

# Resolution Foundation

## BRIEFING

### A recovery for all?

*The evolution of the relationship between economic growth and pay before, during and since the financial crisis*

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*In this note, we use the latest wage and National Accounts data to consider how the ‘wedge’ between productivity growth and median pay growth that arose prior to the financial crisis in the UK – and which appears to have become a feature across a range of advanced economies in recent decades – has developed in the period since 2007. In looking at the evolution of this process of ‘decoupling’ and at how the current picture compares with that which formed in earlier periods, we consider four factors that can help to explain why economic growth doesn’t flow through in full to typical pay:*

- » *The ‘labour share effect’ – which looks at what share of national output flows to workers and what share flows to non-workers. All else equal, a falling labour share increases the ‘wedge’ between productivity and pay;*
- » *The ‘compensation effect’ – which considers what share of overall employee compensation (the labour share) gets paid as wages and what share comprises non-wage compensation such as employer National Insurance and pension contributions. All else equal, a rise in non-wage compensation will mean wages don’t grow as quickly as productivity;*
- » *The ‘wage distribution effect’ – which focuses on differences between mean and median pay growth. Even if average wages are growing in line with productivity, rising wage inequality will serve to reduce the pace of typical pay growth; and*
- » *The ‘deflator effect’ – which accounts for the fact that the value of output is adjusted using a producer price deflator while wages are adjusted using consumer price deflators. If the consumer deflator rises more quickly than the producer deflator then the relative price gap that opens up lowers the real value of wages and increases the ‘wedge’ between productivity growth and median pay.*

*Our study covers the period between 1983 and 2014, and we give particular attention to the five years before the financial crisis (2002-2007) and the period since (2007-2014). The former period is of interest because it marks the point at which decoupling is generally accepted to have become more marked in the UK. The latter period is of course of interest due to the turmoil of recent years. The findings are summarised in Table 1, from which we draw a number of conclusions.*

**Table 1: Cumulative percentage point gap between productivity growth and median pay growth in different periods**

	Overall	Labour share effect	Compensation effect	Wage distribution effect	Deflator effect
					<i>accounted for by:</i>
1983-2014	22.8 100%	2.0 9%	-1.8 -8%	16.1 71%	6.5 28%
2002-2014	15.3 100%	1.5 10%	7.0 46%	2.9 19%	3.9 25%
2002-2007	6.8 100%	1.3 18%	4.3 63%	2.8 41%	-1.6 -23%
2007-2014	8.5 100%	0.3 3%	2.7 32%	0.1 1%	5.5 64%

- » *Over the full period (1983-2014) a 23 percentage point ‘wedge’ has opened up between productivity growth and median pay growth. Widening pay inequality accounts for around 71 per cent of the effect, with the deflator effect accounting for a further 28 per cent. Unlike in many other advanced economies, a shift in the labour share has played a relatively minor role accounting for around 9 per cent of the overall ‘wedge’. The compensation effect has served to narrow the gap between productivity and pay over the period as a whole, but has been a key driver of decoupling since the turn of the century.*

- » **The five years from 2002 to 2007 accounted for just under 7 percentage points of the overall 23 percentage point gap that opened up after 1983. Of this, around two-thirds (63 per cent) was accounted for by the compensation effect and around two-fifths (41 per cent) was due to the wage distribution effect.** The labour share effect accounted for just under one-fifth (18 per cent) of the total – a relatively small, but non-trivial contribution. The deflator effect acted to narrow the gap between productivity and median pay (contributing -23 per cent to the overall movement).
- » **Looking specifically at the exceptional period since the financial crisis, we find that the productivity/median pay ‘wedge’ has continued to widen – with pay falling as productivity growth has stalled. Of the 23 percentage point gap identified over the longer period, roughly 8.5 percentage points appeared after 2007. Of this, around two-thirds (64 per cent) was accounted for by the deflator effect and around one-third (32 per cent) was due to the compensation effect.** Pay inequality has been much less pronounced in this period.

**The divergence in producer and consumer deflators after 2010 is a new finding – implying the appearance of a gap between productivity growth and overall employee compensation. That is, the value of the economic goods produced by workers rose less quickly than the value of the goods being bought with wages, reducing real-terms employee compensation relative to real-terms output. Such a ‘wedge’ – while known to be relatively significant in the US – has been largely absent in the UK until recently. However, closer inspection shows that the divergence was most marked in 2010 and 2011 (potentially reflecting, in part, the one-off effect of the increase in VAT introduced from January 2011) and has subsequently narrowed. There is little to suggest it will persist in the coming years.**

**The growing importance of the compensation effect in explaining decoupling in the UK is somewhat unusual by international standards. It is driven by a rise in the share of overall compensation being paid out in non-wage form – with employer pension contributions proving particularly important. Drawing on the work of Brian Bell, we note that a significant portion of the pension contributions relate to legacy deficits in defined benefit schemes. Effectively, a share of this ‘compensation’ is flowing not to today’s workers but to past workers and those who are already retired but whose pension funds face a shortfall. Given the combined size of the deficits on defined benefit schemes there is – unlike the deflator effect – good reason to suppose that this aspect of the ‘wedge’ between productivity and median pay will remain in place for some time.**

The wage slowdown of the pre-crisis years and the subsequent pay squeeze means that median pay in 2014 was lower than in 2002. By applying a counterfactual in which productivity growth maintained its pre-crisis pace, we consider the contribution made by productivity stagnation to the disappointing performance of median pay in this period. We find that, **in the absence of decoupling after 2002 and productivity stagnation after 2007, median pay would today stand at around £13.95, some £2.80 an hour (or one-quarter) higher than it does.** Of this £2.80 ‘pay gap’, around £1.60 – or just over half – is due to the productivity slowdown. That leaves a ‘gap’ of around £1.20 to be explained by decoupling, with around 55p being due to the compensation effect, roughly 30p flowing from the deflator effect, 25p due to the wage distribution effect and just 10p accounted for by a falling labour share.

Looking to the future, there is of course much uncertainty over how the relationship between productivity and pay will evolve in the coming years. We might expect a partial reversal of the deflator effect observed after 2010 in the short-term, which would help to reduce the ‘wedge’. However, the compensation effect – which has grown in importance – looks as though it will remain significant in the medium term (though given the importance of legacy pension costs for ex-workers in this estimate, it would perhaps be better to categorise a portion of this effect as a labour share effect instead).

It is harder to speculate on what might happen to the wage distribution effect that has formed such a crucial part of the explanation of decoupling over the longer term, but which has been relatively absent in the most recent period. Exiting a downturn, the usual pattern would be for top-half earnings inequality to grow as wages at the top recover more strongly than in the middle. The introduction of the new ‘national living wage’ for those aged 25 and over means that we might also expect

*wages at the bottom to grow more quickly than those in the middle this time around. Taken together, these two trends would serve to strengthen the wage distribution effect (with mean pay growing more strongly than median), helping to widen the 'wedge' between productivity and median pay. This is, of course, highly uncertain however.*

*What's clear is that productivity growth remains an essential – though insufficient – driver of median wage growth. In the absence of any period of 'catch-up' productivity growth, the £1.60 'pay gap' will persist – even if trend growth is achieved. The longer productivity growth remains below trend, the larger the potential 'pay gap' will grow. However, the extent to which decoupling has played a part in the disappointing wage performance of the last decade or so highlights the need to also widen our focus beyond productivity recovery in order to ensure that growth feeds through to gain for all workers.*

## 'Decoupling' of median pay from productivity growth can be observed from around 2002 – pre-dating the financial crisis...

The nature of 'decoupling' between economic growth (in the form of labour productivity) and gain (in the form of median pay) has been much studied in recent years, with typical pay failing to keep pace with national output even in the years before the financial crisis hit. It is a phenomenon

which is far more established and more pronounced in the US than in the UK. But it is one that appears to be prevalent, at least to some degree, across a number of advanced economies.<sup>[1]</sup>

*Following the turmoil of recent years, it is important to understand how the relationship between productivity and pay has altered in the post-crisis world*

Following the turmoil of recent years, it is important to understand how the relationship between productivity and pay has altered in the post-crisis world. This is particularly the case given the heightened uncertainty over how productivity growth will develop in the coming years. It has

flat-lined since 2007-08 and – while there are tentative signs of improvement in recent months – there is much debate as to whether it will now go through a period of 'catch-up' growth or simply return to trend such that none of the ground lost over recent years is restored. Even this outcome is considered optimistic by some.

The 'wedge' between productivity and median pay takes several forms, which can be understood mathematically. As John Van Reenen and João Paulo Pessoa have shown – in a paper for the Resolution Foundation which is perhaps the most comprehensive study of decoupling in the UK<sup>[2]</sup> – it comprises a combination of:

- » Changes in the share of output going to workers rather than owners of production (the '**labour share effect**');
- » Changes in the share of overall labour compensation paid as wages rather than in the form of non-wage compensation (the '**compensation effect**');
- » Changes in the distribution of wages which lead to differences in mean and median pay trends (the '**wage distribution effect**'); and
- » Differences between deflators which arise because productivity is converted to real-terms using a GDP deflator whereas pay is adjusted using a consumer price index (the '**deflator effect**').

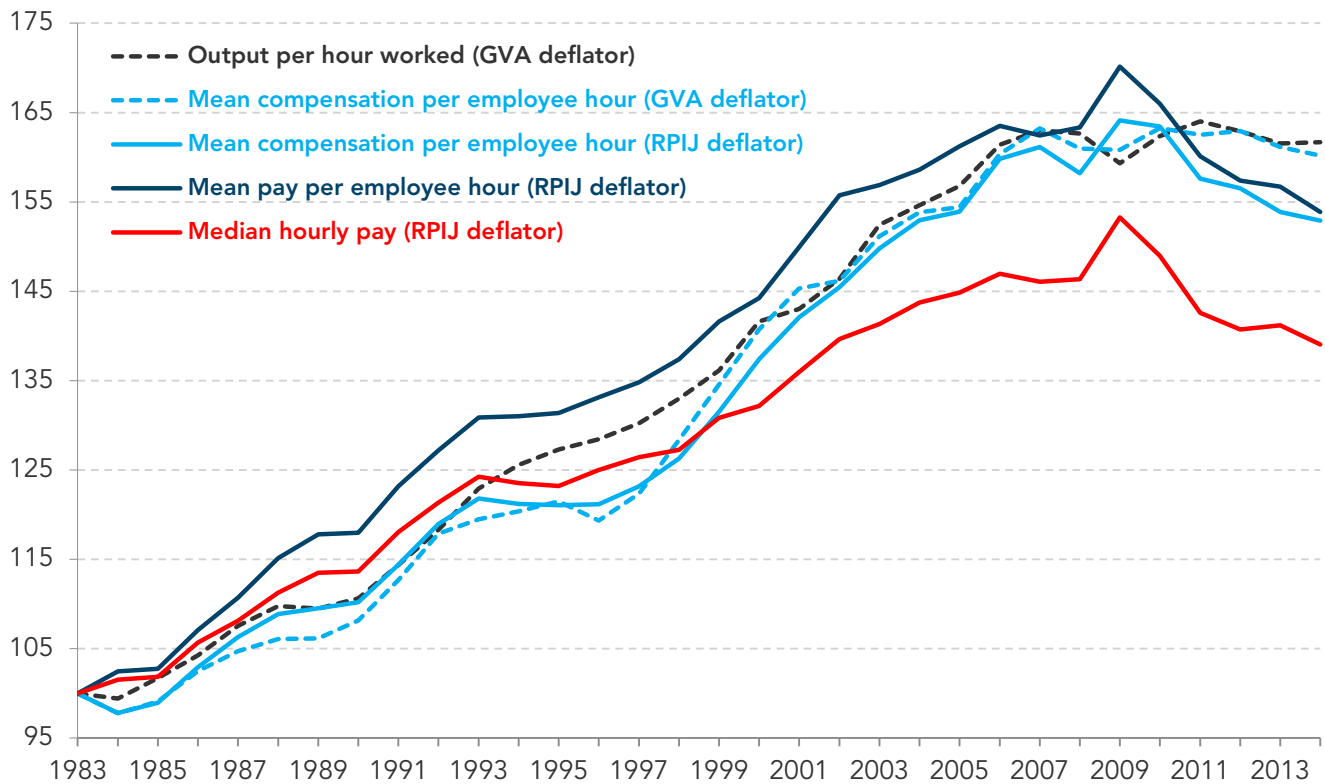
We revisit these steps in Figure 1, moving beyond the original period covered to include the post-crisis years after 2010. As such, we capture differing trends in productivity (output per hour), compensation (deflated in two different ways) and pay (at both the mean and the median) in the three decades from 1983 to 2014.

[1] See J Bailey, J Coward & M Whittaker, [Painful Separation: An international study of the weakening relationship between economic growth and the pay of ordinary workers](#), October 2011

[2] JP Pessoa & J Van Reenen, [Decoupling of Wage Growth and Productivity Growth? Myth and Reality](#), Resolution Foundation, January 2012

**Figure 1: Productivity, compensation and pay – signs of decoupling**

Indices of real-terms productivity, compensation, pay and income growth: 1983 = 100



Notes: 'GVA deflator' is implied deflator used to adjust GVA at basic prices (ONS code MNX5). 'RPIJ deflator' comprises official measure from 1998, with historic RPI growth rates applied in the period before that.

Source: RF analysis of ONS, National Accounts; and ONS, Annual Survey of Hours and Earnings & New Earnings Survey

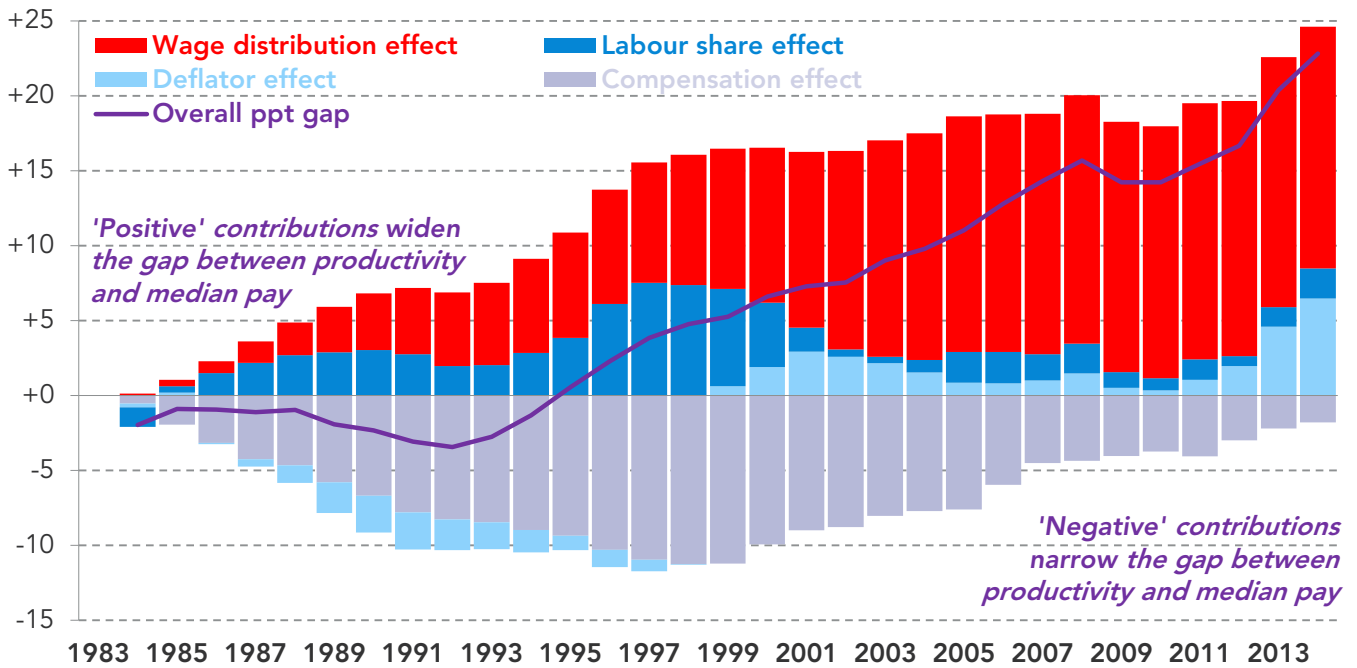
It shows that productivity increased by over 60 per cent over the period, while median pay increased by just under 40 per cent. As in previous studies, it's clear that the break between the two series occurs from around 2002, with a sharper divergence still following the onset of the economic downturn in 2008.

**With the phenomenon occurring as a result of the interaction of four different factors...**

We break down the various steps underpinning this 'wedge' in Figure 2 and Figure 3. The former shows the contributions made by the four different 'effects' set out above to the *cumulative* gap that opens up between productivity and median pay over the period, while the latter sets out contributions to *year-on-year* differences in productivity and median pay growth rates.

**Figure 2: Understanding the cumulative 'wedge' between productivity and median pay**

Contributions to **cumulative percentage point gap** between indices of productivity (GVA deflator) and median pay (RPIJ deflator) - 4-year averages

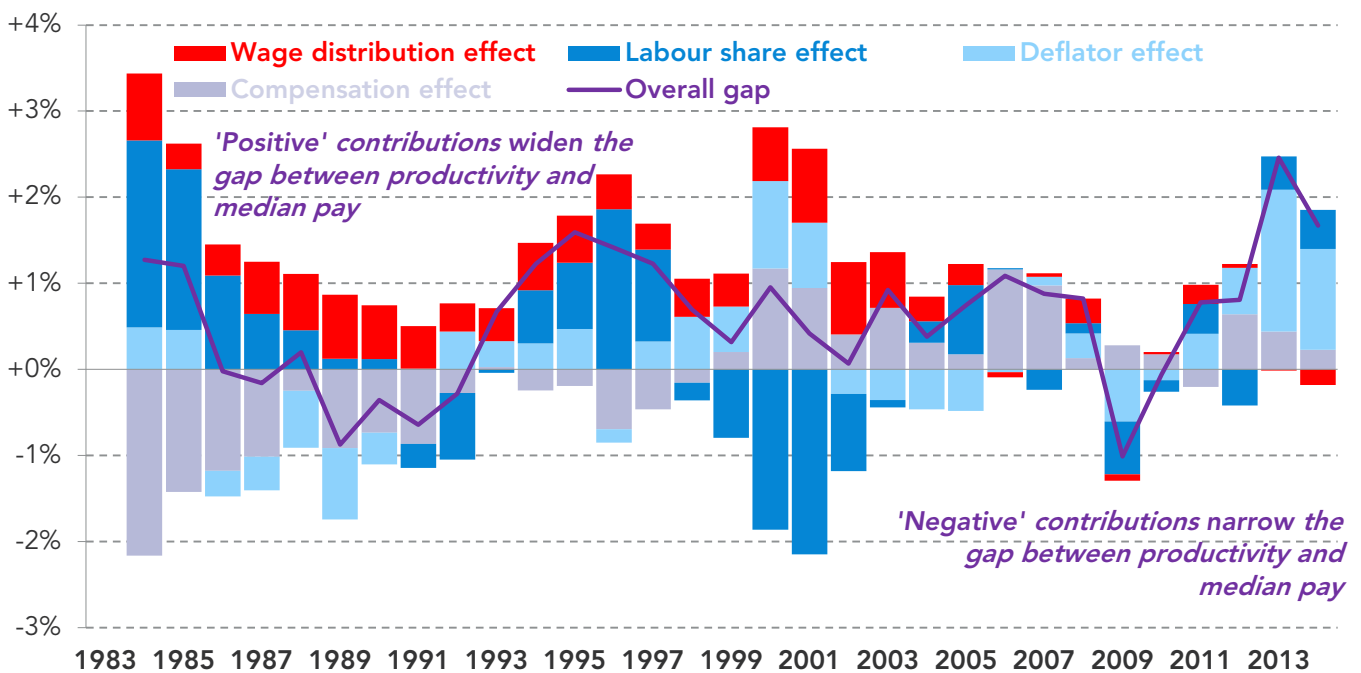


Notes: 'GVA deflator' is implied deflator used to adjust GVA at basic prices (ONS code MNX5). 'RPIJ deflator' comprises official measure from 1998, with historic RPI growth rates applied in the period before that. All values relate to hourly output and compensation.

Source: RF analysis of ONS, National Accounts; and ONS, Annual Survey of Hours and Earnings & New Earnings Survey

**Figure 3: Understanding the annual 'wedge' between productivity and median pay**

Contributions to **gap in year-on-year growth** between productivity (GVA deflator) and median pay (RPIJ deflator) - 4-year averages



Notes: 'GVA deflator' is implied deflator used to adjust GVA at basic prices (ONS code MNX5). 'RPIJ deflator' comprises official measure from 1998, with historic RPI growth rates applied in the period before that. All values relate to hourly output and compensation.

Source: RF analysis of ONS, National Accounts; and ONS, Annual Survey of Hours and Earnings & New Earnings Survey

## The labour share effect has played an apparently minor role in UK decoupling...

The charts show that the labour share effect (measured by comparing productivity and mean compensation using the same deflator) has had a minimal impact – in contrast to many other advanced economies such as the US where the share of output flowing to workers has tended to decline over recent decades. As a result, hourly compensation has grown largely in line with growth in output per hour worked.

By 2014, the labour share effect contributed around 2 percentage points to the overall 23 percentage point gap between productivity and median pay that had opened up since 1983. That is, it explained around 9 per cent of the ‘wedge’. There is some volatility in this series, with Figure 3 showing that labour share trends had a relatively strong effect in the mid-1980s (widening the gap) and the late-1990s (narrowing it). But the year-on-year contribution has otherwise tended to be small.

## As has the deflator effect – though it has become more important in the post-crisis period...

For much of the period, the deflator effect (measured by comparing mean compensation using first the GVA deflator and then the RPIJ deflator) also contributes little to the overall ‘wedge’. The GVA deflator measures changes in producer costs and is the metric most relevant when considering national output. In contrast, RPIJ measures changes in consumer costs and is therefore more appropriate when considering living standards.<sup>[3]</sup>

In Pessoa and Van Reenen’s earlier work (based on the GDP deflator and the RPI), the deflator effect was found to be “trivial” – marking another distinction from the US where the impact appears to have been wider for longer.<sup>[4]</sup> However, in the years since 2010 (the end of the period covered by Pessoa and Van Reenen), a clear gap has opened up between the two deflators in the UK. The RPIJ deflator has outpaced the GVA one, meaning that costs facing consumers have increased more rapidly than producer costs.

As such, having contributed just 0.3 percentage points to an overall 14 percentage point ‘wedge’ in 2010 (explaining just 2 per cent of the overall divergence), the deflator effect now accounts for 6.5 percentage points of the overall 23 percentage point gap (28 per cent). As Figure 3 shows, it has been *the* driving force of continued divergence in the post-crisis period.

## Though this effect appears unlikely to persist...

Important though this factor appears, closer inspection suggests that the effect may be short lived. As Figure 4 shows, the divergence between the two deflators is most marked in 2010 and 2011 – with the latter change likely to reflect, in part, an increase in the VAT rate from January 2011. Since then the gap in the two annual inflation rates has narrowed (and is likely to turn negative in 2015 given the sharp fall in consumer price deflators that has occurred over the course of the year).

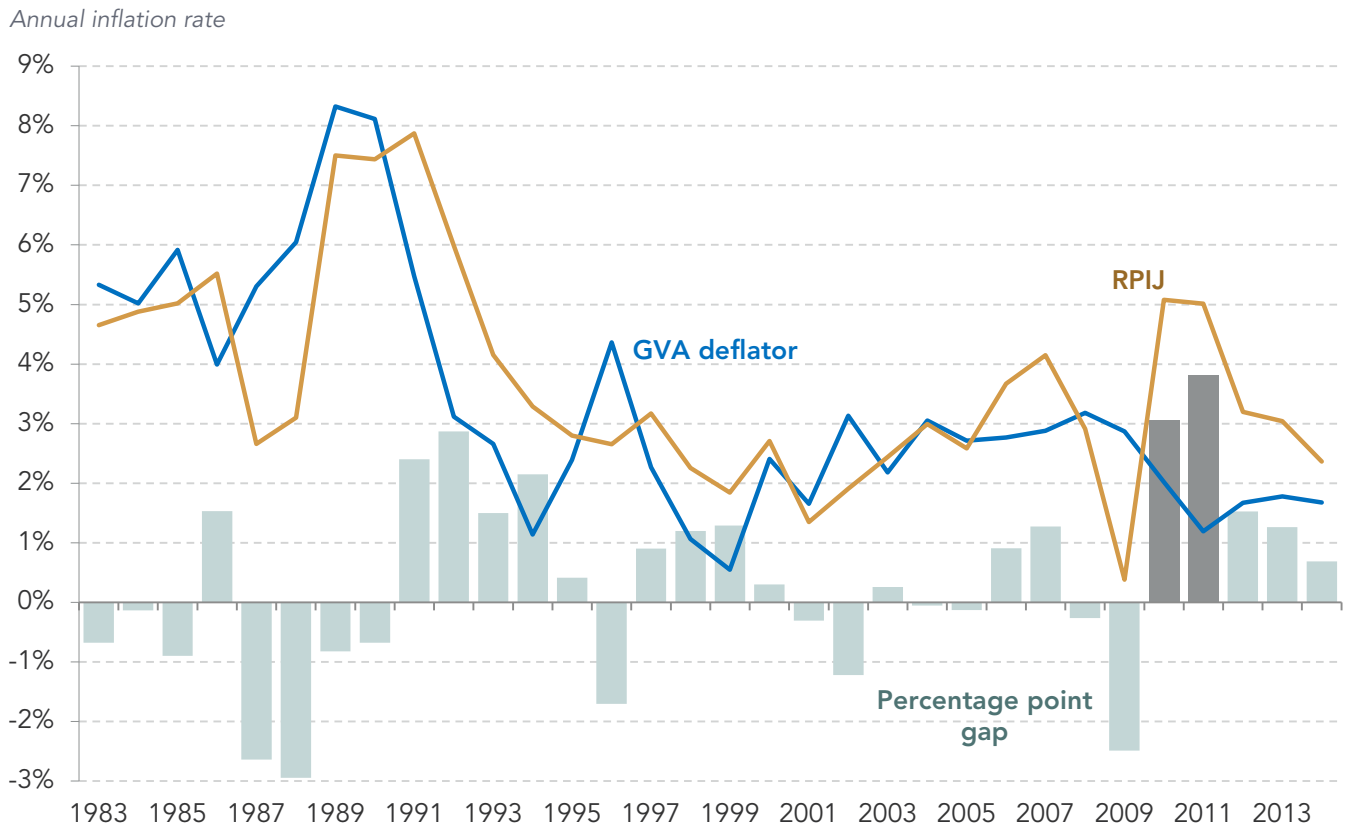
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[3] Other consumer deflators are available, but we believe RPIJ to be superior to CPI (which excludes mortgage interest costs) and RPI (which was used in the Pessoa and Van Reenen work but which has since been declassified as a National Statistic due to problems with the way in which it is calculated). Using an alternative consumer deflator would of course produce a slightly different outcome, but it remains the case that the divergence identified between the consumer and producer deflator would remain even if CPI were used.

[4] For a detailed discussion of the importance of this in the US, see J Bivens and L Mishel, [Understanding the Historic Divergence Between Productivity and a Typical Worker’s Pay: Why It Matters and Why It’s Real](#), EPI, 2 September 2015



Figure 4: The post-crisis divergence in producer and consumer deflators



Notes: 'GVA deflator' is implied deflator used to adjust GVA at basic prices (ONS code MNX5). 'RPIJ deflator' comprises official measure from 1998, with historic RPI growth rates applied in the period before that. All values relate to hourly output and compensation.

Source: RF analysis of ONS, National Accounts

As the chart makes clear, such divergences have occurred before, but have tended to be reversed in subsequent periods. It is our assessment that something similar will happen in the coming years, with the deflator effect fading as the effects of 2010 and 2011 drop out of the rolling four-year averages we use in Figure 2 and Figure 3.

So, while the deflator effect is acknowledged as a significant part of the decoupling story in the US – and might be considered in part to point to a failure of the economy to fully translate efficiencies in the production process into consumer prices – it appears likely to remain a much more minor consideration in the UK.

### The growth of non-wage compensation has been increasingly important since the 2000s...

Looking again at Figure 2 and Figure 3, we see that the compensation effect (measured by comparing mean compensation and mean pay using the RPIJ deflator in both instances) tended to act in the opposite direction to the other effects in the first half of the period considered – helping to reduce the 'wedge' between productivity and median pay. At its height (at the end of the 1990s), this effect had reduced the cumulative gap by 11 percentage points. That is, had the share of overall labour compensation being paid as wages remained unchanged between 1983 and 1998, then the 'wedge' between productivity and median pay would have been 16 percentage points rather than 5.

Taking the period as a whole then, the compensation effect made a negative (or narrowing) contribution to the 'wedge'. However, it made a positive (widening) contribution from the turn of the century. If we focus on the period from 2002 to 2014 then it contributed 7 percentage points to the overall 15 percentage point widening of the gap between productivity and median pay – meaning it accounted for 46 per cent of the phenomenon in this particular period. As Pessoa and Van Reenen identified, this reflected an increase in both employer National Insurance contributions and – more markedly – pension contributions. They point to a variety of legislative changes that are likely to have increased employer pension contributions from the mid-1990s, and we might expect the current roll-out of auto-enrolment to continue this trend.

### Though not all of this 'compensation' is flowing to today's workers...

More recent work from Brian Bell<sup>[5]</sup> suggests that a significant share of this increase in pension contributions relates to unfunded pension liabilities in defined benefit schemes that are no longer open to new members. So, even as firms have reduced their pension promises to employees, they've increased the amount of money being set aside. The implication is that a sizeable part of the non-wage compensation recorded in the National Accounts is actually flowing towards pensioners, rather than serving as a deferred payment for today's workers.

Part of what we consider the 'compensation' effect may therefore be better characterised as a 'labour share' effect. That is, if a significant share of non-wage compensation is flowing not to workers but the retired population, then it would make more sense to classify it as sitting within the capital (rather than labour) share of output. To the extent that such a reclassification would reduce the labour share of UK output and raise the share of compensation paid as wages, we might speculate that it would bring UK trends more into line with those observed in many other advanced economies.

Clearly this area is worthy of more investigation but, as a working – and highly indicative – calculation, Bell puts the potential size of pension deficit funding accounted for by the retired population rather than today's workers at somewhere in the region of £6 billion to £16 billion. Applying such a factor to the overall recorded labour share in the economy (unadjusted for self-employment) would suggest it might be between 0.5 percentage points and 1 percentage points lower.

With pension liabilities growing, Bell suggests that the compensation effect is likely to continue to serve as a 'wedge' between productivity and pay in the coming years.

### Over the longer period, the wage distribution effect remains the most important driver of decoupling, accounting for 71 per cent of the gap that opened up between 1983 and 2014...

By far the largest and most consistent part of the 'wedge' between productivity and median pay over the period as a whole is the wage distribution effect. It accounted for 16 percentage points of the overall 23 percentage point gap that developed between 1983 and 2014 (explaining 71 per cent of the phenomenon). This finding chimes with the Pessoa and Van Reenen work and with our own earlier decomposition of decoupling in the pre-crisis era.<sup>[6]</sup> While wage inequality increased within all sectors of the economy over this period, our previous work concluded that trends in manufacturing (where the employment share fell) and in finance (where pay growth outstripped the national average) made the biggest contribution to rising inequality.

As Figure 3 makes clear however, the wage distribution effect was most pronounced in the pre-crisis years. And, while the growing gap between mean and median pay in the 1980s was primarily driven by rising pay inequality (with pay growth at the top of the earnings distribution

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[5] B Bell, "Wage Stagnation and the Legacy Costs of Employment", forthcoming

[6] M Whittaker & L Savage, *Missing Out: Why ordinary workers are experiencing growth without gain*, Resolution Foundation, July 2011

outpacing growth at the median, which in turn outpaced growth at the bottom), the continued divergence in the late-1990s and early-2000s is likely to owe something to strong pay growth at the bottom associated with the introduction and development of the National Minimum Wage. In this period, top half wage inequality continued to grow but more modestly than was the case previously, while bottom half wage inequality contracted a little.

Since 2007 there has been relatively little difference in wage trends across the earnings distribution, with variations in experiences instead being most pronounced across different age groups (with younger workers being hardest hit).<sup>[7]</sup>

### In the absence of decoupling and productivity stagnation, median pay would be around one-quarter higher today...

Average year-on-year real-terms median wage growth of 1.8 per cent in the period 1983-2002 roughly halved to just 0.9 per cent between 2002 and 2007, before shifting into a *reduction* of 0.7 per cent a year from 2007 to 2014. This pre-crisis slowdown and post-crisis squeeze on pay, mean

that typical hourly wages stood at just £11.15 an hour in 2014 – slightly below the level of £11.19 recorded in 2002 and around 5 per cent lower than in 2007.

*Had there been no decoupling after 2002 and no productivity stagnation after 2007 then we would expect median pay to have reached around £13.95 in 2014*

As a thought exercise, it is worth considering how different this wage performance would have looked in the absence of both decoupling from 2002 and productivity stagnation from 2007.

Of the overall 23 percentage point ‘wedge’ that opened up between productivity and median pay between 1983 and 2014, 15 percentage points arrived after 2002. Had productivity not flat-lined after 2007, but had instead continued to grow at its pre-crisis trend rate of 2.1 per cent a year, then the ‘wedge’ appearing after 2002 would instead have stood at 35 percentage points. As Figure 5 shows, productivity stagnation would account for just over half (56 per cent) of this, with decoupling accounting for the remainder.

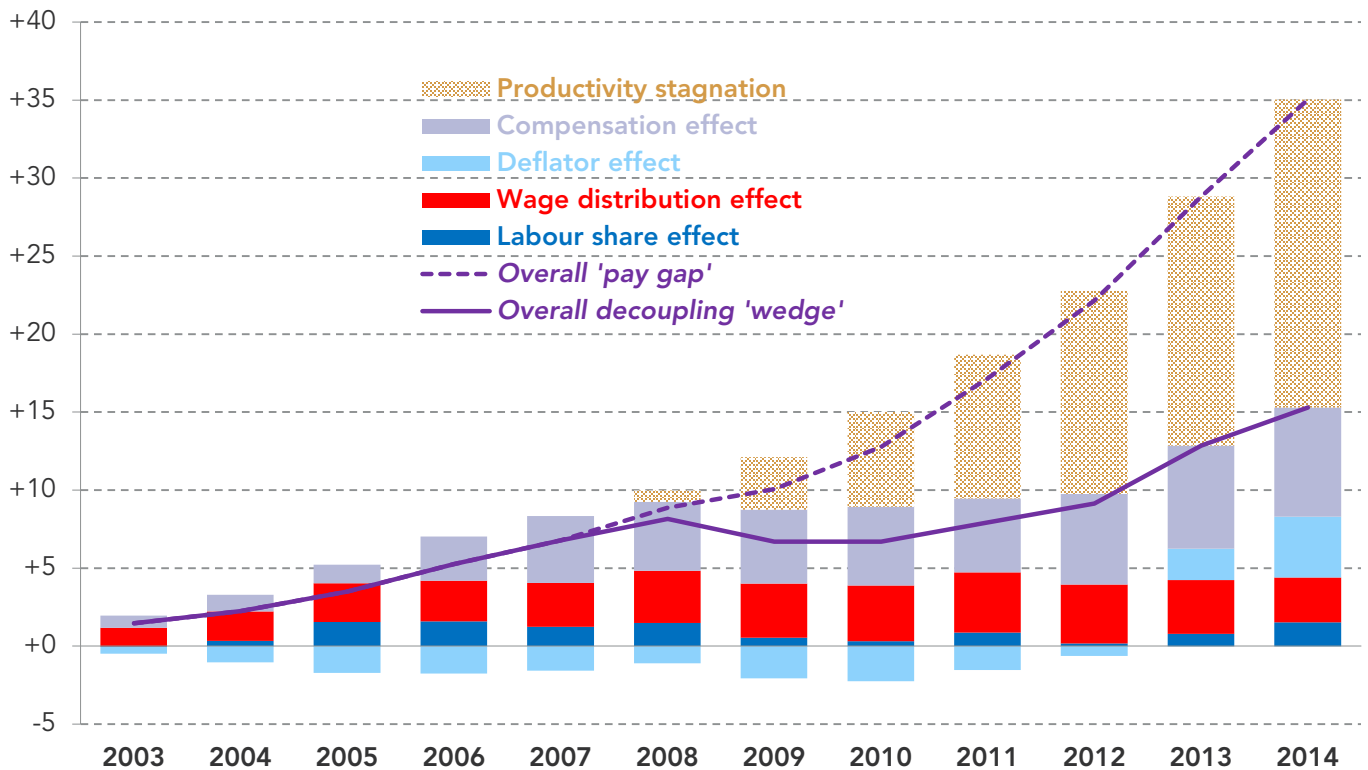
To put it another way, had there been no decoupling after 2002 and no productivity stagnation after 2007 then we would expect median pay to have reached around £13.95 in 2014. This means there is a £2.80 (or 25 per cent) ‘pay gap’ relative to what might otherwise have been in place. Of this, around £1.60 is due to the productivity slowdown, 55p is accounted for by the compensation effect, roughly 30p flows from the deflator effect, 25p is due to the wage distribution effect and just 10p is accounted for by a falling labour share.

Of course, this is a highly simplified exercise. Faster productivity growth would in practice have wider implications for growth, employment and – therefore – pay. Our approach is designed to be indicative only.

[7] See for example G Kelly & M Whittaker, “[Rise, Slowdown, Collapse: What next for wage growth?](#)” in *Securing a pay rise: The path back to shared wage growth*, Resolution Foundation, March 2015

**Figure 5: Understanding the median wage 'pay gap' associated with decoupling and productivity stagnation**

Contributions to cumulative percentage point 'pay gap' for median wages - 4-year averages



Notes: 'Pay gap' refers to how much higher median pay would have been in the period 2002-2014 in the absence of any further decoupling of median pay growth from productivity growth and the absence of productivity stagnation after 2007.

Source: RF analysis of ONS, National Accounts; and ONS, Annual Survey of Hours and Earnings & New Earnings Survey

### Meaning repairing productivity is necessary but not sufficient for renewed median wage growth...

This finding highlights the fundamental importance of restoring productivity growth. In the absence of any period of 'catch-up' productivity growth, the £1.60 'pay gap' will persist – even if trend growth is achieved. The longer productivity growth remains below trend, the larger the potential 'pay gap' will grow.

However, the extent to which decoupling has played a part in the disappointing wage performance of the last decade or so highlights that productivity recovery alone will be insufficient to ensure that growth feeds through to gain for all workers.

In the short-term, a partial reversal of the deflator effect in evidence after 2010 might help to narrow the 'wedge' between productivity growth and median pay growth slightly, but other factors mean that we cannot assume that the decoupling we have observed since 2002 is about to disappear.

While not the primary driver of this effect over the last decade or so, the future path of wage inequality will be an important factor in determining how closely median pay growth tracks productivity growth. Coming out of a downturn, we would usually expect to see wages at the top of the distribution growing more strongly than those in the middle. At this stage we can do no more than speculate, but if such a pattern again develops then top-half inequality will grow. And, unlike in previous periods, we have a fairly good idea of what will happen in the bottom half of

the distribution. The introduction of the new ‘national living wage’ for those aged 25 and over and the target of raising it relative to median pay by the end of the decade means that bottom half inequality is likely to contract slightly.

Taken together, these two effects mean that there is a reasonable chance that pay growth at the mean will be stronger than at the median. As such, the wage distribution effect may well act to widen the ‘wedge’ between productivity and pay in the coming years – even if some of that effect (at the bottom) is more generally positive for lower earning employees.

However this distribution effect develops, there is compelling evidence that the compensation effect at least will continue to act as a ‘wedge’ between output and pay, with some of this being driven by payments to *ex*-workers rather than today’s employees. We might be more sanguine about the re-direction of employee compensation towards today’s pensioners if this generational transfer persisted over time, but with defined benefit schemes now largely closed to new members that appears unlikely.

### And for household living standards more generally

Of course, whatever the relationship between productivity and pay, the impact of economic output on overall living standards in the coming years will be affected by a variety of other factors. Employment levels – and female participation in particular – along with the redistribution associated with taxes and benefits will clearly play their part.

Yet, with significant cuts in working-age benefits due over the next few years and with reduced headroom for further expansion of second earners in households (and a new Universal Credit system of benefits that dis-incentivises such behaviour), it is likely that wage growth will remain central to the overall outlook for Britain’s living standards. Vital too will be the productivity landscape. We’ll consider the role that these factors play – and compare the UK position with the US – in a forthcoming paper.

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- » *developing practical and effective policy proposals; and*
- » *engaging with policy makers and stakeholders to influence decision-making and bring about change.*

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