TOUCHSTONE EXTRA

Tracking the Labour Market Recovery

by Ian Brinkley

Contents

About the author

Ian is a Chief Economist at The Work Foundation, having joined The Work Foundation in June 2006. He was formerly Director of the Knowledge Economy Programme and Director of Socio-Economic Programmes. Ian's previous appointments include with the Trades Union Congress (1980–2006), where he was Head of the Economic and Social Affairs Department (2004–2006) and its Chief Economist (1996–2006). Prior to 1980, he worked as a researcher at the University of Kent and the Centre for Environmental Studies. He was a member of the Low Pay Commission, the body that sets the UK's national minimum wage (NMW), from 2004–2006.

Touchstone Extras

Touchstone Extra publications are not statements of TUC policy but instead are designed, like the wider Touchstone Pamphlets series, to inform and stimulate debate. The full series can be downloaded at **www.tuc.org.uk/touchstonepamphlets**

Introduction

The past six years appears to have destroyed many of the certainties we thought governed the labour market – the old links between inflation and wages, and between unemployment and wages seem to have been consigned to the history books. Employers appear to have recruited in large numbers despite falling sales per employee. We would normally expect wages to be growing in response to falling unemployment and increasing skill shortages, but at the time of writing, there was little sign of recovery. The return of real wage growth in 2014 still owes much more to the recent fall in inflation driven by low oil prices.

Wages have been unresponsive so far to rising skill shortages and unfilled vacancies. According to the 2013 Employer Skills survey undertaken by the UK Commission for Employment and Skills (UKCES), the share of vacancies unfilled because of skill shortages increased from 16 to 22 per cent between 2011 and 2013, affecting most sectors. Moreover, the overall level of unfilled vacancies and indicators of recruitment difficulties has returned to near pre-recession levels, according to the Bank of England.[1]

We have also seeing a divide between incumbents and those entering the jobs market – new entrants have experienced significant falls in wages, while incumbents have seen annual wage increases of around 2 per cent in money terms. The latter is, however, very weak by past standards and in 2014 implies a real wage increase of only 0.3 per cent after several years of falling real wages.[2] We can see this as the full-blooded operation of the flexible labour market, with the biggest adjustments forced on those with relatively little bargaining power such as the young and the less skilled.

Against this background, it is not surprising that anxieties about the future of work have risen to new heights. Not all of these concerns are matched by the aggregate data but sometimes they are well-founded. Since 2008, the share of self-employed and temporary employment has increased, as has casualised employment. Moreover, it is hard to convince some people that real recovery is taking place when in most quarters since 2008 real wages have fallen and many have experienced no pay increase (over 40 per cent of employees in 2014 according to the CIPD).[3] Employment growth has also been uneven between and within regions. Meanwhile, longer-term issues such as low pay, the lack of social mobility and long-term youth unemployment remain as serious and pressing challenges.

1 Bank of England (February 2015) *Inflation Report*, Table 3c
2 http://touchstoneblog.org.uk/2015/03/ons-now-say-that-nominal-pay-growth-is-2-not-4-per-cent-for-those-in-continuous-employment-with-real-pay-stagnating
3 CIPD (February 2015) *Labour Market Outlook*

In understanding what is going on, the historical context matters but is often ignored. The previous recession started in 1990, nearly 20 years before the start of the last recession in 2008. Collective memories fade about what happens in recessions and recoveries, so that all change appears to be unique. There is a temptation to portray marginal and short-term changes as vastly more significant than they really are – such as claims that the recent rise in self-employment is the dawn of a new entrepreneurial future – while ignoring more prosaic realities such as the persistence of large numbers of low pay jobs.

The central theme of this report is to distinguish between the cyclical and the structural – in other words, what changes have we seen so far in the labour market that are likely to diminish in importance as the labour market recovers and what changes are likely to persist. This will then provide a sound basis for projecting what some of the key features of the UK labour market might be over the next decade and what policy options are most likely to maximise the benefits and mitigate some of the worst aspects of change.

1 Recessions compared

The first section of our analysis compares the recessions and recoveries of the 1990s and 2008–2014 with turning points identified by changes in total employment. We have two major sources of information on employment. The Workforce in Employment time series provides consistent information over the longest periods of time for change in employment by industry. The Workforce in Employment measure includes employees (based on returns from employers), estimates of the self-employed and administrative measures of the number of people on government employment schemes, and HM Forces. We have also used the Labour Force Survey (LFS) measure, which is a large-scale household survey and includes employees, self-employed, unpaid family workers and government trainees. The two measures give slightly different turning points. We have taken the turning points in employment as defined by the LFS, as this is the preferred measure of total employment in the economy used by the ONS and is also the source for most of the non-industrial variables in this analysis.

Somewhat trickier is making sure the comparisons are at similar points in the economic cycle. The easiest way would be compare the six and a half years from the start of the recession in 2008 to the latest available statistics in 2014, with a similar period of six and a half years from 1990 to 1996. However, the most recent recession was shorter than that of the 1990s, so in order to compare two recovery periods of equal length we have taken the period Feb–April 1993 to September–November 1997 to compare with the current recovery (at the time of writing) of Jan–March 2010 to August–October 2014.

The overall performance of the labour market

In making comparisons of overall labour market performance, we have to be careful about comparing absolute figures because in most years outside recession the total number of people in work tends to grow as the population rises. In 1990, there were 26.8 million people in work and in 2014, there were 30.7 million. The statement that there are more people in work than ever before is a claim many post-war governments have been able to make. A more accurate measure of labour market performance is to look at rates – the employment rate (the share of people in work); the unemployment rate (the share of all those in work and of those actively looking for a job) and the inactivity rate (the share of those neither in work or unemployed). These rates use internationally agreed definitions as measured by the LFS and are for the working age population 16 to 64.

The employment rate fell significantly between 1990 and 1993, dropping by nearly 4 percentage points. It recovered somewhat between 1993 and 1997 by nearly 2.5 percentage points. Nonetheless, the employment rate in 1997 was still significantly below that of 1990. The pattern between 2008 and 2014 was similar but with a much smaller fall in the employment rate between 2008 and 2010. The recovery of the employment rate in both recoveries was almost identical, increasing by around 3 percentage points in both periods. By 2014, however, the employment rate was slightly above the 2008 level and was also above the previous peak in 1990. This is encouraging, as the recovery of the employment rate to pre-recession levels after 2010 has been much faster than in the period after 1993. The implication must be that if the recovery can be sustained, the employment rate will continue to edge up as it did after 1997.

Unemployment went up by about the same in both recessions but peaked at a much lower figure in 2010 because the starting point was lower – unemployment was still at 7 per cent in 1990, whereas it was down to 5.2 per cent at the start of the recession in 2008. Unemployment fell faster in the recovery of 1993–1997, dropping by 37 per cent compared with a fall of 29 per cent between 2010 and 2014. Over the whole period, the story on unemployment puts the 1990s ahead – by 1997 unemployment was nearly 7 per cent below its 1990 level, whereas in 2014 it was still 17 per cent higher than its 2008 level.

However, this comparison is misleading because of what was happening on economic inactivity (the statistical category for people who are not in a job, not actively looking for work or are unable to start a job quickly). Over the two recessions, there was a greater increase in inactivity between 1990 and 1993 than between 2008 and 2010. Between 1993 and 1997, economic inactivity rates continued to increase, albeit by not very much, whereas between 2010 and 2014 inactivity rates declined, again by not very much. As a result, the economic inactivity rate in 1997 was still 2 percentage points higher than in 1990, whereas in 2014 it was 0.6 percentage points lower. The better performance on unemployment in the 1990s was because more people dropped out of the labour market than in the in the period since 2008.

Another useful measure is to look at the inactive who say they would like a job. The question was not asked before 1993, so we cannot directly compare the two recessions. Not all working age inactive people either want to be or can be employed but a rising share of inactive people who want to work but cannot is one indicator of a dysfunctional labour market. In the 1990s recovery, the share of working age inactive people who said they wanted a job went up (from just under 26 per cent to just under 28 per cent). These shares slowly declined so that by 2008, the share of inactive people who wanted to work was down to just under 23 per cent. There was a much smaller increase in the recession of 2008–2010 and in contrast to the 1990s, a decline in the recovery. One factor is that employment policy and benefit reform were much more focused on the working age inactive from 2000 onwards.

Table 1: Overall labour market performance, 1990–2014

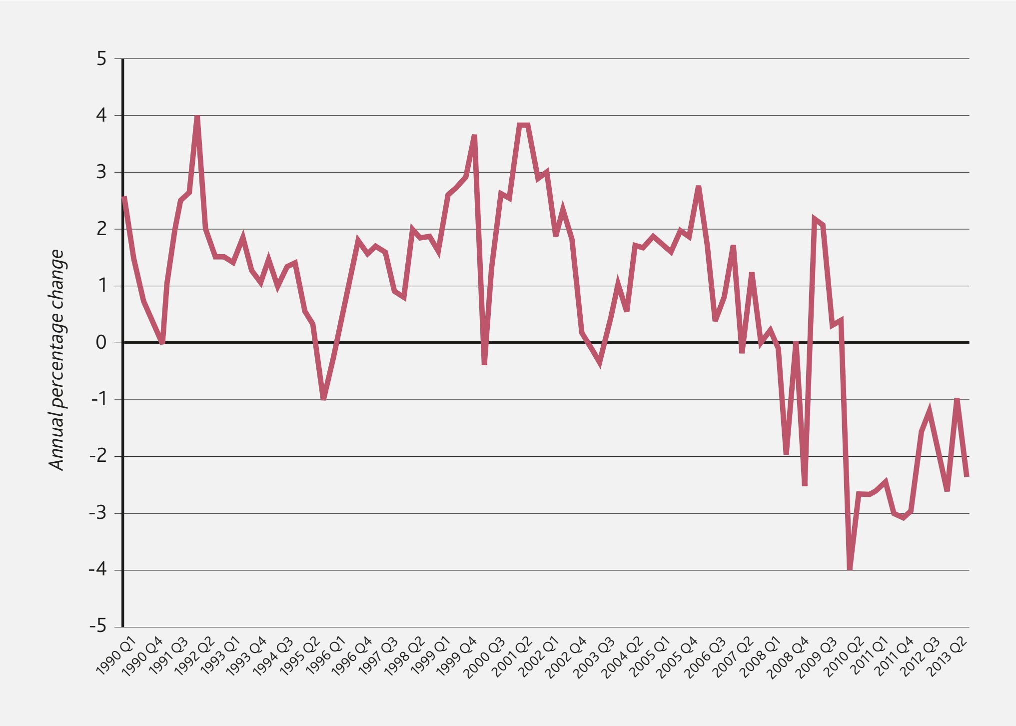
Periods change	*Employment rate (% points)*	*Unemployment rate (% points)*	*Inactivity rate (% points)*	*Inactive who want work*
Recession 1990–1993	-4.5	+3.7	+1.8	–
Recovery 1993–1997	+2.9	-4.1	+0.3	+2.0
Recovery and recession 1990–1997	-1.6	-0.4	+2.1	–
Recession 2008–2010	-2.8	+2.9	+0.9	–
Recovery 2010–2014	+3.2	-2.3	-1.3	-0.2
Recovery and recession 2008–2014	+0.2	+0.6	-0.6	–
Years	*Levels (%)*	*Levels (%)*	*Levels (%)*	*Levels (%)*
1990	72.8	7.0	21.7	–
1997	71.2	6.6	23.8	27.6
2008	73.0	5.2	22.9	25.5
2014	73.2	5.8	22.3	25.3

Note: All figures share of UK population 16–64, seasonally adjusted, percentage point changes; 1990–1993 recession is June–April 1990 to February–April 1993; 1990–1997 recovery is February–April 1993 to October–December 1997; 2008–2010 recession is March–May 2008 to Jan–March 2010; 2010–2014 recovery is January–March 2010 to September–November 2014. **Source:** ONS

Wages

One of the starkest differences between the previous recessions and recoveries has been the behaviour of real wages. In 2014, the Office for National Statistics published a long run analysis of trends in real wages. Between 1990 and 1997, real wages fell in only two quarters and over the period averaged around 1.5 per cent. Between 2008 and 2013, in contrast, real wages fell in almost every quarter. Real wage growth turned slightly positive in 2014 but primarily because of falling prices rather than stronger growth, in the ONS measure of average weekly earnings. This is shown in Figure 1 on page 10.

Figure 1: Real wage growth, 1990–2013



Source: Taylor *et al.* (2014) *An Examination of Falling Real Wages* 2010–2013, ONS, www.ons.gov.uk/ons/dcp171766_351467.pdf.

Employment

In this section, we focus on three components of employment as measured by the Workforce in Employment series: employee employment, self-employment, and government employment and training schemes. The latter are a small part of the overall total, especially in more recent periods, but they are important part of the overall change in employment in the 1990s when the large-scale schemes inherited from the 1980s were run down rapidly.

Employment fell by 6.2 per cent between 1990 and 1993 but by only 2.4 per cent between 2008 and 2010. In the subsequent recoveries, employment growth was not that different – growing by 5.4 per cent between 1993 and 1997 and by 6.1 per cent between 2010 and 2014. Employee employment held up better in the period 2008–2014 than between 1990–1997, mainly because fewer people were laid off during the recession – between 1990 and 1993 employee employment fell by just over 6 per cent compared with a fall of just over 3 per cent between 2008 and 2010. In the recovery, employee employment grew faster in the 1990s – by just over 7 per cent between 1993 and 1997, compared with just under 5 per cent between 2010 and 2014. Nonetheless, the much lower employment losses during the 2008–2010 recession meant that employee employment grew by 1.6 per cent between 2008 and 2014, compared with 0.5 per cent between 1990 and 1997.

The story on self-employment is a complete contrast between the two periods. In the 1990s recession, self-employment fell significantly – down by over 4 per cent – while in the recession of 2008–2010, it went up by nearly 3 per cent. In the 1990s recovery, there was hardly any growth in self-employment – up just 0.5 per cent between 1993 and 1997. In contrast, self-employment boomed between 2010 and 2014, growing by over 33 per cent. In 1997, self-employment was still 3.5 per cent lower than it had been in 1990 but in 2014 self-employment was over 33 per cent higher than it had been in 2008.

Table 2: Employment changes, 1990–2014

Periods	*Employees (%)*	*Self-employed (%)*	*Government schemes (%)*
Recession 1990–1993	- 6.3	-4.2	-22.9
Recovery 1993–1997	+7.3	+0.5	-41.5
Recovery and recession 1990–1997	+0.5	-3.5	-54.9
Recession 2008–2010	-3.2	+ 2.7	+4.2
Recovery 2010–2014	+4.9	+33.1	-9.7
Recovery and recession 2008–2014	+1.6	+17.2	-5.9

Note: All figures UK, seasonally adjusted; Labour Force Survey definitions, excluding unpaid family workers
Source: Labour Force Survey, TWF estimates

The recession of 2008–2010 was in part a classic labour hoarding story for employees, with firms holding onto labour in anticipation of the upturn rather than laying people off. The 2011 Workplace Employment Relations Survey shows that over 40 per cent of workplaces froze or cut wages, while just 14 per cent instituted compulsory redundancies and 5 per cent voluntary redundancies (these responses overlap). The theory behind flexible 'hire and fire' labour markets is that firms lay off people quickly in response to economic shocks and take them back on quickly in upturns, allowing labour to be efficiently reallocated to more successful enterprises. Between 1990 and 1993, employers seemed to be acting in line with these expectations but between 2008 and 2010, they did not – and we do not really know why.

The workforce in 2008 was more highly skilled and better educated than in 2010, so more firms may have concluded that hire and fire was a more costly and risky path to follow than in the past. Moreover, if employers were reluctant to cut their workforces in the recession, they would have been even more reluctant to do so in the upturn. More firms would have been in a better position to tolerate some loss of efficiency because profitability remained relatively high and the upward pressure on wage bills was small. We are not saying all firms reacted like this – many will have followed traditional employment practices, especially among less skilled workforces – rather that a higher share of firms followed this pathway between 2008 and 2014 than did so between 1990 and 1997.

Another part of the explanation may be that employment was boosted less by increased hiring and more by people who would otherwise have left the labour market staying on longer in their current job. Average job tenures did indeed increase after 2010, although this builds on a pre-recession trend.[4] Why would people stay on longer in their job? This turns on its head the frequent assertion that the job for life has gone and that people will spend much less time in a job than they did in the past. The factual basis for this claim was always highly dubious but now the labour market seems to be moving in the opposite direction. We think a major factor has been demographics – the overall employment rate may not have moved very much, but employment rates for older workers have increased significantly over the past 20 years. People can, and are able to, stay in work longer and government policies have become more supportive,[5] though their overall effectiveness is hard to judge. Some older workers will have little choice given lower returns from pensions and recent reforms increasing the state pension age.

In addition, a growing share of the workforce is made up of professionals and managers, and these groups tend to have significantly longer tenures than manual and less skilled non-manual workers. Employers will be much less tolerant of high turnover rates for high-skill workers than low-skill, and so have more incentive to offer career paths and other inducements to keep valuable workers with the organisation as long as possible.

Finally, there may also be a connection to the financial crash creating larger numbers of 'zombie' firms that would otherwise have been forced out of business between 2008 and 2010. This may have slowed down the normal labour market reallocation mechanisms we outlined above, which could have been good for employment but bad for productivity in the short-term.

And there was a viable alternative, which was to cut wages rather than employment, which may have seemed less credible in 1990. The balance of power in the workplace has undoubtedly swung in favour of capital since 1990, so managers were in a better position to impose wage cuts. But it may also have reflected the preferences of most people in work and a shared collective bargaining agenda in recognised workplaces, as trade unions reflected the preferences of their members to save jobs rather than sustain pre-recession wage rates.

Moreover, the 'hit' to living standards from a short-term freeze on wages may have seemed less costly to the average worker in 2008 than to the average worker in 1990. The period 1990–1993 was characterised by high inflation and high interest rates, increasing resistance to wage cuts, while between 2008 and 2010, inflation was relatively low and interest rates very low indeed. In addition, some of the financial penalties associated with job loss may have been higher in 2008 compared with 1990, including less generous redundancy and early retirement schemes, falls in the value of unemployment benefits relative to wages, and less chance of moving to higher rate and longer-term disability related benefits.

4 CIPD (August 2013) *Has Job Turnover Slowed Down?*
5 DWP (2014) *Working Fuller Lives,* www.gov.uk/government/publications/fuller-working-lives-a-framework-for-action

A key difference between the two periods was that many more people remained in the active labour market between 2008 and 2010 and this may have helped depress wages for new entrants to the labour market. Between 1997 and 2008, successive governments increased 'conditionality' for unemployed people who claim benefits, with a strong emphasis on active job search. In contrast, critics of the government in the early 1990s charged that unemployment figures were being held down by moving people onto long-term disability related benefits. In addition, large-scale but low-quality employment programmes between 1990 and 1993 may also have kept more people out of the mainstream labour market because of 'lock-in' – people looked less actively for work than they would otherwise have done because they were being forced to do low-value community based work.

It is also hard to find an entirely coherent reason why self-employment should behave in such a very different way in the two periods. There were no obvious policy changes that might have triggered a prolonged slump between 1990 and 2000, and equally, no obvious trigger in 2008 that would have unleashed a new wave of entrepreneurial activity on the UK economy. We suggest that the exceptional growth of 2008–2014 was due to a combination of a longer-term structural upward growth in self-employment that started around 2000, with changes in new technologies, markets and some employment practices, encouraging the rise of both professional white collar freelancers and the conversion of low-wage employee employment into low-income self-employment; exceptional labour market conditions which reduced outflows from self-employment well below previous norms for a recovering economy,[6] and a much stronger employment performance between 2008 and 2014 in more traditional sectors such as agriculture and construction which already had high shares of self-employment. For example, between 1990 and 1997, self-employment in construction and agriculture fell by 124,000 but between 2008 and 2014, self-employment in these sectors went up by 61,000.

Full- and part-time work

In this section, we look at how the distribution of full- and part-time jobs evolved in the two periods. We have seen a long-term structural shift towards more part-time jobs in the economy but at a glacial pace. For example, in 1990, nearly 78 per cent of employees worked full-time, and in 2008 the share was 75 per cent – a 3 percentage point fall in nearly three decades. In the short-term, there are always big cyclical effects, as job losses in recessions are typically concentrated on full-time jobs. Full-time work always recovers in subsequent periods but up to now it has never quite returned to its pre-1990s recession share.

Overall, the share of full-time work declined by about the same in both recessions (1.7 percentage points from 1990 to 1993 and 1.5 percentage points between 2008 and 2010). However, the recoveries were different. The share of full-time work continued to decline between 1993 and 1997, whereas between 2010 and 2014 the share hardly changed. This was mainly because full-time employee employment recovered much more strongly after 2010 compared with a similar period after 1993. Indeed, the share of employees in full-time jobs has gone up since 2010, while it went down between 1993 and 1997.

6 ONS (2014) *Self-employed workers in 2014*, www.ons.gov.uk/ons/rel/lmac/self-employed-workers-in-the-uk/2014/rep-self-employed-workers-in-the-uk-2014.html

It has been a very different story for self-employment. There was a big shift away from full-time work for the self-employed in both periods and the change has been much greater than for employees. In 1990 about 84 per cent of self-employed people worked full-time, compared with 78 per cent of employees. By 2014, this position had reversed, with 74 per cent of employees working full-time compared with 71 per cent of self-employed workers. These trends have continued over the past 12 months, with the share of employees working full-time going up and the share of self-employed working full-time going down. This looks like a structural change that shows little sign of stopping anytime soon.

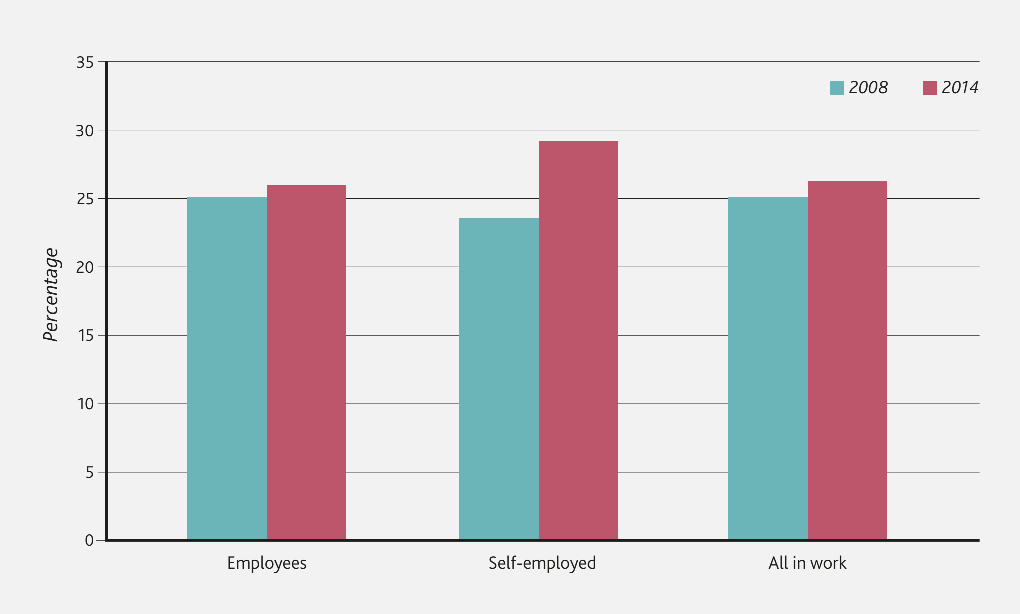
Table 3: Full-time employment, 1990–2014

Periods	*Full-time all in work (%)*	*Full-time employees (%)*	*Full-time self-employed (%)*
1990	77.7	77.7	84.1
1993	76.0	76.1	79.7
1997	75.0	74.9	78.8
2008	74.7	74.9	76.3
2010	73.2	73.4	74.3
2014	73.1	73.8	71.2
	Change (% points)	*Change (% points)*	*Change (% points)*
1990–1997	-2.7	-2.8	-5.3
2008–2014	-1.6	-1.1	-5.1
1990–2014	-4.6	-3.9	-12.9

Source: ONS, TWF estimates

As a result, part-time work, and especially part-time self-employment, have increased as a share of employment since 2008. For all in work, the share increased from 25.3 per cent to 26.9 per cent in 2014. For employees, the increase was from 25.1 per cent to 26.2 per cent but for the self-employed, the increase was from 23.7 per cent to 28.8 per cent. So, although full-time work has recovered somewhat for employees since 2010 it remains the case that part-time employment has grown faster than full-time employment since 2008. This is shown in Figure 2 on page 15. This shift towards part-time work is following the pattern of the 1990s but with the growth of part-time self-employment playing a bigger role.

Figure 2: The rise of part-time work, 2008–2014



Source: TWF estimates from Office for National Statistics data.

Under-employment

Under-employment occurs when people in work cannot get all the hours they would like. The normal pattern we would expect is that under-employment goes up in recessions and falls in recoveries. Professors David Bell and Danny Blanchflower have constructed what they call an under-employment index that measures the hours people would like to work as a share of total hours worked.[7] The index adds together the hours lost through unemployment together with those in work who would like more hours while taking account of those who said they would like to work fewer hours.

Before the recession, the under-employment index was running at a fairly steady 5 per cent but rapidly increased to over 10 per cent in 2011 and by the third quarter of 2014, was back to 7.5 per cent. So, there is still some way to go before under-employment on this measure returns to its 2008 levels. It is possible that the demand for more hours has increased in this recovery compared with the 1990s because of the fall in real hourly pay for many workers.[8] We do not have a similar measure for the 1990s but over the past decade, the under-employment index has tracked the actual unemployment rate fairly closely. This is shown in Figure 3 on page 16.

7 www.theworkfoundation.com/blog/2371/The-latest-quarterly-data-from-the-BellBlanchflower-underemployment-index

8 Bank of England *Inflation Report* (February 2015, p24) The Bank suggests that if hourly pay recovered the desired number of hours would fall back towards pre-recession levels

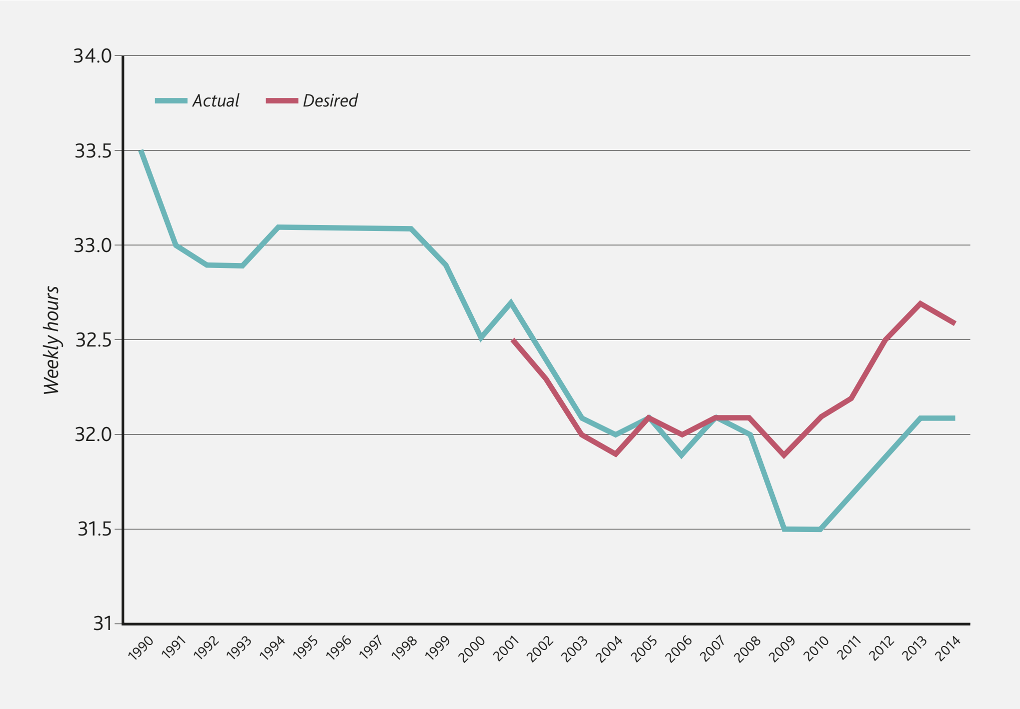
Figure 3: Under-employment and unemployment rates, 2001–2014 (Q3)

Source: Bell and Blanchflower under-employment index, TWF

The Bank of England also measures under-employment based on the Bell-Blanchflower methodology by comparing the desired hours of those in work and actual weekly hours. The pattern is very similar: desired hours of those in work and actual hours worked remained close to one another between 2001 and 2008, and then desired hours have been consistently higher than actual hours. The Bank's latest estimate, for 2014 Q3, shows the gap between desired and actual hours has not significantly changed since 2008. While actual hours have returned to their pre-recession levels, desired hours have not. This is shown in Figure 4 on page 17.[9]

9 The long-term decline in actual weekly hours between 1990 and 2008 is likely to reflect the shift towards part-time work, efforts to regulate excessive working time and collective bargaining preferences

Figure 4: Actual and desired weekly hours of those in work, 1990–2014



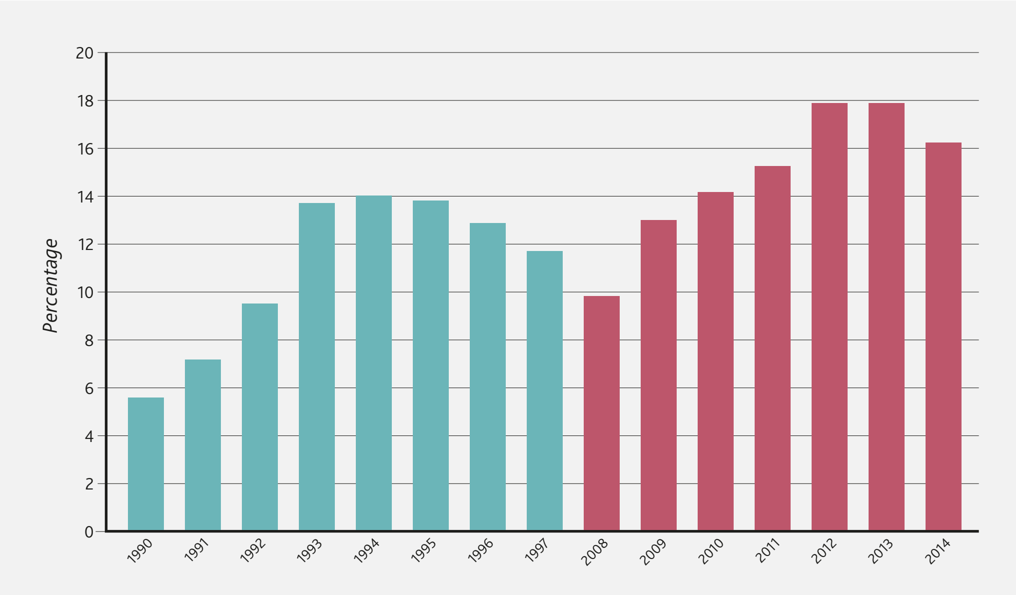
Source: Chart 3.3, *Bank of England Inflation Report,* February 2015

There is a narrower measure of under-employment that shows the share of people in part-time work who could not find a full-time job that does allow direct comparisons to be made with the 1990s recovery. The OECD calls these people "involuntary part-time".[10] In the UK, involuntary part-time work – the share of part-time jobs taken by those who said they could not find full-time work – tends to follow the unemployment rate after a lag.

However, there is also an underlying upward trend which has pushed the peak higher in each economic cycle. The peak in this recession and recovery was just under 18 per cent of all those in part-time work, compared with 14 per cent in the 1990s. Moreover, even by 2008, involuntary part-time working as a share of all those in part-time work was still higher than in 1990. Some of the increase compared with the 1990s might be because of exceptionally high demand for more hours of work because of the downward pressure on hourly real wages since 2008. Involuntary part-time employment fell in 2014 but past experience means there is an obvious danger that the share will not return to pre-recession level. Figure 7 on page 21 shows the trends across the two recoveries and recessions.

10 http://stats.oecd.org/Index.aspx?DataSetCode=INVPT_I

Figure 5: Involutary part-time employment, 1990–2014



Note: 1990-1992 not directly comparable with subsequent years; all other figures UK, seasonally adjusted, June of each year 1993–1996; September 1997; June each year 2010–2013, September 2014
Source: Labour Force Survey, ONS, 1993–2013; OECD Employment Database 1990–1992

Permanent work

One of the big questions has been how much of the increase in employment has been insecure. The share of permanent jobs in the economy is one indicator of whether employment overall is getting more or less insecure. We think it is misleading to think of part-time work as 'atypical' – part-time work has been a significant and growing feature of the UK labour market for decades, most part-time jobs are permanent, and most part-time workers say they do not want full-time jobs. Our indicator therefore includes all permanent employee jobs, whether they are full- or part-time, described as 'secure' and all temporary, self-employed, unpaid family workers, and those on government employment schemes as 'insecure'. However, this can at best only be a rough proxy as not all permanent jobs are secure – for example, most zero-hour contracts are described by their holders as permanent; conversely, some forms of self-employment can offer stable long-term employment.

The consistent data series only goes back to 1992, so we have had to make two changes to cover the full 1990s recession period. Firstly, we have drawn on the 1990 Labour Force Survey, which was then an annual survey. It is not strictly speaking directly comparable with the results from the later LFS because of technical changes, but we do not think it provides a seriously distorted picture. We have also excluded unpaid family workers from the overall employment totals, as this group was not identified in the 1990 survey. As they typically account for less than 0.2 per cent of total employment, we again do not consider their exclusion to be significant.

There was a significantly bigger loss of permanent jobs between 1990 and 1997, (when the share of permanent work dropped by 3.6 percentage points) than between 2008 and 2014, (when it fell 2.3 percentage points). However, this was entirely because of the much bigger scale of job shedding that took place in the 1990s recession, compared with that of

2008–2010. In the recoveries, the share of permanent jobs stabilised between 1993 and 1997, whereas between 2010 and 2014 the share of permanent jobs has continued to fall.

The fall in permanent employment in both periods had different drivers. In the 1990s, we saw more temporary jobs but falls in other forms of insecure work such as self-employment and government employment schemes. In the 2000s, the big driver has been the rise in self-employment. However, we do not think the fall in permanent work in this recovery is the first signs of a structural break from the past. Over the past year, the shares of self-employment and temporary work have started to fall and we expect the latter to move back towards pre-recession levels.

However, the share of self-employment may remain permanently higher than before because of changes in markets and technologies that have seen self-employment increase in new areas, such as education services. Between 2008 and 2014 self-employment increased by over 120,000 or 85 per cent, while between 1990 and 1997 self-employment in education declined slightly, by just over 2 per cent. The reasons for this are not well-understood and vary at sectoral level. For example, in education they include higher and further education establishments and firms providing education services making more use of freelance contracts, more academics taking second jobs as self-employed, and increased home education and more personal tutoring to improve the chances of children from better off families accessing better schools. It has also been suggested that there is an ageing effect, with education professionals staying in the sector as self-employed after they have retired as employees.[11]

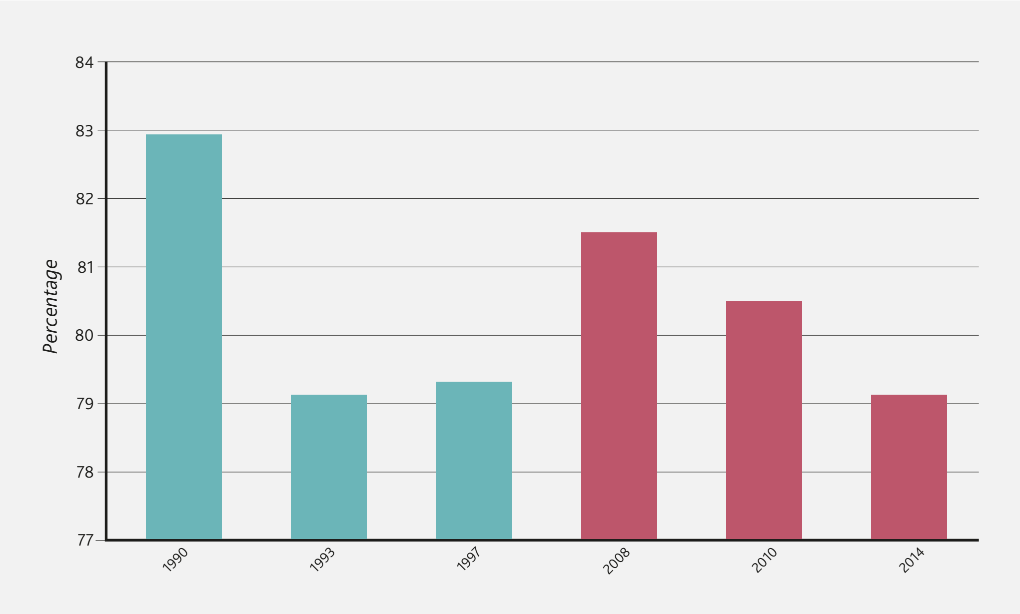
Table 4: Share of permanent employment, 1990–1997 and 2008–2014

Years (levels)	*Permanent employees (%)*	*Temporary employees (%)*	*Self-employment (%)*
1990*	82.9*	3.9*	13.1
1993	79.2	5.3	13.4
1997	79.3	6.7	12.8
2008	81.5	4.8	13.0
2010	80.5	5.1	13.6
2014	79.2	5.5	14.7
Periods (change)			
1990–1993	-3.7*	+1.8*	+0.3
1993–1997	+0.1	+1.4	-0.6
1990–1997	-3.6*	+3.2*	-0.3
2008–2010	-1.5	+0.3	+0.6
2010–2014	-1.3	+0.4	+1.1
2008–2014	-2.3	+0.7	+1.7
1990–2014	-3.7	+1.6	+1.6

*1990 annual Labour Force Survey; 1993–2014 quarterly LFS; all figures UK, seasonally adjusted
Source: Office for National Statistics, TWF estimates

11 UKCES Sector Skills Insights: Education, Evidence Report 57 (August 2012, para 2.3) Self-employment is projected to grow by 1.2 per cent per annum in education between 2010 and 2020, while employee employment is projected to slightly decline

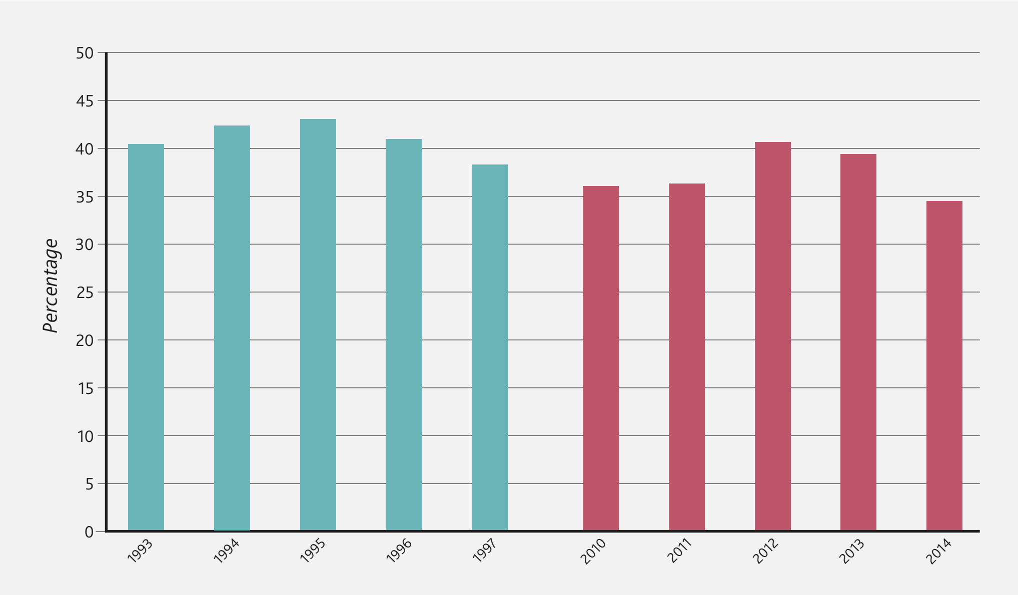
Figure 6: Share of permanent employees, 1990–2014



Source: TWF estimates from the Labour Force Survey

An important distinction is whether people are in temporary jobs because they prefer temporary work or because no permanent jobs are available. The trends on involuntary temporary working are much the same as for involuntary part-time working – they are cyclical, following the unemployment rate but with a lag. We do not have data before 1992 but the statistics we do have show that involuntary temporary work continued to rise between 1993 and 1995 to reach a peak of just over 43 per cent of all temporary workers, before falling back slowly to just over 38 per cent by 1997. The share continued to fall, reaching a floor of about 25 per cent from the mid-2000s onwards. The share rapidly increased from 2008 onwards to just over 40 per cent by 2012 but fell slowly to just over 34 per cent in 2014.

Figure 7: Involuntary temporary working in two recoveries



Note: Share of temporary workers who say they took a temporary job because no permanent jobs were available; UK, seasonally adjusted, July–September each year **Source:** Labour Force Survey

Zero-hours – the rise of casualised employment?

However, it has become clear that in this recovery that some employers have been making more use of casualised employment contracts. These are popularly known as zero-hours contracts, though many such contracts are not described as zero-hours. The ONS now refers to jobs that do not have guaranteed hours of work in some of the statistical estimates.[12] By implication, a rise in the share of permanent employees is an even less reliable guide to whether overall employment is becoming more secure.

The general assumption that zero-hours contracts have been on the rise is as near certain as we can be given the unreliability of statistical evidence. The Workplace Employment Relations Survey shows a consistent increase in the share of workplaces reporting the use of zero-hours contracts since 1998, with the share more than doubling between 2004 and 2011 from 4 per cent to 11 per cent. However, the only data we have on time-series for the actual number of people on zero-hours contracts is derived from the Labour Force Survey. Although some of the early estimates are not directly comparable with later years and there is a lot of erratic movement from year to year given the tiny sample size, we think the underlying trend is a decline from 1997 onwards until about the mid-2000s followed by a similar upward trend to 2011. There is then a jump in 2012, followed by an even bigger surge in 2013 and another rise in 2014. It is likely that much of the increase since 2011 has been people becoming more aware they were on zero-hours contracts due to media and campaigning activity, according to the ONS.

12 ONS (February 2015) *Analysis of Employee Contracts that do not Guarantee a Minimum Number of Hours,* www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-392551

However, an ONS survey of employers in early 2014 found that even the enhanced LFS response was a severe underestimate. The employer survey shows employers issued 1.4 million contracts, while the latest LFS estimates showed 622,000 people on ZHCs. These are different measures and some people will have more than one contract – but this is still a huge difference. Zero-hours contracts as reported by employees in April-June 2014, represented 2 per cent per cent of all employment in 2013 and 2.4 per cent of employee jobs (LFS definition of employment). Zero-hours contracts as reported by employers account for about 4.2 per cent of total employment and 4.9 per cent for employee employment (Workforce in Employment definition).

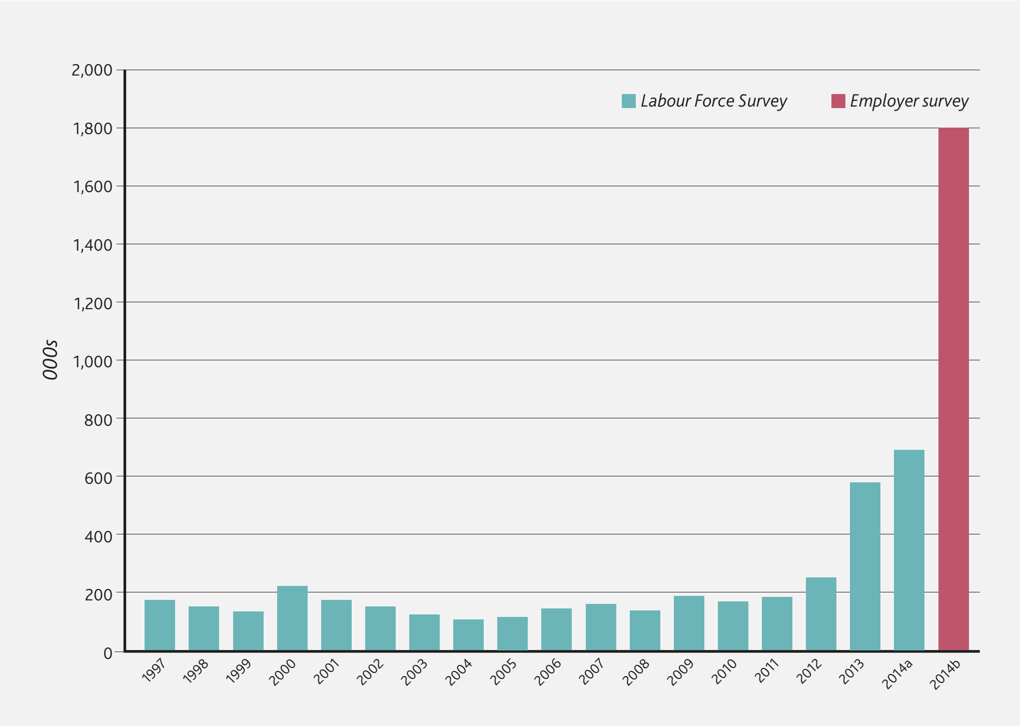
This is not the end of the story, as the ONS only counted employees who their employer said worked during the week of the survey and there were nearly as many people on some form of zero-hours contract who were reported by employers as not working in the survey week. These include people who were sick or on holiday, were working for another employer, who did not want to work in that week, or were not offered work and also agency staff. Some but not all of these contracts will need to be added to the employer estimate when the ONS refines the measure.

To sum up, we do not know whether the huge iceberg of unreported casual employment shown by the ONS employer survey has always been with us or is a relatively recent development. Nor do we know exactly how much zero-hours employment has increased since 2008 from the less accurate Labour Force Survey. Moreover, we have no statistical measure of what share of zero-hours jobs are held by people who would prefer a regular contract. Ad hoc and unofficial surveys[13] suggest that as many people take them out of choice as do not, while individual case evidence suggests that some of those who take them because they have no choice can be highly vulnerable to exploitation.

The hard evidence we have on the numbers on zero-hours contracts are shown in Figure 8 on page 23 – the years 1997 to 1999 from the Labour Force Survey are not directly comparable with those from 2000 onwards, while those from 2012 onwards are likely to have been biased upwards by increased awareness amongst survey respondents.

13 CIPD (2013) *Zero-hours contracts: Myth and reality,* www.cipd.co.uk/hr-resources/research/zero-hours-contracts-myth-reality.aspx; UKCES (2014) *Flexible Contracts: Behind the headlines,* www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-392551

Figure 8: Zero-hours contracts, 1997–2014



Note: Estimates for 1997–1999 not directly comparable with later years. 2014a is latest Labour Force Survey estimate of individuals on zero-hours contracts Oct-Dec 2014; 2014b is latest employer survey of zero-hours contracts for those who worked in the two weeks of the survey, August 2014.
Source: Labour Force Survey, ONS

The skills mix of job creation

There has been much debate about what sort of jobs have been created – there seem to be to contradictory accounts, one that emphasises the growth of poor quality, low-wage employment and other claims that most of the new jobs have been high-skill. The answer is that both are true. Many studies have shown how the economy has been consistently producing jobs at the top and the bottom of the labour market, with jobs in the middle such as skilled manual and clerical disappearing. But there is more debate about the balance between the number of jobs at the top and the number of jobs at the bottom, not least because there is no fixed definition of what constitutes the top, middle, and bottom and how they are measured.

We have followed the broad classification used in the recent analysis of the labour market looking at employment polarisation from SKOPE at Oxford University.[14] The top three occupational groups (managers, professionals, and associate professionals and technical) are classified as high-skill; the middle is defined as administrative, skilled manual and operatives; the bottom as caring and leisure service jobs and unskilled workers. This

14 Holmes (2014) *Why is the Decline of Routine Jobs Across Europe so Uneven?* SKOPE, www.skope.ox.ac.uk/wordpress/wp-content/uploads/2014/12/Skope_IssuesPaper33Holmes.pdf

differs a little from that used in some analyses, for example by the Bank of England, by including operatives in the middle skill group rather than the lower skill group but we do not think it distorts the overall picture.[15] These are of course only broad proxies – in practice, each occupational group will contain wide ranges of skill and qualification.

Trying to track occupational change over time is exceptionally challenging because of changes in occupational coding and the lack of published statistical data on a consistent basis. We have drawn on two published datasets that allow us to get as close as possible to the two recovery periods of 1993 and 1997 and 2010 and 2014:

- We have drawn on two sets of statistics from the Labour Force Survey for 1993 to 1997 and 2010 to 2014. They are not directly comparable, so can only give a broad guide to what happened to jobs in the two periods.
- We have also drawn on the UKCES Working Futures estimates of employment change which are produced on a consistent definition over time but which do not neatly fit with the two periods we have focused on in this report. UKCES show changes over decades, and we have compared the periods 1992 and 2002 and 2002 and 2012.

The results are strikingly consistent, despite the diversity of statistical sources, no matter what period we look at or what dataset we use. Both our estimates from the Labour Force Survey datasets and the UKCES estimates for each decade between 1992 and 2012 show that the majority of new jobs are higher skill in both periods. Moreover, the balance between high-skill and low-skill job generation is moving in favour of high-skill jobs, comparing the 1990s with the 2000s. Since 2008 the economy has generated more high-skill jobs and fewer low-skill jobs than it did in a comparable period since 1993.

The main reason is not that the 2010–2014 recovery saw high-skill jobs being generated at a faster rate. The increase in high-skill jobs between 1993 and 1997 and 2010 and 2014 is about the same in percentage terms. The contribution from high-skill jobs is nonetheless bigger in absolute terms because the base of high-skill jobs in the economy is much larger than it was in 1990. The biggest growth of all is in professional jobs, where the UK has one of the highest shares in total employment in the EU. This is partly because of high levels of employment in education, health and other high value and knowledge intensive services, but also because of a more general trend in some OECD economies including the UK to designate more jobs as professional that require entrants to have a minimum level of qualification before they can practice.[16]

In contrast, overall low-skill job generation has declined because of the impact of new technologies and markets on traditional sales jobs in areas such as retailing – replacing jobs in-store as well as shifting to on-line sales. As a result, whereas sales and related jobs were a significant major contributor to low-skill employment growth in the 1990s, they contribute very little in more recent periods. In our estimates for 1993 to 1997 sales jobs increased by well over 200,000, whereas between 2010 and 2014 there was virtually no change.

15 In terms of pay-rates, operatives sit between the low-wage, lower skill group of the bottom three occupational classifications and the mid-skill, mid-wage group of skilled manual and administrative workers

16 Koumenta *et al.* (2014) *Occupational Regulation in the EU and UK*, Queen Mary College

The most recent UKCES Working Futures projections note that: *"This category has seen job losses in recent years as the retail and distribution sector restructures itself. Increasing concentration of businesses, competition from the Internet and technological developments such as automated checkout are expected to reduce the need for more traditional sales occupations meaning that this pattern is expected to continue."*[17] Some categories such as somewhat more skilled customer services occupations may grow and a recovery in real incomes may mean that consumption may be stronger in future years, strengthening retail sales.

Nonetheless, UKCES is projecting very little growth in sales and customer service jobs to 2020. Although we have concentrated on changes in the overall numbers of jobs, it should always be remembered that even sectors that appear to be in decline will still provide large numbers of job openings as people drop out of the workforce or move to other industries. For example, UKCES is forecasting that while sales jobs will decline by another 200,000 over the next decade, the sector will have over 700,000 job openings to fill, giving a net demand for labour of 500,000. For the foreseeable future, retailing will continue to provide large numbers of new entry jobs.

The shrinkage of the middle of the skill distribution has not been accompanied by a similar degree of wage polarisation, leading some to suggest that the middle has been replaced by different jobs.[18] This, however, is still problematic. Firstly, some analysis has suggested growing polarisation within the top three occupational categories between well-paid top jobs and much less well-paid jobs, some of which are filling the middle of the wage distribution.[19] Secondly, because some of the new middle paid jobs require qualifications and different skill-sets to the old middle, people without the right skills and qualifications find their opportunities more limited than in the past, increasing competition for less skilled work and adding to downward pressure on pay.

Table 5: Employment polarisation compared across two recoveries

TWF estimates	*High-skill (%)*	*Mid-skill (%)*	*Low-skill (%)*
1993–1997*	+9.8	+0.1	+6.5
2010–2014*	+9.5	-0.1	+3.0
Working Futures			
1992–2002	+25.1	-7.1	+18.0
2002–2012	+20.5	-8.4	+ 5.5

*These two periods are not directly comparable as they are derived from different occupational classifications. 1993–1997 is Labour Force Survey, quarterly unweighted, Dec–Feb 1993 and Dec–Feb 1997, seasonally unadjusted, SOC 1990. 2010–2014 is annual population survey workplace analysis, twelve months to September 2010 compared with twelve months to September 2014, SOC 2010. High-skill is managers, professionals, associate professional and technical jobs in all periods; mid-skill is administrative and clerical jobs, skilled trades, operatives; low-skill is personal services, sales, other and unskilled for 1993–1997 and caring and leisure, sales, and unskilled for 2010–2014.
Source: NOMIS

17 UKCES (2014) *Working Futures 2012–2022*
18 BIS (2013) *Hollowing out and the future of the labour market,* Research Paper 134
19 Holmes (2015) *Have UK Earnings Distributions Polarised?* Resolution Foundation

2 Industrial composition

A key question is whether Britain's industrial structure is changing so that the balance of job generation between higher wage and lower wage industries is shifting in favour of lower wage industries or higher wage industries. We would expect the share of employment in higher skill and better paid industries to increase over time in line with the overall improvements in skill and education levels of the workforce. As we saw on page 24, there has been a significant shift towards higher skill occupations since 1990.

However, the relationship between the shift to a more highly skilled workforce described above and the share of people working in higher pay and lower pay industries is not straightforward. Some of the increase in the employment of more skilled labour is occurring within industries as well as between industries, which means that increased numbers of skilled jobs no not automatically mean a higher share of employment in our most highly skilled industries. The pay rate for a skilled worker in retailing, for example, is still going to be much lower than a skilled worker in the professional services. Moreover, the job polarisation we noted earlier may result in more people working in low paid industries and more people working in better-paid industries. Lastly, there can be significant job miss-match with for example a significant minority of better educated young people forced to take lower paid jobs because there is an insufficient number of jobs that require a graduate level education. There is also a wider problem of skills-underutilisation, where people find that the skills they have acquired do not always lead to better pay because the demands of the job have not changed.

There is no official definition of a low-wage industry. We have taken the TUC's previous definition,[20] which is all industries where the median hourly wage is below the national average median at the 25th percentile. According to the latest estimates from the Spring 2014 Annual Survey of Hours and Earnings (ASHE), the UK hourly wage at the 25th percentile (the point where 25 per cent of employees earn less) was £8.15. The industries defined as low paid on this definition were retailing, hospitality, residential care, services to buildings (which includes cleaning), and betting and gambling.

This however presents a problem, as several of these industries require us to go below the broadest industrial classification – for example, residential care services are included within the broad health services classification alongside hospital services and social care. The only comparable statistical information on employment below the broad industrial sectors for the 1990s recession and recovery is for employees. Statistics for the self-employed at this level only exist from 1996 onwards. As self-employment has been such an important part of the overall growth of employment in this recovery, there is a risk we are would be not be comparing like to like by just confining the analysis to employee employment.

20 TUC (2013) *The UK's Low-Pay Recovery*

Has employment in low-wage industries increased since 2008?

The first question we asked was whether there has been a shift from high- to low-wage industries since 2008 using the TUC definition. For this period, we were able to include the self-employed, although we present results separately for both employees and the self-employed. The results confirm that there has been a slight increase in the share of these sectors in total employment: in other words, employment in low pay industries has grown faster than employment as a whole. The share of total employment in low paid industries went up from 20.8 per cent to 20.9 per cent comparing 2008 and 2014. Self-employment in low pay industries grew significantly faster than self-employment across the economy as a whole. Overall, between 2008 and 2014 self-employment grew by 32 per cent across the low pay industries compared with 22 per cent across the economy as a whole.

As we would expect given our previous analysis, retailing employment over this period has been very weak with employee employment falling by just over 6 per cent, and total employment by just over 5 per cent. In contrast, most other low pay sub-sectors have seen stronger growth than for either the economy or for services as a whole – total employment in hospitality has increased by just under 7 per cent, residential care by 11 per cent, and employment in building services up 29 per cent. The small gambling and betting services sub-sector showed no overall employment growth.

Self-employment growth in low-wage industries, 2008–2014

Unlike some other service sectors, retailing has seen only a modest increase in self-employment, which is consistent with an industry that historically has seen falls in small independent retail outlets and higher shares of employment in large firms, chains, and franchises. Residential care has seen a big percentage increase of 50 per cent, but from a very small base so the contribution to overall job growth has been 11,000. In contrast, building services has seen an explosive growth in self-employment, up 132 per cent and adding nearly 140,000 jobs. Almost all of the increase is accounted for by increased part-time working for men and women, with the share of part-time self-employment in building services increasing from 33 to 54 per cent. This is consistent with the shift towards part-time working in self-employment we noted earlier, and the decline in average incomes for the self-employed since 2008.

Employee employment in low pay industries – 1990s and 2000s compared

When we look just at employees then we find that the growth of employment in our low pay sub-sectors was somewhat stronger between 1990 and 1997, with employment growing more strongly than both total employee employment and employee service sector employment. The main reason is that retailing employment expanded by nearly 10 per cent in the 1990s, whereas in the period since 2008 employee employment in retailing has so far contracted, although more recent figures suggest it may be recovering somewhat.

In some other low pay sub sectors, employment grew faster in the period after 2008 than in the 1990s. For example, hospitality saw employee employment increase by just over 4 per cent in the 1990s and by nearly 7 per cent since 2008, and residential care grew by 7 per cent in the 1990s and by over 9 per cent in the period since 2008. Without the weakness in retailing, low-pay employment would have grown at a faster rate since 2008 than it did in the 1990s. Building services employee employment growth was also weaker than in the 1990s but we think this was because of the rapid increase in low-income self-employment since 2008 in this industry.

Table 6: Growth of low pay industries compared, 1990–2014 (employees)

Sector and SIC	*Employees*	
	1990–1997 (%)	*2008–2014 (%)*
Retail (47)	+ 9.9	- 6.2
Hospitality (55/56)	+ 4.4	+ 6.7
Residential care (87)	+ 7.0	+ 9.3
Building services (81)	+31.1	+11.1
Gambling (92)	+11.9	+ 2.0
All low pay industries	+10.1	+1.1
All service industries	+ 4.8	+2.6
All industries	-12.2	+0.6

Note: TUC definition of low pay industries: all industries with hourly median pay below the hourly pay at the 25th percentile (bottom 25 per cent). All figures UK seasonally unadjusted March of each year.
Source: ONS

Table 7: Growth of low pay industries, 2008–2014 (total and self-employment)

Sector and SIC	*Total employment*	*Self-employed*
	2008–2014 (%)	*2008–2014 (%)*
Retail (47)	- 5.4	+ 4.1
Hospitality (55/56)	+ 6.5	+ 3.0
Residential care (87)	+10.8	+100
Building services (81)	+29.4	+132
Gambling (92)	No change	- 67
All low pay industries	+3.4	+32.2
All service industries	+5.3	+30.5
All industries	+3.2	+22.2

Note: TUC definition of low pay industries: all industries with hourly median pay below the hourly pay at the 25th percentile (bottom 25 per cent). All figures UK seasonally unadjusted March of each year.
Source: ONS

The shift to lower pay work within industries for employees

We have also looked at some of the trends within the broader sector in which our low pay sub-sectors are located. Residential care is part of the wider health and social care sector, building services part of the administrative support services sector, and gambling part of the arts and leisure sector. In all these industries there are significant areas of employment in sub sectors where median wages are above the low pay cut-off used in our definition, but are still below the national median wage. We find reasonably consistent evidence that within each of these broad industry sectors, compared with the 1990s, more jobs are being created in lower wage activities and fewer jobs in higher wage activities.

- Health and social care – consists of three sub-sectors: human health; residential care and social work. The median hourly wage in human health (hospitals, GPs and dental services) is £11.70; followed by social work at £9.00 an hour (including non-residential care for the elderly and disabled and child care); and residential care at £7.89. In the 1990s, the fastest growing sub-sector was the higher wage human health and the slowest growing was residential care. Since 2008 however, the fastest growing sub-sector was social care followed by human health and the slowest was residential care. So compared with 1990s we have seen fewer jobs in higher wage health related activities such as human health and more jobs in lower wage related activities such as social work and residential care. The slower growth in residential care employment in both periods is probably because of the policy of delivering care so people can remain at home rather than move into institutions.
- Administrative and support services – a wide-ranging sector covering renting and leasing, employment agencies, security and cleaning services, travel agents, call-centres and other office administrative and business services. Hourly median wages range from £11.76 an hour in travel and tour operators to £7.42 in gambling and betting, with significant areas of employment paying just above the cut-off point for our definition of low pay. Here we find the same pattern, where the only areas of employee employment growth since 2008 have been in lower wage security and cleaning services. Similarly, self-employment growth since 2008 has been entirely concentrated in low-wage building service activities.
- Arts, entertainment and recreation – another wide ranging sector, with median hourly wages ranging from £14.63 (support for performing arts) to £8.10 (gambling and betting) but like administrative support services there are considerable areas of employment with hourly wages just above the low pay cut-off point. For employees, there is an unambiguous shift towards employment in lower wage activities such as sports, amusement and recreation activities, where pay is £8.50 an hour and away from some higher wage activities such as arts and cultural services where pay is between £11.70 and £12.71 an hour. However, there has also been strong self-employment growth in both higher wage and lower wage activities since 2008.

Table 8: Shift towards lower wage employment growth within sectors

Sector and SIC	*Median hourly pay*	*Employees*	
		1990–1997 (%)	2008–14 (%)
Health and social work			
Human health (86)	£14.27	11.8	11.6
Social care (88)	£9.00	5.5	22.0
Residential care (87)	£7.89	7.0	9.3
Admin support services			
Rent and leasing (77)	£11.01	- 5.1	-10.9
Travel and tourist (79)	£11.76	22.9	-18.0
Employment agencies (78)	£ 8.65	25.0	- 4.1
Security	£ 8.49	7.4	8.2
Building services (81)	£ 7.42	31.1	11.1
Arts, entertainment, recreation			
Arts and entertainment (90)	£12.71	11.6	-0.9
Cultural activities (91)	£11.67	13.4	-18.0
Sports, amusement (93)	£8.57	10.2	16.0
Gambling (92)	£8.10	11.9	2.0

Source: ONS, UK seasonally unadjusted March of each year.

Higher value added services

At the opposite end of the spectrum to our low pay industries, there are three private sector based knowledge intensive service sectors where pay is well above the UK median hourly wage of £11.61: information and communication services (hourly median £16.97); financial services (hourly median £17.96); and professional, scientific and technical services (hourly median £15.38 an hour). At this broad level of aggregation, we also have figures for self-employment for the 1990s, so we can make direct comparisons for total employment as well as employee employment.

Job growth since 2008 has been much stronger in these higher wage industries than in the 1990s. Employee employment grew by 7 per cent overall between 2008 and 2014, compared with growth of just over 2 per cent between 1990 and 1997. Employee job growth was entirely concentrated in information and communication, and professional, technical, and scientific services. Financial services shed employee jobs in both periods. There was an even bigger contrast with self-employment, with an increase of nearly 40 per cent between 2008 and 2014 compared with a slight decrease between 1990 and 1997. Self-employment increased in all three industries, including financial services.

Overall, total employment (employees plus self-employed) grew by just over 11 per cent between 2008 and 2014 compared with 1.3 per cent between 1990 and 1997. Between them, these three higher wage industries added 522,000 jobs to the overall total between 2008 and 2014 compared with 47,000 between 1990 and 1997.

Table 9: Employment growth in higher wage services, 1990–2014

Employees	*1990–1997 (%)*	*2008–2014 (%)*
Professional, scientific, technical	+8.8	+17.3
Information services	+6.2	+5.9
Financial services	- 7.3	-9.3
All of above	+2.2	+7.0
Self-employed		
Professional, scientific, technical	-0.3	+44.7
Information services	1.8	+26.8
Financial services	-5.1	+41.9
All of above	-0.2	+39.8
Total employment		
Professional, scientific, technical	+5.9	+21.8
Information services	+5.2	+ 8.6
Financial services	-7.3	- 7.0
All of above	+1.3	+11.1

Source: ONS, UK seasonally unadjusted, March of each year

Education services also have median hourly wages (£13.82) above the UK medianand have been a strong employment generator. Between 2008 and 2014, total employment in the sector increased by over 11 per cent, with employee employment growing by 7 per cent and self-employment by nearly 50 per cent. In contrast, employment in education fell slightly between 1990 and 1997 driven by falling self-employment. The difference in absolute term is striking. While total employment in education services contracted by about 17,000 between 1990 and 1997, the same sector expanded by 286,000 between 2008 and 2014.

Table 10: Growth in education services, 1990–2014

Education employment	*1990–1997 (%)*	*2008–2014 (%)*
Employees	+0.2	+ 6.8
Self-employed	- 2.6	+49.5
Total employment	- 0.8	+11.1

Note: All figures UK unadjusted **Source:** NOMIS

However, the sector also includes areas of lower pay and some pockets of very low pay, notably nursery education where the hourly median pay is only £7.58 an hour. Pay rates for teaching assistants are also typically low and both before and after 2008 there has been a policy driven increase in the share of classroom assistants in the schools workforce. Unfortunately, the readily available statistical information from ONS employment datasets provides remarkably little detail about the education workforce, and statistics from the different education agencies and authorities are a model of inconsistency both with each other and over long time periods. However, between 2010 and 2013 the number of teachers on a full-time equivalent basis in English schools (nursery, primary and secondary) went up by 0.7 per cent, while the number of teaching assistants on the same basis went up by 14 per cent, according to the Department of Education.[21] The figures before 2010 are derived from a different survey carried out at a different time of the year. They may not be directly comparable but they do show that between 2000 and 2010, the number of teachers on a full-time equivalent basis went up by just over 10 per cent, while the number of teaching assistants went up by 155 per cent

21 Department of Education (2013) www.gov.uk/government/statistics/school-workforce-in-england-november-2013

3 Conclusions and key findings

Many of the changes we have seen in the labour market since 2008 reflect long term structural changes, some more intense than in the 1990s and others somewhat weaker. We should not view the 1990s with rose-tinted spectacles – it was also a time of difficult industrial change and public sector austerity. So, while some changes look better when compared with the period 1990 to 1997, the bar may not always be set very high. Even so, better progress on employment, unemployment and inactivity in this cycle suggest an underlying long-term structural improvement since the 1990s. Non-existent wage inflation makes us optimistic that unemployment can fall significantly without triggering significant inflationary pressure, but also raises concerns about the drivers of future pay growth.

Job polarisation means that while there has been a shift in employment towards higher skill employment and higher wage industries, there has also been strong employment growth in several low pay industries. The fact that overall employee employment growth in low pay sectors is less than in the 1990s is entirely down to the very differing fortunes of the retail industry and other low pay industries, and one striking feature is the persistence and expansion of large swathes of low pay work outside retail. The other side of the coin is an acceleration of growth in some higher wage sectors, again reflecting underlying structural changes. The faster rate of growth translates into even bigger big job increases in absolute terms because these industries are much larger than they were in 1990.

The shift towards more casualised forms of employment that cut across the permanent-temporary boundary, as exemplified by zero-hours contracts, is in our view structural, but we do not know how big that shift has been. We see the recent rise of self-employment in this recovery as largely a one-off that will partially reverse itself in subsequent years.

The unemployment, employment and inactivity rates all have strong cyclical components, although it is the structural differences compared with those from the 1990s that are the more significant. Under-employment is almost entirely cyclical and tracks the unemployment rate fairly closely on the broadest measure we have. We are worried, however, that on the narrower measure of involuntary part-time working that a structural element is creeping in, with a higher peak and slower recovery than in the 1990s. The loss of full-time and permanent employee jobs over the recession and the rise of involuntary temporary working are largely cyclical. There is a very slow long-term structural shift towards part-time employee working, but it is been less evident in this cycle and we are confident that the share of full-time and permanent work for employees will be largely restored over the coming years.

At the start of the report, we said we would distinguish between cyclical and structural change comparing the two recessions and recoveries. These are summarised in Table 11 on page 34.

Table 11: Structural and cyclical changes in two recessions and recoveries

Structural or mainly structural	*Short description*
Overall labour market performance	Better progress on unemployment, employment and inactivity compared with the 1990s, suggest structural improvement.
Real wages	Sustained falls in real pay have led to higher than anticipated employment but have led to substantial falls in living standards. Suggests possible structural shift towards lower pay growth.
Job polarisation – higher skill job generation	Sustained shift towards jobs in the top three occupational categories has continued and strengthened compared with 1990s.
Job polarisation – lower skill job generation	Sustained shift towards less skilled jobs but weaker than in the 1990s. Recent pick up may suggest a cyclical element.
Employment in higher wage industries	Much stronger growth in some higher-wage and higher-skill industries than in the 1990s
Employment in lower wage industries	Differential structural change depressing growth in retail but accelerating growth in other low pay industries compared with 1990s
Employment within broad sectors with mix of higher, middle, and lower pay industries	Shift in employment towards sub-sectors with lower wage employment but not classified as low-paid (e.g. social care growing more strongly than hospital based services).
Incidence of low pay in whole economy	Structural feature unaffected by shift towards higher skill and higher wage employment or the economic cycle or the NMW.
Incidence of casual employment contracts (zero-hours)	Structural shift to zero-hours working but unsure about level and strength of increase.
Self-employment	Overall growth mix of structural and cyclical that will be partially reversed; shifts to part-time and polarised job growth are structural.
Cyclical or mainly cyclical	
Unemployment, employment rates	Strong cyclical element common to both recoveries, so if demand is sustained it should reduce unemployment and boost employment.
Under-employment	Broadest measure is cyclical, tracking unemployment rate, but involuntary part-time working may be developing structural element.
Permanent and full-time employee jobs	Mainly cyclical, with pre-recession shares likely to be attained, or nearly attained.
Involuntary temporary jobs	Cyclical, will return to pre-recession rate of 25 per cent, but may be structural barrier to falling any lower.
Productivity	Has fallen significantly but likely to be mainly cyclical given recent shifts in employment have been towards occupations, industries, and activities associated with higher levels of productivity.

4 Policy implications for the future

Full employment – an achievable goal

We have seen much faster progress in restoring pre-recession levels of employment and than in the recovery of the 1990s. Just as the employment rate continued to rise after 1997 so too would we expect the employment rate to increase in the years after 2014 and with it the prospect of pushing unemployment down significantly below 5 per cent. Just as unemployment and inactivity seemed to constantly ratchet up between 1980s and 1990s, we have been moving in the opposite direction in the 2000s with unemployment ratcheting down.

There is in our view a huge opportunity for the next government to give the ratchet another twist and create a full employment labour market over the next decade with unemployment at the sort of levels we last saw in the 1970s of between 3 and 4 per cent. There is widespread cross-party political support for the idea of full employment, and a previous TUC report has discussed what a full employment labour market might look like, especially some of the actions that could be taken through labour market interventions to ensure greater participation by groups with historically low employment rates.[22]

The most obvious macro-economic requirement is a period of sustained economic growth – and that is most likely to be achieved if the recovery becomes more balanced – investment and exports growing faster than consumption, stronger growth outside Southern England, and a revival of manufacturing. The concept of a "Northern Powerhouse" coined by the last government is attractive but is still more aspirational than a reality. Policy also needs to address more effectively the root causes of the imbalance between the demand and supply of housing which also serves to reduce labour mobility and increases the danger of a property market bubble. Another important pre-condition is that the UK's productivity record needs to improve – low productivity has been good for jobs since 2010 but this is not sustainable as without a return towards pre-recession rates the UK's competitive position will continue to erode and over time this will constrain both growth and employment generation.

The UK economy can achieve full employment within the next decade – by which we mean an unemployment rate consistently around 4 per cent – provided we have sustainable and balanced growth, especially across and within the countries and regions of the UK; and a return to pre-recession rates of productivity and wage growth.

22 TUC (2014) *Equitable Full Employment: A Jobs Recovery for All,* www.tuc.org.uk/economic-issues/touchstone-pamphlets/equitable-full-employment-jobs-recovery-all-touchstone-extras

Enhancing the UK's knowledge base and creating a high-wage economy

The protracted fall in real wages of this recovery makes it very different not just to the last recovery, but to any post-war recovery. At the time of writing, real wage growth had been restored but only as a result of falling prices. As the recent report for the TUC by Income Data Services makes clear, there may be some measurement issues and in the short–term, changes in composition of the workforce might also have an impact. However, the changes described in this report suggest other factors may be even more important over longer time periods. The weakness of wage growth since 2008 is closely linked to the weakness of productivity growth and any sustained recovery in wages requires a solution to the productivity paradox.

The analysis in this report is not consistent with the view that the growth rate of productivity has permanently declined because of structural changes in the economy. The shift in employment has been towards occupations, industries, and activities associated with higher levels of productivity and higher rates of investment in new technologies and knowledge-based "intangible assets".

The short-term productivity challenge

It is helpful to think of the productivity problem as both a short-and long-term issue. Real wages and productivity remain locked in step, so just as it is hard to imagine a sustained productivity improvement without higher wages it is equally hard to imagine a sustained recovery in wages without a productivity response. We need to see movement on both sides and that is best done through continuing expansionary macro-economic policies that encourage productivity enhancing business investment and reduce unemployment, making labour both scarcer and dearer. When employers have both the means (higher productivity) and the necessity (recruitment difficulties) they should start to increase wage rates. Collective bargaining deals acting on both sides of the equation can also help speed up the restoration of both productivity and wage growth to more 'normal' rates.

The long-term productivity challenge

The longer-term challenge is how to improve on the pre-recession productivity rate and make up some of the ground lost against other major competitors since 2008. Productivity also slowed down in some other OECD economies but not as much as in the UK, and some such as the United States have shown a much more robust recovery. We think there is an underlying problem between what goes in to the workplace and what comes out. Year on year what goes into workplaces seems to be improving – the UK has never had such a high share of higher skilled jobs or a better educated workforce or a higher rate of investment in knowledge-based intangibles – but what comes out in terms of measured productivity has shown little improvement and has significantly worsened since 2008. We think a neglected part of meeting the productivity challenge is a focus on the workplace and how work organisation and practice can be changed in ways that enhance productivity performance. There are a number of UK institutions with both good knowledge of the workplace and the networks of employers, trade unions, and others to devise and deliver solutions – but they need to be brought together to combine their different strengths and achieve critical mass.

The latest OECD Economic Survey of the UK[23] calls for enhancing the knowledge-based economy by addressing long standing weakness in skills and education, especially for the young; better infrastructure, including rail, road and airport provision and investment in more sustainable energy systems; the planning system, take up of research and financial support for fast growing innovative firms. The OECD points out that identified investment needs in the UK's rail system would require investments of 3.5 per cent of GDP by 2030, while the rail system is between 20 and 40 per cent less efficient than in the rest of Europe. The OECD specifically calls on the government to relax controls on the employment of high-skilled migrants through the company visa system, as these are too restrictive given the tightening labour market.

In addition, there is more to be done in strengthening innovation and industrial strategies and as well as protecting and enhancing long term support for science and engineering research funding and strengthening institutions such as the Technology and Strategy Board and the Catapult Centres.[24] We think there is significant scope to move resources towards more productive uses – for example, away from supporting house buying and towards housebuilding; and away from cutting corporation tax and reducing business rates and towards more investment in the priority areas identified by the OECD. This will further encourage the growth and development of better paid and higher productivity jobs in the economy. Next steps could include:

- Focusing on the priorities identified in the OECD Economic Survey; stepping up public and private investment in good quality apprenticeships, improving the transport and energy infrastructures, strengthening the research and innovation base, and providing better support for fast growing innovative firms.
- Establishing a Workplace Productivity Commission based on existing social partner institutions such as ACAS and UKCES and the TUC and CBI charged with identifying the causes and solutions to low productivity at the workplace level on a sector-by-sector basis.

A strategy for progression

We can see no significant structural shift towards part-time, non-permanent or low paid work – indeed on some but not all measures the period since 2008 has been an improvement on the experience of the 1990s. There has also been a shift towards higher skill job generation and towards employment in the higher pay industries.

Despite this, the economy of 2015 is just as capable of generating lots of badly paid jobs and low income work as the economy of 1990. Moreover, the skewing of job generation towards higher skill jobs offers little to those in the rest of the labour market, if access to those jobs is effectively closed off because of lack of opportunity for progression within workplaces, a lack of pathways to allow workers to move out of low pay industries, or the setting of high professional qualification barriers.

23 OECD (February 2015) *Economic Survey of the United Kingdom 2015,* www.oecd.org/unitedkingdom/economic-survey-united-kingdom.htm
24 Levy and Brinkley (2013) *A Manifesto for Growth and Innovation,* The Work Foundation

The evidence of the past 35 years tells us that relying just on structural and technological change and expanding the university educated workforce in the hope of reducing the incidence of low paid work in the UK is unreasonably optimistic. If this is what happens the result will be more of the same and we can confidently predict that in 2025 the UK will still have around one firth of all jobs classified as low paid unless more is done. The next government should:

- set out a comprehensive low pay strategy, including industrial, innovation, skills and planning policies targeted on the low pay industries and also the role of public procurement and local level strategies
- widen the Low Pay Commission's remit to include a report on the causes of and potential solutions to low pay at both national and sectoral level building on the extended remit given to the Commission in 2013.

Checking the rise of casualised employment

Although we find no long-term shift towards temporary work, the boundaries between permanent and temporary, and secure and insecure work are increasingly blurred. The extent of casualised work in today's economy is higher than we previously thought but we do not know whether this has always been there or is a much more recent development in this recovery. Nor do we fully understand the overlaps between different forms of atypical and insecure work that in isolation may not appear to be a large share of the workforce, but when taken together could represent a more significant share of employment. A mapping exercise is badly needed to get a better idea of what is going on and why, as a basis for more informed and effective policy making in the future.

There is nothing inevitable about the rise of zero-hours contracts in the future. Organisations have many ways of achieving flexibility and zero-hours are only one way. Larger organisations could for example make better use of the advances in demand forecasting techniques.[25] The future direction will be influenced by trade union and other campaigns, especially when these can be addressed through the collective bargaining machinery in areas such as the NHS and higher education.

The future policy framework will also have a key role: for example, the Labour Party indicated that it would introduce legislation to in effect limit the growth of zero-hours contracts. Equally important will be social care, where private sector providers have suggested that the level of funding and the way care packages are constructed have encouraged greater use of such contracts. Finally, the creation of a full employment labour market as part of a more regionally balanced economy and with strengthened policies on progression, would reduce the ability of some employers to offer zero-hours work because there will be more regular work opportunities on offer.

25 www.theworkfoundation.com/blog/1313/The-alternative-to-zero-hours-contracts-is-better-demand-forecasting

The TOUCHSTONE Blog

Go to **www.touchstoneblog.org.uk** for informed and lively progressive comment on the big policy issues of the day. Blog posts are written by TUC experts with a passion for social justice.

Trades Union Congress
Congress House
Great Russell Street
London WC1B 3LS

tuc.org.uk

Cover illustration: Lo Cole