

Although UK real wages have been stagnant for over a decade, there has been a notable increase in non-wage compensation. But as **Brian Bell** reveals, this rise consists largely of special payments to fund deficit gaps in 'defined benefit' pension schemes – and most of these schemes have been closed to new members for years.

# Wage stagnation and the legacy costs of employment

**T**he real wage of the average worker in the UK has stagnated for over a decade. Average hourly earnings rose from £11.76 in 2003 to £15.16 in 2014, a rise of 28.9%. Over the same period, inflation rose by 32.5%. So by this measure, real wages are down 3.6% since 2003. There are of course many ways to measure real wages, but however one slices the data, it is incontrovertible that real wages have at best stagnated.

In the long run, the real compensation of workers should rise at the same rate as the growth of labour productivity. This would suggest a quite simple story to explain the stagnation in real wages:

workers are doing badly because productivity growth has been so poor. To a large extent, this story is true: Figure 1 shows the trends in labour productivity (the blue line) and real compensation of workers (the red line) since the early 1970s. Clearly, the two move closely together and there has been no obvious 'decoupling' since the early 2000s.

But there is a puzzle: labour productivity has actually risen over the past ten years – by about 6% in total – so should we not see the same growth in real wages? Such growth would still be substantially less than the 2-3% per year to which we might have become accustomed – but we have to ask, where

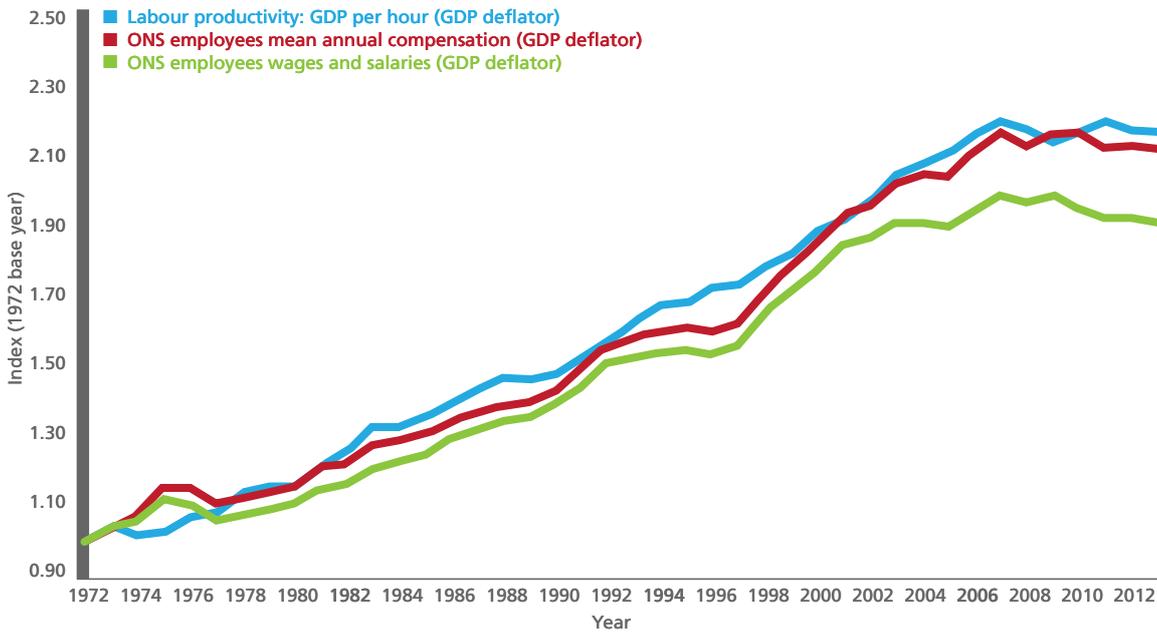
is the missing growth and how can we reconcile this gap with the view that there has been no decoupling?

On one level, the answer is simple (and discussed in Pessoa and Van Reenen, 2013 – see Figure 1). If labour productivity has risen by 6% and there has been no decoupling, then real compensation (measured in the same units) must also have risen by 6%, since this is the definition of no decoupling.

So if real wage growth has been zero, the non-wage components of compensation must have risen at a rate fast enough to generate an overall compensation increase of 6%. This is indeed the case: non-wage compensation



Figure 1:  
Productivity and compensation in the UK, 1972-2013



**Notes:** This is an updated version of a chart in João Paulo Pessoa and John Van Reenen's 2013 CEP Discussion Paper No. 1246: 'Decoupling of Wage Growth and Productivity Growth? Myth and Reality' (<http://cep.lse.ac.uk/pubs/download/dp1246.pdf>).



UK employer pension contributions rose by a staggering 96% between 2003 and 2013

grew by 33% in real terms over the period 2003-13, which explains the gap between compensation (the red line) and wages (the green line) that has opened up in the recent past.

What accounts for this rise in non-wage compensation? The UK National Accounts decompose compensation into various components. We start with the simple decomposition into wage and non-wage costs:

**Total compensation = wages and salaries + social contributions**

There is then an extended decomposition of the social contributions into the following categories:

**Social contributions = employer National Insurance contributions + implied employer social contributions + actual employer non-pension contributions + actual employer pension contributions**

Most of these categories are self-explanatory. The implied social contributions primarily covers the implied cost of contributions to pension schemes that are either only partial funded or completely unfunded ('pay as you go'). These are almost exclusively public sector pension schemes. Non-pension

contributions include benefits such as private healthcare.

This is as far as the UK National Accounts go. But we can use the Annual Survey of Pension Funds conducted by the Office for National Statistics (ONS) to get some perspective on the final category of social contributions – actual employer pension contributions. As we shall see, this plays the dominant role in changes in compensation over the last decade so it is useful if we can unravel the components a little more.

Firms make contributions to both 'defined benefit' and 'defined contribution' schemes. The second component shows no substantial change over the period. But the first component rises significantly and is the principal explanation for the rise in non-wage compensation.

We can further decompose the payments to defined benefit schemes into two: first, the normal employers' contribution rate (for example, 18% of gross salary); and second, deficit-funding payments to cover any actuarial gap between the assets and liabilities of the defined benefit scheme.

Table 1 decomposes the changes in real labour productivity per hour, real employee compensation per hour and its constituent components for the period

2003-13. Labour productivity rose by 6.1% while total compensation rose by 4.8% – so there was a marginal gap over this period.

But as is clear from Figure 1, there are long periods in which the two diverge, so such a small gap cannot sensibly be called decoupling. Wages and salaries did not rise at all over this period, so all of the 4.8 percentage point rise in total compensation is due to rising non-wage costs. Indeed, total social contributions rose by 33%, on a share of just under 15% of total compensation.

Let me first deal with the dogs that did not bark. First, implied social contributions have played little role in the growth of compensation over the last decade – accounting for only 0.2 percentage points of the 4.8 percentage points rise. Second, non-pension employer costs have actually declined over the period and would, all else equal, have reduced total compensation by 0.4 percentage points. This suggests that employers have been cutting back on these benefits over the last ten years.

There are two more substantive contributions. First, National Insurance payments rose by 15% over the period, and so generated a one percentage point rise in total compensation. This is primarily a result of the rise in the employer Class 1

Table 1:  
Decomposing changes in total compensation, 2003-13

	Growth rate	Contribution to total compensation growth rate	Share of total compensation in 2003
<b>Labour productivity</b>	<b>6.1%</b>		
<b>Total compensation</b>	<b>4.8%</b>		
<i>of which</i>			
Wages and salaries	0.0%	0.0%	85.4%
Social contributions	33.0%	4.8%	14.6%
<i>of which</i>			
National Insurance	15.3%	1.0%	6.4%
Imputed contributions	5.6%	0.2%	2.9%
Actual non-pensions	-43.9%	-0.4%	1.0%
Actual pensions	95.9%	4.1%	4.3%
<i>of which</i>			
Normal contributions		2.0%	3.1%
Deficit contributions		2.1%	1.2%

**Notes:** Data come from *The Blue Book 2014* and the *2014 Statistical Bulletin: MQ5: Investment by Insurance Companies, Pension Funds and Trusts*. Growth rates are total real growth rate per hour over the period 2003-13.

## Box 1: British Airways – 'a pension deficit with wings'?

In 2013, British Airways (BA) employed 38,476 employees (of which 34,079 were UK employees). The total amount spent on wages and salaries was £1.455 billion, implying an average annual wage of £37,816. BA had three pension schemes in existence. One, the Airways Pension Scheme (APS), was a defined benefit scheme that had been closed to new members in 1984, though existing members could continue to accrue benefits.

In 2013, BA made an employer contribution of £69 million to the APS (of which £55 million was a deficit funding payment). There were 28,918 members of the scheme, of which only 844 were active (that is, currently employed by BA). This is unsurprising since the scheme closed in 1984, so one would need almost 30 years of service with BA still to be active.

What this all means is that BA spent £55 million funding a deficit in a scheme that provided a benefit to only 2.5% of their UK employees. If this money had not been required and had instead been distributed across the entire workforce as a pay increase, it would have represented a 3.8% rise. Some have ironically described the airline as 'a pension deficit with wings'.

## Deficits in defined benefit pension schemes constitute a potential headwind for wage growth

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## The increase in non-wage compensation provides few benefits to the currently employed



National Insurance contribution rate from 12.8% to 13.8% announced in Budget 2010.

Second and most importantly, employer pension contributions have risen by a staggering 96% over the period. So even though such contributions accounted for only 4.3% of economy-wide total compensation in 2003, the near treble-digit growth rate ensured that these contributions explain 85% of the overall rise in total compensation. A substantial part of this rise consisted of the special payments to fund deficit gaps in schemes – most of which have been closed to new members for some years.

Does this really matter? If every worker's share of non-wage compensation equalled their share in the total wage and salary bill, there would arguably be little interesting to say. Firms and workers may simply be choosing the best way to be compensated and if this results in a shift of more compensation from current pay to deferred compensation in the form of pension contributions, then that both explains the trends we see and results in no distributional consequences.

There are two reasons to doubt this account. First, there is no reason to

suppose that non-wage compensation is distributed across the workforce in exactly the same pattern as wages. Indeed, we know that high earners are more likely to have been in defined benefit schemes and in particular to benefit from the final salary aspect of such schemes.

Second and more specific to the issue at hand, the increase in non-wage compensation may provide no, or few, benefits to the currently employed. Because a substantial part of these payments are to cover deficits in pension schemes for past workers and those already in retirement, current workers benefit little from these payments (see Box 1 for an example).

This is not a problem that is likely to go away soon. The Pension Protection Fund, an organisation established to help people get their defined benefit pensions from companies in the event of insolvency, reports that at the end of August 2015, defined benefit schemes had a combined deficit of just over £280 billion. What's more, there were over four schemes in deficit for every one in surplus. This suggests a potential headwind for wage growth even if productivity begins to recover.