Between 1978 and 2008 real wages grew at nearly 2% per year.

Although, during past recessions real wages fell short of this trend, as unemployment fell the wage recovery not only re-ignited wage growth, but made up the lost ground.

Since 2008, Britain has experienced an unprecedented and protracted fall in real wages as earnings are not keeping pace with the cost of living, normally measured by the Consumer Price Index (CPI). Real wages have fallen by 10% and are now nearly 20% below the level that would exist today had trend wage growth continued. This equates to a loss of earnings of just under £5,000 per year for the typical worker.

This fall in real wages has helped keep unemployment down through the Great Recession; which is now approaching 6%, some three years earlier than in the last recession. However, the price paid in below trend earnings growth continues to rise rapidly. The question is: what are the prospects for a wage recovery in the UK and what can policy achieve to address the falling value of wages?

Research from the University of Bath - conducted by Professor Paul Gregg and Dr Mariña Fernández-Salgado (Department of Social and Policy Sciences) - compares employment, wage and cost of living data over two distinct periods of recession and recovery (1990-2001 and 2004-2014).
Wages and unemployment since the crash

Since 2008, Britain has experienced an unprecedented and protracted fall in real wages as earnings are not keeping pace with the cost of living, normally measured by the Consumer Price Index (CPI). Figure 1 plots the growth of (nominal) wages and prices, and provides a trend line showing what wage growth would have looked like if the trend in real wage growth over the last 30 years (that is wages adjusted for prices) had continued. It shows that wages have grown more slowly than prices. Indeed, real wages have fallen by more than 10%, and are now some 20% below the level that would exist today had prior wage trends continued. This equates to falls of £2,500 per year in real terms for the typical British worker, and £5,000 per year below trend.

Unemployment peaked two and a half years ago (October 2011), and has fallen rapidly over the last fifteen months. After the 1990s recession, the real wage recovery was well underway two years after the peak in unemployment, with subsequent wage growth recuperating all wage losses and returning to trend within eight years. The wage recovery this time is a long way behind schedule.

This unprecedented fall in real wages has been driven by the greater sensitivity of wages to unemployment, a six year stagnation in productivity levels, and a de-coupling of median wages from productivity growth, which reflects top earners and pensions taking a larger portion of the wage cake.

Falling unemployment alone will not re-start sustained wage growth. Productivity growth, and in turn business and infrastructure investment, needs to re-start.

In addition, for a broad-based wage recovery, the real wages of typical workers needs to be linked to productivity, as was the historic norm. Without correcting this, any wage recovery will be focused on top earners not ordinary workers.

This fall in real wages has helped keep unemployment down through the Great Recession. As Figure 2 shows, unemployment rose from 5% to just over 8% in this recession. These rates are well below those experienced in the 90s, and the peak in unemployment occurred shortly after the recession hit. The recovery has seen unemployment fall to near 6% some three years earlier than after the last recession. Thus, the story in the labour market since the crash has been one of relative benign unemployment combined with far worse wage outcomes. Whether this is a better or worse combination will depend on whether the current fall in unemployment is matched by a wage recovery in the UK in line with that seen after past recessions.

Key messages for policy

- Since 2008, real wages have fallen by 10% and are now nearly 20% below the level that would exist today had trend wage growth continued. This equates to a loss of earnings of just under £5,000 for the typical British worker.
- Unemployment peaked two and a half years ago (October 2011), and has fallen rapidly over the last fifteen months. After the 1990s recession, the real wage recovery was well underway two years after the peak in unemployment, with subsequent wage growth recuperating all wage losses and returning to trend within eight years. The wage recovery this time is a long way behind schedule.
- This unprecedented fall in real wages has been driven by the greater sensitivity of wages to unemployment, a six year stagnation in productivity levels, and a de-coupling of median wages from productivity growth, which reflects top earners and pensions taking a larger portion of the wage cake.
- Falling unemployment alone will not re-start sustained wage growth. Productivity growth, and in turn business and infrastructure investment, needs to re-start.
- In addition, for a broad-based wage recovery, the real wages of typical workers needs to be linked to productivity, as was the historic norm. Without correcting this, any wage recovery will be focused on top earners not ordinary workers.
For this recovery to match the last one we would expect unemployment to fall toward pre-recession levels - which it is rapidly - but also for real wages to rise by nearly 20%; a prospect that seems unlikely as wages continue to lag behind inflation.

Why has this extraordinary fall in real wages occurred?

Research, with Professor Steve Machin (London School of Economics), has explored why this unprecedented fall in wages has occurred. It identifies three major causal factors:

Greater sensitivity of wages to unemployment

Wages have become more sensitive to movements in unemployment through this recession, compared to the past. Our research suggests that a doubling of unemployment from say 4 - 8% is found to push wages some 14% below trend whereas this was around 7% in the past. But as unemployment falls this should swing back again with a period of above trend growth, although this happens with a lag of around a year. Hence, after the 1990s recession unemployment peaked in 1993, but it was only from 1994 that wage growth re-started, and only from 1996 that wage growth was faster than trend. The unemployment rise through this recession has been moderate and peaked in October 2011, but was broadly flat from the beginning of 2010 to the middle of 2013, at just over 8% (see Figure 2). Given that unemployment peaked in 2011, the expectation would be that real wage growth should have re-started by 2013, and be progressing to above trend now as unemployment falls rapidly. Yet, real wages continued to fall throughout 2013 and the first half of 2014.

Comparisons with the past

Figure 3 (left-hand side panel) shows how wage stagnation and growth played out through the recession and recovery in the 1990s. During the recession real wages didn’t fall, but grew below trend, causing a gap to emerge between actual and expected wage levels. The gap peaked at around 5% in 1994; a year or so after unemployment had started to fall. From this point, real wage growth quickly returned to trend. From 1996, as unemployment started to fall more rapidly, wages grew above trend, and by 2001, when unemployment fell to levels below those seen in the late 1980s, wages were some 20% higher than at the onset of the recession. By comparison, the right-hand side panel tells the story of wage stagnation and growth for the Great Recession.

Source: ONS, Average Weekly Earnings and ONS, Consumer Price Indices – CPI annual percentage change: 1989 to 2014

Figure 2: ILO unemployment rates (1988 – 2014)


Figure 3: Real Median Weekly earnings and trend trajectory 1990 – 2001 and 2008 - 2014

Figure 3a: Real median weekly earning and trend trajectory 1990 – 2001

Figure 3b: Real median weekly earnings and trend trajectory 2008 - 2014

Source: Calculated from ONS, Average Weekly Earnings and ONS, Consumer Price Indices – CPI annual percentage change: 1989 to 2014
The importance of productivity growth

The fact that wage recovery is well behind schedule is not in itself overwhelming evidence that underlying real wage growth is stagnant. Figure 4 makes a bigger point; that underlying trend earnings growth moves in line with improvements in economic efficiency as reflected in productivity. The figure shows that real total compensation (a broad measure of wages, including National Insurance and pension contribution costs paid by employers) closely tracks total productivity per hour. Productivity growth has been stalled at levels slightly below those of the pre-recession peak of 2008 for six years, and the latest figures show that there is still no sign of an increase. Without the steady rate of 2% productivity growth per annum that Britain enjoyed prior to the crash, there will not be any sustained rise in real wages.

De-coupling of wages from productivity

Figure 4 also charts two other measures of wages. The first is average wages per hour (a measure that excludes the non-labour costs included in total compensation). Average wages have been growing slightly slower than productivity since the early 2000s. The lower line is median wages per hour (the hourly wage received by the typical British worker). Median wages have been growing below productivity since the early 1990s, and markedly so since the early 2000s. The growing gap between median wages and productivity suggests that ordinary British workers are no longer benefiting from improvements in economic efficiency in the economy. Rather the benefits of improving economic efficiency have gone to meeting firms’ pension obligations, mostly to workers who are already retired (represented by the gap between total compensation and average earnings), and also to top earners, who have enjoyed very rapid wage growth and who drive the gap between average and median wages.

This ‘de-coupling’ of productivity from median earnings growth is a phenomenon the UK shares with the United States; where the extent of de-coupling has been so extreme that there have been no sustained increases in median hourly earnings for 30 years, despite a strong productivity performance.

In summary, the UK’s unprecedented fall in real earnings reflects a higher sensitivity of wages to unemployment, a Europe-wide problem of poor productivity and a de-coupling of earnings from productivity, which is shared with the US. It appears that only Britain has combined all three of these factors at the same time.

Of course, these patterns are linked. Falling real wages combined with the difficulty of accessing investment loans from banks, has encouraged firms to use extra cheap workers rather than investing in capital. From 2008 to 2009, business investment fell by 14%, and has yet to recover this lost ground; creating flat productivity and the (relatively) good picture for employment. In turn, poor productivity performance offers little hope for a rise in real wages.

Figure 4: Labour productivity and annual compensation (mean and median wages)

Source: Median and mean real wages from New Earnings Survey/ Annual Survey of Hours and Earnings (GDP deflated). Labour productivity from ONS. Labour productivity is constructed as real GDP over total actual weekly hours worked. The GDP is published in the ONS Quarterly National Accounts and total actual weekly hours are calculated using the Labour Force Survey. Annual Compensation from ONS and OECD. Annual compensation is constructed as total compensation of employees (GDP deflated) over share of employment. Total compensation of employees is published in the ONS Quarterly National Accounts and share of employment (number of employees over total employment) is extracted from the OECD.
The recent rapid fall in unemployment, since the summer of 2013, should be sufficient to stop real wage falls by the end of 2014. Continued falls should lead to a modest wage recovery, but alone such gains will cease two to three years after unemployment stops falling. For a sustained wage recovery, the economy also needs to generate a return to the levels of productivity growth seen over the 25 years before the crash, but that have been notably absent over the last six years. As labour gets scarce and more expensive, we should expect firms to increase investment generating productivity improvements. However, even this will not be enough for sustained real wage gains unless the distribution of the returns from productivity growth can be channelled back to ordinary workers, in the way they were before the start of the new millennium.

Policy implications

There are three necessary conditions that need to be met in order for the earnings of British workers to regain the 20% (or £5,000 per year) loss in real wages. These are falling unemployment, steady improvements in economic efficiency and improved wage equality. Falling unemployment has been achieved, however it will only be strong enough to lift wages, if there is a return to previous trend productivity growth and median wages are recoupled to productivity.

A return to improving economic efficiency requires a major boost to business investment to recover lost ground since the financial crash. It also reflects a need for investment in infrastructure and housing to reduce inflationary pressures. Reconnecting earnings of typical British workers to productivity is a complex issue, and requires addressing rising inequality in the labour market. The hardest agenda politically, is to control the extraordinarily rapid increases in pay and pensions to executives, which has far outstripped company profitability, so that productivity improvements benefit all workers.

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