed, the winter 2013/14 CIPD *Employee Outlook* found that 47% of employees were satisfied with their most recent pay decision, whereas 48% of employees were dissatisfied. The majority of employees who were dissatisfied said this was because their pay rise had not kept pace with the cost of living.

Some employers may need to redefine the psychological contract with their employees and remove any expectation of continuous (or even periodic) pay progression. Employers will need to make more use of other ways of motivating and retaining employees. As shown in our previous *Megatrends* report, the alternative is disillusion, discontent and distrust.<sup>39</sup> Non-financial rewards from work, such as job satisfaction or a sense of helping others, will become (even more) important in attracting and keeping staff, as will tackling the issues that make valuable people leave, such as poor management.<sup>40</sup>

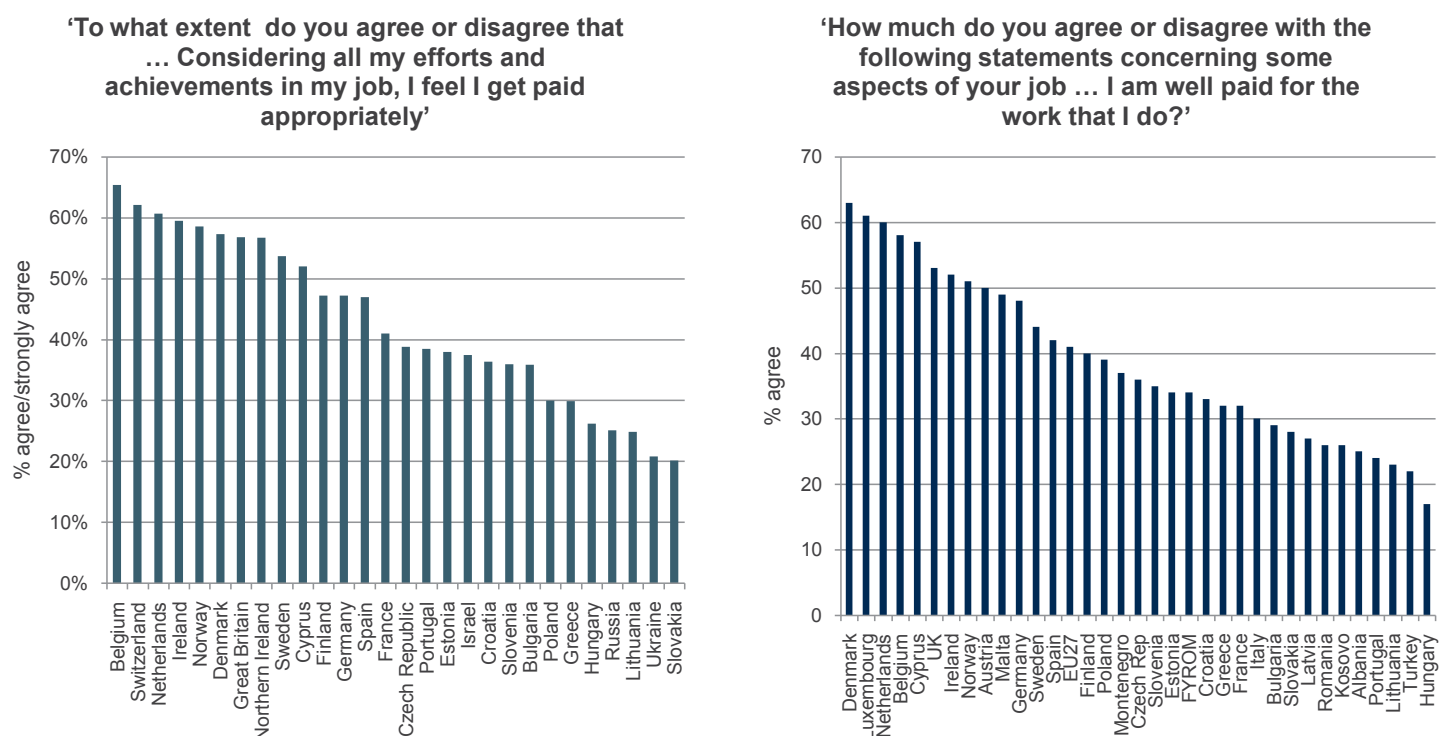
It seems likely that some of the measures adopted out of necessity during the recession, such as pay freezes or non-consolidated payments, might continue to be used more frequently. Assumptions about the reaction of employees that might have previously led to caution on

**Figure 23: Employee satisfaction with pay, 1983–2011**



Sources: British Social Attitudes Survey, Workplace Employment Relations Study.

**Figure 24: Employee perceptions of whether they are paid appropriately, 2010**



Sources: Left panel: European Social Survey, 2010; Right panel: European Working Conditions Survey, 2010.

the part of management might have changed – in effect, these practices become part of the ‘HR toolkit’. For example, significant numbers of private sector employers appear still to be contemplating pay freezes.

The CIPD’s 2013 *Reward Management* survey found that some employers would like variable forms of pay to make up a (moderately) higher proportion of the pay bill. While 63% of employers responding said that 10% or less of the pay bill was variable, just 49% thought this was the ideal situation. Greater use of variable pay may or may not increase employee engagement and individual or organisational performance – it will depend on the context and the detail of design and implementation – but it might well give employers some flexibility over labour costs. The dilemma employers face is that employees are more likely to be discontented with a switch from fixed to variable pay if the overall pay rise does not even match inflation. More generally, if pay continues to lag behind inflation, management lose a tried and tested means of easing employee resistance to workplace change.

If there was to be a sustained period of little or no real earnings growth, employees would need to reconsider their current and future consumption and savings behaviour.

Expectations of economic growth based on productivity (and hence wage) growth underpin pensions. Slower earnings growth would prompt many employees to consider whether they should save a higher proportion of their (more slowly growing) wages to provide for their retirement. If slower earnings growth was due to reduced productivity growth, this would also reduce the expected value of (private) pension investments through its impact on asset returns and annuity factors.

According to the summer 2012 CIPD *Employee Outlook* survey, just 23% of employees think their financial plans will enable them to live comfortably (or better) in retirement. Even some of this group may need to save more if their current plans are based on assumptions about the future growth of their earnings (and pension contributions) that may be in question. For the 48% of employees who do not think their plans add up to a comfortable retirement, the challenge is presumably greater. The impact on the 17% of employees who have not made financial plans for retirement may depend greatly on the choices made for them by pension trustees about contributions and benefits and by the Government about the future of the state pension and means-tested benefits and about enrolment into occupational pension schemes.



Of course, employees faced with the prospect of lower than intended retirement benefits may be able to avoid saving more from current income by increasing the length of their working lives (delaying retirement and/or continuing to undertake paid work once in receipt of retirement benefits). Older employees and those who have made few provisions for their retirement may think they have little option.

## What are the implications for policy-makers?

Falling real earnings and their impact on the living standards and aspirations of citizens have moved centre stage in the political debate.

In a sense, the choices facing policy-makers do not appear particularly attractive. Policies that promote a competitive labour market will support a high employment rate but they may make it easier for employers to keep hiring without general increases in wages. The set of (politically feasible) policy instruments available for increasing pay levels in general are limited (see box below). Interventions such as a large increase in the National Minimum Wage or mechanisms to

promote take-up of the Living Wage could reduce employment in sectors where there are large concentrations of lower-paid workers and little scope to pass on costs to the customer.

While potential trade-offs between pay and jobs are a reality of the policy environment, this need not be a zero-sum game. The growth rate of the economy is not fixed. Higher output growth creates more space for employment growth as well as productivity (and wage) growth.

Macroeconomic policies – choices made by the Government over total levels of tax and spending and by the Bank of England over monetary policy – affect output growth in the short term but are less effective in raising growth in the medium to long term. What matters in the long term is the sustainable growth rate, that which the economy can manage over a sustained period of time without running into problems of boom or bust. The sustainable growth depends on the growth rate of labour input (total hours worked) and its quality, capital investment and the underpinning rate of productivity in the economy (often called total factor productivity (TFP)). A key driver of TFP growth is innovation – the introduction and adoption of new goods, services and ways of doing things.

## How can governments raise pay (if they want to)?

In the period up to 1979, UK governments attempted direct intervention in wage (and price) setting. These were abandoned after 1979 and no government since has shown any appetite for similar measures. Less direct alternatives were also tried. Governments at times encouraged collective bargaining over pay and put in place measures such as the Fair Wages Resolution that extended the reach of collectively bargaining. Like price and incomes policies in general, these were dismantled during the 1980s. Ministers have restricted themselves since to reminding employers and employees of the consequences of 'excessive' wage increases.

Governments have a policy instrument to tackle low pay – the National Minimum Wage – that can have an impact on wages more generally.

There has been periodic interest in how government can use a combination of moral pressure and other policy tools (in particular, taxation policy, its role as an

employer and its role in purchasing goods and services) to meet labour market objectives. These have recently included promoting pay levels above the National Minimum Wage, such as the Living Wage.

Governments have a direct impact on pay through the public sector's role as an employer, accounting for one-fifth of all employees. Ultimately the Government determines pay levels and structures throughout the public sector, although its role is more direct in some cases than others (for example, pay for most civil servants is set directly by departments in discussion with trade unions, whereas the pay of senior civil servants is set following recommendations from an independent pay review body and the pay of local government employees is negotiated by employers and employees – but central government influences the outcome through its role in setting budgets). Governments have used pay restraint (such as the pay freeze instituted in 2009) primarily to control public expenditure, although the impact on pay expectations more broadly will have been a supporting objective. Public sector pay has not been used explicitly to raise pay levels in the economy.



**Table 1: How can governments raise the sustainable growth rate?**

Broad policy objective	Examples
Macroeconomic stability	Inflation targeting and forward guidance for monetary policy Stability of public finances
Increase labour supply	Welfare to Work Increasing state pension age
Improve quality of labour supply	Investment in schools plus post-16 further and higher education Apprenticeships
Increase capital investment	Support through tax system (such as capital allowances) Financial and non-financial support for inward investment
Improve infrastructure	Transport infrastructure (road, rail) Making energy markets work more effectively
Increase competition	Investigate anti-competitive markets and business practices
Encourage entrepreneurship	Finance for entrepreneurs Business advice
Encourage creativity and innovation	Public expenditure on scientific research R&D tax credits Targeted support for business R&D (such as Catapult centres)

Growth thus depends on the individual and combined actions of people – as consumers, employees, investors – as well as businesses and other organisations. There is also a role for government and there is a very wide range of policies that could raise the sustainable growth rate (see Table 1). The practical problem government faces is that it can be very difficult to know which policy options work and which do not (or offer a lower pay-off) because their impacts are often long term and usually difficult to isolate from each other.

## Conclusions

Most employees still have their pay reviewed every year but, in recent years, this has not always led to any increase in pay. If a 'pay rise' means pay going up by more than prices, many employees have not seen a pay rise for a number of years. The majority of employees do not expect

a real-terms pay rise in the coming year and economic forecasts and employer expectations suggest they are unlikely to be (pleasantly) surprised.

Looking further ahead, the tradition of periodic pay reviews seems unlikely to unravel, but we might see a broader range of outcomes. Although pressures to fix pay around the 'going rate' remain strong, we might see a smaller proportion of employers focusing their attention on a single number for the percentage pay uplift. Pay freezes and other means of targeting reward budgets used in the recession are likely to remain more commonly used in the future.

Whether pay and the reward package as a whole will increase in real terms over time depends largely on future productivity growth. This is something that the Government and business can influence and making more effective use of people is central to realising it.

## ENDNOTES

- 1 Bonus payments are excluded from the analysis because their timing is concentrated in certain months of the year. Variations in timing can introduce sizeable fluctuation into estimates of year-on-year growth. Bonus payments are highly concentrated in certain sectors but in total only account for about 6% of total weekly earnings.
- 2 TURNBULL, A. and KING, M. (1999) 'Review of the revisions to the Average Earnings Index', House of Commons, HC263.
- 3 Because the AEI data include bonuses and are not seasonally adjusted, we take a 12-month moving average to reduce the month-to-month variability due to seasonality and the timing of bonus payments. Hence, although the AEI series commenced in January 1963, 12-month average levels data commence in 1964.
- 4 The principal private sector industries where collective bargaining remains in place are industries that used to be in the public sector or were nationalised industries such as telecommunications and the railways. See VAN WANROOY, B. et al (2013) *Employment relations in the shadow of the recession: Findings from the 2011 Workplace Employment Relations Study*. Basingstoke: Palgrave Macmillan.
- 5 VAN WANROOY, B. et al (2013) op cit.
- 6 The proportion of mean gross weekly earnings for full-time employees accounted for by overtime payments, PBR-type payments (such as piecework) and shift premia fell from 8.9% in 2000 to 5% in 2012.
- 7 This may be a slight underestimate as it excludes all of the 22% of employees experiencing a pay freeze who said they could not remember when their pay was last increased.
- 8 The question does not put any time limit on the impact of the downturn. Thus, we cannot be sure whether a respondent stating that the downturn had led to a pay freeze in 2013 is referring to a pay freeze in the last 12 months or a pay freeze at any point between 2009 and 2013. In addition, the percentage of respondents stating that the recession had not had an impact on their workplace, while still less than 20% in summer 2013, has started to increase – we presume this is the result of new workplaces coming into being and/or employees changing employers and not being sure what impact (if any) the recession had had on their new employer.
- 9 The equivalent figures based on employee responses in the same workplaces with 5+ employees were 32% saying pay had been frozen or cut, 18% saying paid overtime had been restricted and 5% saying non-wage benefits had been reduced.
- 10 INCOMES DATA SERVICES. (2014) *When is a pay freeze not a pay freeze?* IDS Pay Report No. 1120, January.
- 11 See BLUNDELL, R., CRAWFORD, C. and JIN, W. (2013) *What can wages and employment tell us about the UK's productivity puzzle?* London: Institute for Fiscal Studies. Of course, we might expect individual-level data to show greater variability in year-on-year earnings than organisation-level data due to measurement error, variations in individual bonuses, and so on.
- 12 Younger employees may be most affected by reductions or freezes in starting salaries.
- 13 This implies that, on this measure, the distribution of earnings among full-time employees has narrowed slightly. This might not hold true for employees as a whole.
- 14 BLUNDELL, R., CRAWFORD, C. and JIN, W. (2013) op cit.
- 15 Equivalent figures using the RPI as the inflation measure would be a 5.8% fall in wages and salaries and a 4.9% fall if employers' social contributions are included.
- 16 MURPHY, R. (2013) Disappearing fast: the falling income of the UK's self-employed people, *Tax Research LLP*, November.
- 17 CRIBB, J., HOOD, A., JOYCE, R. and PHILLIPS, D. (2013) *Living standards, poverty and inequality in the UK: 2013*. IFS Report R81. London: Institute for Fiscal Studies.

- 18 Of course, this analysis assumes that price inflation affects everyone equally. The Commission for Living Standards argues that, in recent years, the cost of goods and services forming a greater part of low to middle earners' consumption have increased faster than average. In other words, official statistics understate the reduction in living standards in the bottom half of the earnings distribution.
- 19 MISHEL, L. and SHIERHOLZ, H. (2013) *A decade of flat wages: the key barrier to shared prosperity and a rising middle class*. Washington, D.C.: Economic Policy Institute.
- 20 VAN WANROOY, B. et al (2013) op cit.
- 21 GREGG, P. and MACHIN, S. (2012) *What a drag: the chilling impact of unemployment on real wages*. September. London: Resolution Foundation.
- 22 See also BLUNDELL, R., CRAWFORD, C. and JIN, W. (2013) op cit.
- 23 See MANNING, A. (2013) Lousy and lovely jobs. *CentrePiece*. Vol 18, No 2. Autumn.
- 24 See FITZNER, G. (2006) How have employees fared? Recent UK trends. *Employment Relations Research Series*. No 56, March.
- 25 BLUNDELL, R., CRAWFORD, C. and JIN, W. (2013) op cit.
- 26 Only Slovenia and Korea have higher labour shares. In contrast, the labour share is below 50% in Mexico and Turkey.
- 27 ALVAREDO, F., ATKINSON, A., PIKETTY, T. and SAEZ, E. (2013) The top 1 percent in international and historical perspective. *Journal of Economic Perspectives*. Vol 27, No 3. Summer. pp3–20.
- 28 DOREY, P. (2001) *Wages politics in Britain*. Eastbourne: Sussex Academic Press.
- 29 GREGG, P. and MACHIN, S. (2012) op cit.
- 30 LSE GROWTH COMMISSION. (2013) *Investing for prosperity: skills, infrastructure and innovation*.
- 31 PESSOA, J.P. and VAN REENEN, J. (2013) *The UK productivity and jobs puzzle: does the answer lie in labour market flexibility?* Centre for Economic Performance Special Paper, No 31. June.
- 32 PESSOA, J.P. and VAN REENEN, J. (2013) op cit.
- 33 GREGG, P. and WADSWORTH, J. (2010) *The UK labour market and the 2008-09 recession*. Centre for Economic Performance Occasional Paper, No 25. June. p18. This paper was written in 2010 and the authors noted that low mortgage rates and reductions in VAT had maintained the real value of wages (the RPI was at one point negative in 2009). Inflation increased after 2009 but there was no corresponding increase in nominal wage growth.
- 34 CIPD. (2013) *Labour Market Outlook*. November. London: Chartered Institute of Personnel and Development.
- 35 OFFICE FOR BUDGET RESPONSIBILITY. (2013) *Economic and Fiscal Outlook*. December.
- 36 Leading proponents of this argument are Erik Brynjolfsson and Andrew McAfee from MIT and Tyler Cowen from George Mason University. See the recent blog by Gavin Kelly at [www.resolutionfoundation.org/blog/2014/jan/06/robots-are-coming-will-they-bring-wealth-or-divide/](http://www.resolutionfoundation.org/blog/2014/jan/06/robots-are-coming-will-they-bring-wealth-or-divide/)
- 37 See PHELPS, E. (2013) *Mass flourishing*. and GORDON, R. (2012) Is US economic growth over? Faltering innovation confronts the six headwinds. *CEPR Policy Insight*, No 63. September.
- 38 Across 22 European countries, the correlation coefficient between OECD estimates of average earnings in 2011 adjusted for PPP and the proportion in each country saying they are well paid in the 2010 EWCS (displayed in the right-hand panel of Figure 24) is 0.84.
- 39 CIPD. (2013) *Are organisations losing the trust of their workers?* December. London: Chartered Institute of Personnel and Development.
- 40 According to a survey conducted for Investors in People, among those looking for a new job, 63% said job satisfaction was [their main/a] motivation for moving, compared with 48% mentioning pay. Bad management was cited as a leading cause of unhappiness at work by 47% of workers. Source: IiP press release, 4 December 2013.



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