

Resolution Foundation

4

All accounted for

517

The case for an 'all worker' earnings measure

July 2014

resolutionfoundation.org info@resolutionfoundation.org

•

+44 (0)203 372 2960

@resfoundation



Acknowledgements

The Resolution Foundation would like to thank Paul Bivand, Stephen Machin, John Philpott, James Plunkett and Jonathan Portes for providing comments and insights on earlier versions of this paper. However the content of the report, and any errors contained, remain solely the responsibility of the author.



Contents

Executive Summary	4
1. Why the focus on earnings and the self-employed?	6
Box: How we measure earnings	8
2. What we know (and what we don't) about earnings and the downturn	9
3. The impact of the self-employed in our 'all worker' earnings barometer	12
4. Why the self-employment earnings drag?	16
5. Options for a more complete earnings measure	18
Conclusion	20



Charts & figures

Executive Summary

RF

In order to stimulate a much-needed debate about how we measure earnings and incomes, this briefing provides a tentative estimate of what our most timely pay data – Average Weekly Earnings – would look like if it included the self-employed. This estimate is not designed to provide a definitive answer to the question of what has happened to the earnings of all workers in recent years – for that we need a proper measure as a supplement to our existing measures of employee earnings. Rather, our estimate is an informed 'best guess' that uses the available data to show what may have happened to 'all worker' earnings. In doing so it shines a light on the shortcomings of the data that policy makers are currently relying on and suggests possible improvements.

In particular, this analysis:

- » Integrates self-employed earnings and the earnings of employees to give an estimate of an 'all worker' average weekly earnings measure, using the Family Resources Survey, which is currently the best bet for comparing the earnings of the self-employed and those of employees
- » Projects the 'all worker' earnings measure for the years since the latest Family Resources Survey publication (2011-12), using available datasets
- » Shows that 'all worker' earnings may have fallen by significantly more than existing employee wage data suggest – the size of the decline between the pre-recession peak and 2014 may be 20 to 30 per cent larger than we currently think
- » Suggests that 'all worker' earnings may bounce back more strongly than standard measures of employee wage growth
- » Evaluates the 'hours effect' the role that falling hours among the selfemployed play in the gap between all worker and employee-only weekly earnings – along with other factors that may explain this gap
- » Highlights the shortcomings of our various earnings measures, despite the crucial role they play in policy making



» Considers options for creating an improved measure of 'all worker' earnings that includes self-employed workers

The gap in our understanding of the earnings of the self-employed (and therefore all workers) is the most glaring of the ways in which our earnings and incomes data is inadequate, and hence the focus of this note. However, we hope that this provocation prompts a wider debate about how we capture earnings, incomes and living standards in a timely fashion and what we do with the results.



Why the focus on earnings and the self-employed?

Set against a remarkably strong employment recovery, the two most notable features of our recent labour market performance are the persistent decline in real wages, and rapid self-employment growth. Therefore, it is concerning that none of our main measures of earnings captures this growing group of self-employed workers that now makes up one seventh of the workforce. What little information we do have suggests that self-employed earnings took a big hit during the downturn and since, but this information is very out of date and does not feature in the current debate on wages.



Figure 1: Change in employment including and excluding the self-employed since 2008 peak

Source: Labour Force Survey, ONS

Notes: Both the 'all workers' and 'employees only' series include unpaid family workers and those on government employment and training schemes

To highlight how lopsided this debate may be, consider what our jobs recovery would look like if it had failed to capture the self-employed. Figure 1 shows that if we neglected to count the self-employed in the jobs numbers, it would have taken more than a year longer for the employment lost during the recession to be regained, and there would be 700,000 fewer people in work than our current headlines suggest. We would have a completely false understanding of the recovery. Self-employment is therefore an important area for interpretation of what is going on in our labour market on the employment side.^[1] Yet – strangely – no consideration is given to the self-employed when it comes to earnings.

The inclusion of the missing one-seventh of workers who are self-employed could change the picture much more dramatically. This problem is not just academic; it is of central importance to our understanding of the recovery and the economy. In considering the extent to which growth is feeding through to the pockets of workers – and therefore to future tax receipts and benefit bills – HM Treasury must work with partial information. On the monetary side, falling real wages have been highlighted by many, not least the

Bank of England's Monetary Policy Committee (MPC), as a sign that there is less inflationary pressure than the headline unemployment rate would suggest.^[2] Amid growing discussion about the timing and pace of interest rate rises, analysts have picked up on every 0.1 percentage point rise or fall in the monthly rate of growth in Average Weekly Earnings. Yet the inclusion of the missing one-seventh of workers who are self-employed could change the picture much more dramatically.

This briefing estimates what our most timely measure of wages might look like if it did not exclude the self-employed. This estimate is necessarily very speculative and should not be taken as the definitive picture of 'true' earnings across the workforce. Rather, it is intended to demonstrate the potential level of inaccuracy in our existing data. The point is that if wages are a key part of serious economic and monetary policy debates (as they definitely should be), then the way we measure them needs a serious rethink in order to properly reflect the reality of today's labour market.

[1] For example, the Bank of England's Monetary Policy Committee has discussed what rising self-employment signifies in terms of the health of the labour market, holding a range of views. See: 'Minutes of the Monetary Policy Committee Meeting, 9 April 2014,' Bank of England, April 2014

^{[] &#}x27;Inflation Report: May 2014,' Bank of England, May 2014



i How we measure earnings

We have a few different options for measuring UK earnings, most of which do not capture the self-employed. Our two key earnings datasets are:

- » The Annual Survey of Hours and Earnings (ASHE), which is an official dataset produced by the Office for National Statistics (ONS). It is based on a large-scale survey of employers, and therefore excludes the selfemployed. The survey asks about the pay of individual employees, allowing us to look at the distribution of pay as well as pay on average. ASHE is probably our most accurate measure of employee earnings.
- » Average Weekly Earnings (AWE), which is also an official ONS survey of businesses (and therefore also excludes the self-employed), is published on a monthly basis. As a result of its timeliness, it is often our principal barometer of earnings in the economy. It asks medium and large employers (an adjustment is made for small employers based on ASHE) separate questions about their pay-bills and employee numbers and then divides the two to calculate average earnings, including and excluding bonuses. Although robust, this is felt to be less accurate than the ASHE approach and also means that AWE doesn't tell us anything about the distribution of pay.

Beyond these two employer surveys, we have other ways of measuring pay. For example, the quarterly *Labour Force Survey (LFS)* is the largest and most timely ONS survey of individuals and households in the UK. It asks a range of questions about labour market activity, including specifics on self-employment. It asks employees about pay, although the results are felt to be less accurate than other sources due to a smaller sample for these questions and an inaccurate understanding of wage levels among individuals. The LFS does not ask any earnings questions of self-employed respondents.

One reason that most of our pay data does not include the earnings of the self-employed may be that the concept of self-employed earnings – the profits of individuals or the businesses they own – is qualitatively different to employee pay. Self-employed earnings are also harder to capture, and there is concern that even the limited sources we do have are subject to a significant decree of measurement error. However, both self-employed and employee earnings equally represent the rewards from work, and as such, surveys designed to measure the various components of household incomes usually capture the two and allow comparison.

Our best bet for capturing self-employed earnings is the annual *Family Resources Survey (FRS)*, which provides a detailed picture of the incomes (including earnings) of individuals and households. The FRS is therefore one of the only ways of comparing the earnings of the selfemployed and employees. It suffers from a significant time-lag, however – the most up-to-date full dataset covers 2011-12.^[1] In addition, there may be inaccuracies due to self-reporting, with individuals not always aware of exactly how much they earn. The *Living Costs and Food Survey (LCFS)* also collects self-reported information on incomes and earnings, but is thought to be less accurate in this regard and suffers from the same time-lag as the FRS.

There are other sources that can be used to measure, or estimate, the relative earnings the self-employed and employees, but all suffer from drawbacks:

- » The *Survey of Personal Incomes (SPI)* is an annual sample of HMRC records of individuals liable for income tax, disaggregated by income source including earnings from employment and self-employment. It therefore fails to cover employees and self-employed people who earn too little to pay tax, and is subject to a similar time-lag to the FRS (2011-12 being the latest data).
- » The **Bank of England's NMG Consulting survey** is an annual online survey published shortly after collection. It asks questions about the employment status of the respondent (including whether they are self-employed) and their total pre-tax household income. However, it does not capture individual employee or self-employed earnings specifically.
- » Finally, **National Accounts** disaggregate GDP into the part which is wages and salaries of employees, and 'mixed income,' which broadly represents income from self-employment. These are aggregates and do not relate directly to the pay of individuals as captured in other surveys.

[1] Headline messages for 2012-13 are available in the FRS and Households Below Average Income publication series, but the data sitting

What we know (and what we don't) about earnings and the downturn

We have a pretty clear picture of what happened to the earnings of employees during the downturn and the period since. Figure 2 shows the progression of real earnings on both our best measure – the Annual Survey of Hours and Earnings, or ASHE – and our most timely measure – Average Weekly Earnings, or AWE (see the box on the previous page for more information on different earnings measures). Although these surveys produce slightly different cash values for mean





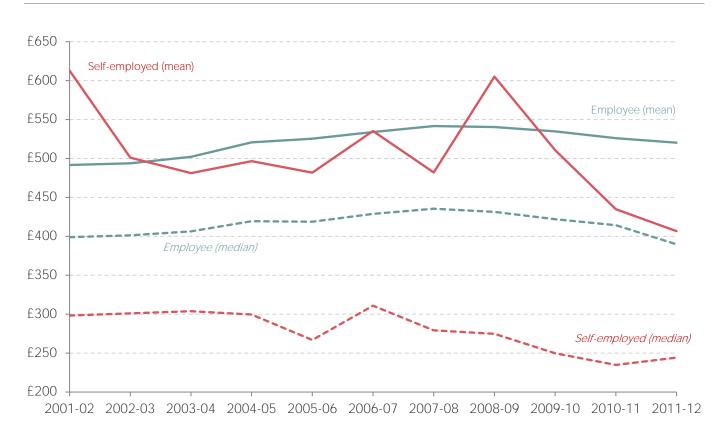
Source: Annual Survey of Hours and Earnings and Average Weekly Earnings, ONS

Notes: AWE data is presented as a three-month average

earnings, the magnitude of the decline from the 2008 peak to the latest data has been similar in both. Median earnings, which are only available in ASHE, have experienced a similar decline.^[3] These three different measures show a deep and sustained fall in real, CPI-adjusted, earnings over this period of between 8 and 10 per cent.^[4]

Figure 3: Trends in real employee and self-employed earnings

Self-employed and employee weekly earnings (CPI adjusted to April 2014 prices)



Source: Family Resources Survey, ONS

The evolution of earnings on our best measure that includes the self-employed – the Family Resources Survey (FRS) – is shown in Figure 3. This shows that at the mean (although volatile), the weekly earnings of the self-employed hovered around those of employees up to 2008-09, after which there were three years of decline. Given that our measure is weekly, some of this decline will reflect falling hours among the self-employed relative to employees (an issue we return to in Section 4).

[3] We often prefer to focus on median earnings rather than mean, as this measure captures the pay of the typical worker, half way up the distribution, and therefore is not skewed by what can be very large changes in pay for very high earners. AWE is only available as a mean, however.

[4] This fall might look even larger if we had opted for an alternative inflation index. Throughout this note, earnings are adjusted using CPI inflation, because this has become the conventional measure for benchmarking AWE data in particular. In general, though, we think that the RPI-J inflation index provides a more accurate reflection of price inflation for household budgets.



At the median, the self-employed have consistently earned less than employees, as average selfemployed earnings are even more skewed towards the very top than employee earnings are, a gap that widened during the recession. Whether looking at means or medians, it is clear that from the crisis up to 2011-12 the self-employed experienced a much deeper earnings decline than employees, falling as much as 24 cent compared to a figure for employees of up to 9 per cent.

The impact of the self-employed in our 'all worker' earnings barometer

We have seen the different paths that self-employed and employee earnings have taken in recent years. In this section we provide a rough estimate of earnings, in AWE, adjusted to reflect all workers rather than just employees. We have chosen to use AWE rather than ASHE because it will be the focus of economic and monetary policy thinking in coming months, with the 2014 instalment of ASHE not available until December. This does, however, mean that our adjustment focuses on the mean rather than the median (not captured by AWE), which, as we saw in the previous section, is much more sensitive to extremes, particularly for the self-employed. In general, we prefer to look at the median as a better measure of the earnings of a typical worker and how these feed through to living standards, and further reflection on the adequacy of our earnings data should consider our ability to bring timely estimates of median pay to the fore.

There may also be other deficiencies in our data that we would like to see improved along the way. Rather than being seen as a solution to our measurement problems, this provocation should serve as the start of a broader debate.

Our approach centres on comparing the average earnings of all workers (including the selfemployed) to the average earnings of employees in the FRS. We use the ratio between these two for each year to adjust the AWE 'total pay' series to take account of the self-employed as well as employees.^[5] This is felt to be justified as average employee earnings in the FRS lie relatively close to the figure produced by AWE, and, more importantly, follow the same trend over time. However, it is worth reiterating that the earnings of the self-employed according to the FRS are volatile, and do not always move in the same direction as those of employees (see Figure 3 above). This suggests that, although the FRS is currently our most reliable data source for self-employed earnings, our estimates of all worker earnings may not be correct and should be treated as an informed 'best guess'.

The latest FRS data is from 2011-12, so this still gives us no indication as to how average earnings for all workers have changed in the most recent couple of years. We have explored various options for updating our estimate, all of which produce speculative results:

- » In the absence of any data, we could assume that average self-employed earnings have grown at the same rate as average employee earnings in the most recent couple of years, and simply adjust our 'all worker' average earnings figure to reflect the fact that the self-employed, who are lower paid, have continued to grow as a share of workers (according to LFS data). This is our 'equal wage growth with compositional shift' approach.
- » We can use the timely *Bank of England NMG survey* to compare the total pre-tax income of working households, disaggregated by whether the household respondent is self-employed or an employee. Pre-tax household income is, of course, not the same as individual earnings, but this data could be a reasonable proxy for the relative change in self-employed and employee

^[5] We have chosen to adjust 'total pay' rather than 'regular pay,' which excludes bonuses and is therefore less volatile and seasonal. This is because we think total pay relates more directly to self-employment earnings/ profits, also often very irregular at the individual level and potentially affected by seasonal patterns.



Figure 4:

earnings between 2011 and 2013.^[6]

» Alternatively, we can compare the 'wages and salaries of employees' and 'mixed income' (which broadly reflects the income of the self-employed) components of GDP in the *National Accounts*. Looking at these components on a per-worker basis can similarly provide a proxy for the *relative change* in self-employed and employee earnings between 2011 and 2013.^[7]

Although all are highly uncertain it is noteworthy that the results of these three methods are quite similar. Our FRS-adjusted 'all worker' version of average weekly earnings, and our three speculative projections for the latest couple of years, are shown in Figure 4.

Estimated average weekly earnings of all workers Average weekly earnings, total pay (CPI adjusted to April 2014 prices) £540 £530 £520 All workers (AWE adjusted using FRS) £510 Employees (AWE) £500 £490 £480 National Accounts-based projection £470 NMG-based projection £460 · Equal wage growth with compositional shift-based projection £450 £440 2002 2004 2001 2003 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Source Average Weekly Earnings, Family Resources Survey, Labour Force Survey and National Accounts, ONS; NMG Consulting Survey, Bank of England; Resolution Foundation calculations Notes: Data is averaged over three months

Figure 4 shows that adjusting our most timely measure of earnings to include the self-employed

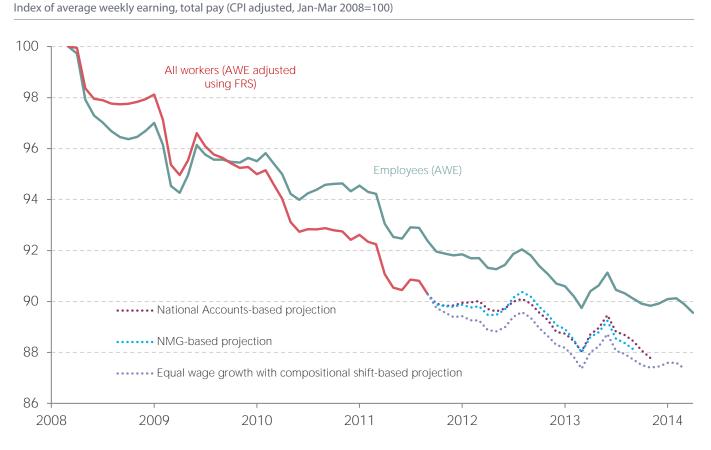
[6] In this method, the ratio between the average pre-tax income of all working households and the average pre-tax income of households in which the household respondent is an employee is created, and this is used to project forward the all-worker-to-employee-only ratio derived from the FRS.

[7] In this method, the ratio between our estimate of 'compensation per worker' [('compensation of employees: wages and salaries' + 'mixed income') / (number of employees + number of self-employed according to the LFS)] and 'compensation per employee' ['compensation of employees: wages and salaries' / number of employees according to the LFS] is created, and this is used to project forward the all-worker-to-employee-only ratio derived from the FRS.

makes hardly any difference over quite a lot of the last decade: between mid-2003 and the beginning of the recession in 2008. And there are times (between 2001 and 2003 and during the recession itself) when including the self-employed would have resulted in a more positive view of real earnings. But from the beginning of 2010 up to 2011-12, we estimate that average weekly earnings would have been consistently and significantly lower had the self-employed been included in the measure.

Our very speculative projections for the period *since* 2011-12 suggest that the gap between AWE employee earnings and all worker earnings has been maintained (or closed slightly). This reflects the tentative indications we have from the available data that self-employed earnings have not plummeted any further since 2011-12 relative to employee earnings, but have not bounced back (very much) either.

Figure 5: Change in estimated average weekly earnings of all workers since pre-recession peak



Source: Average Weekly Earnings, Family Resources Survey, Labour Force Survey and National Accounts, ONS; NMG Consulting Survey, Bank of England; Resolution Foundation calculations

Notes: Data is averaged over three months

Figure 5 focuses on the period during the downturn and since. It shows that including the selfemployed in our most timely earnings barometer may have worsened our view of the fall in earnings since the pre-recession peak by a factor of around two percentage points. Between the pre-recession peak and 2011-12, all worker earnings may have fallen by roughly 10 per cent rather than 8 per cent for employees (that is, the scale of the earnings decline would have been around 29 per cent larger than existing wage measures suggest). Between the pre-recession peak and early 2014 'all worker' earnings may have fallen around 12 per cent compared to 10 per cent for employees – though, again, the latter part of our projection is more uncertain. Put differently, looking at the whole post-crisis period, the overall earnings decline may be between 20 and 30 per cent deeper than the prevailing view if we actually measure 'all workers' rather than just employees.

Figure 6 shows the same data in terms of annual earnings growth, which commentators tend to focus on when AWE is published each month. Our estimates suggest that the picture would have looked even worse between the end of the recession and 2011-12, as the gap widened between employee-only and all worker earnings. At the extreme, in 2010-11 all worker earnings growth may have been -2.8 per cent, compared to a figure of -1.1 per cent for employees. However, since 2011-12 our tentative projections suggest that all worker annual earnings growth would have been roughly the same as the published AWE figure, as the gap between all worker and employee earnings is broadly maintained, meaning growth rates are similar.

Figure 6: Estimated annual average weekly earnings growth of all workers



Source: Average Weekly Earnings, Family Resources Survey, Labour Force Survey and National Accounts, ONS; NMG Consulting Survey, Bank of England; Resolution Foundation calculations Notes: Data is averaged over financial years; the average of three projections is presented for 2012-13 and 2013-14



Why the self-employment earnings drag?

Our estimates suggest that the self-employed are a large-enough group that experienced a sufficiently sizeable earnings decline since the recession to put downward pressure on all worker average earnings. Why have their earnings dragged in this way?

The Resolution Foundation's recent in-depth study of self-employment growth considered this question in detail.^[8] One partial explanation it explored is changes in **the hours that people are working**. Our focus in this note is on weekly earnings, which would fall at the average if more

A small part of the self-employment earnings drag simply reflects them working fewer hours than they used to. people worked part-time, for example, even if average hourly pay held constant.^[9] We know from the LFS that part-time working has grown more quickly among the self-employed, and that average hours have fallen for the self-employed but not for employees. Indeed, we estimate that falling hours among the selfemployed relative to employees explain around one seventh (15 per cent) of the gap between earnings

for all workers and earnings for employees only in our estimate.^[10] In other words, a snall part of the self-employment earnings drag simply reflects them working fewer hours than they used to.

Another factor may be **the ability of the self-employed to respond more flexibly to lower demand**. Although the 2008-09 downturn was characterised by a much lower rate of job losses than seen in previous recessions, unemployment still increased by nearly one million. In this context, employee earnings may have held up in recent years (compared to the self-employed) because some employees lost jobs and were taken out of earnings altogether (and so did not drag down the average), whereas the self-employed had the flexibility to stay put and take an even bigger hit to their earnings. The Resolution Foundation analysis found some evidence in support of this view.^[11]

Finally, dragging self-employed earnings may relate to **changes in the composition of the self-employed** that have not been seen among employees – towards lower-paying sectors or age groups, for example. There is some evidence for this, for example, there has been strong self-employment

[11] In particular, the declining rate at which workers have exited self-employment relative to a constant rate of employee exits

^[8] C D'Arcy and L Gardiner, 'Just the job – or a working compromise?: The changing nature of self-employment in the UK,' Resolution Foundation, May 2014

^[9] Indeed, part-time working has increased among employees in recent years, which is likely to explain a part of the sustained decline in real employee earnings

^[10] We do this by making our adjustments to AWE (using the ratio between all worker average earnings and employee only average earnings in the FRS) using average hourly pay rather than average weekly pay, and comparing the difference between all-worker earnings and employee-only earnings in 2011-12 on this estimate to that difference in our original estimate

growth among women (who tend to be lower paid). But overall the picture looks quite mixed, with self-employment (like employee jobs) growing in both higher- and lower-paying sectors.^[12] It is likely that compositional shifts among the self-employed explain a relatively small part of the gap between employee and all worker earnings.

As further context it is worth noting that, because we have focused on a measure that captures (mean) average earnings, rather than the median, we are **very likely to have understated changes in the earnings of a typical worker**. We have seen that the earnings of the self-employed are even more skewed by very high earners than employee earnings. In this light, an estimated 'all worker' measure of median earnings would probably capture more strongly the gradual shift in our workforce towards the self-employed, the majority of whom are lower paid than employees at the equivalent point in their earnings distribution.

The earnings of the self-employed are even more skewed by very high earners than employee earnings. While our estimates are tentative (and for the most recent years, even more so) the evidence consistently suggests we have seen a deeper earnings collapse following the downturn than first thought, had the selfemployed been included in our earnings measures. Equally, it is important to note that at other times, such as at the start of this century, the inclusion of the self-employed would have given

us a more positive view of earnings growth than we had (though this effect is smaller in duration). Indeed, it seems likely that self-employed earnings will bounce back in coming years as business picks up for those who have held on and cut back their hours and as those who are struggling the most transition into employee jobs. If this happens, our current measures of earnings will understate the scale of any wage-recovery. The point is that a highly incomplete measure of workforce earnings can cause upside or downside mistakes: the self-employment drag effect may well turn into a self-employment boost, but we won't know. This is important and highly relevant economic information that policy makers are currently missing.

[12] C D'Arcy and L Gardiner, 'Just the job – or a working compromise?: The changing nature of self-employment in the UK,' Resolution Foundation, May 2014



Options for a more complete earnings measure

Although our estimates are tentative, we have demonstrated the potential scale of what one of our main earnings indicators is missing by failing to capture the self-employed. As such, we call for an improved measure of earnings that captures all workers, not just employees, to function alongside existing measures.

We call for an improved measure of earnings that captures all workers, not just employees, to function alongside existing measures. This will be a necessarily complex endeavour. There are important conceptual differences between employee pay and self-employed earnings, and greater challenges in defining and measuring the latter. However, we think there is a consistent-enough understanding of self-employed earnings as they relate to employee wages (in terms of earnings liable for income tax, for example). In addition, we think that the comparison and

combination of the two is valid and important in order to capture rewards from work across the whole workforce, and how these feed through to living standards and spending power. With this in mind and given the perceived challenges in defining and measuring earnings from self-employment, crafting a measure of earnings that captures all workers would provide an opportunity to appraise the quality of all of the data that we have on self-employed earnings and gain a better understanding of what we are capturing.

Crucially, we are not proposing replacing our existing wage measures, which serve other purposes than that of our proposed all worker earnings measure, but rather *supplementing* them. For example, we already have a distinction in AWE between total pay and regular pay (excluding bonuses), and although the former is perhaps a more complete measure of rewards, commentators frequently prefer the latter as a more stable measure of earnings growth in relation to typical workers. An 'all worker' supplementary earnings measure would add to this potential for granularity in our measures.

This is not the place to propose exactly what an all worker earnings measure would look like, but our view is that it would not necessarily need to be a hugely costly statistical undertaking. Options for consideration might include (in no particular order):

» Developing earnings questions for self-employed respondents to the quarterly *Labour Force Survey*, and using the results to *adjust existing employer surveys* of wages among employees. AWE itself is already adjusted for the results of another survey (ASHE) so there is some precedent here, although this approach would involve merging the results of surveys that sample completely different entities (businesses and households). There is no 'business' alternative for the self-employed, however, and the fact that they are already sampled in large numbers in a regular survey of labour market activity surely provides an opportunity to incorporate their experience into our headline earnings measures.

- » Developing earnings questions for self-employed respondents to the quarterly *Labour Force Survey* and combining these with earnings data already collected from employee respondents to the *same survey*. The results could be published on a quarterly basis alongside other key LFS series. This has the advantage of capturing self-employed and employee earnings from the same sample. However, the LFS is not currently felt to be a particularly accurate source of information on employee earnings, and this approach would therefore necessitate a thorough review of the quality and comparability of LFS earnings data in order to place the results on a similar standing to our existing employer surveys of employee wages.
- » Adjusting existing employer surveys of wages among employees using HMRC data on self-employed taxpayers. The published HMRC data on *incomes and earnings* of taxpayers is extremely out of date, but HMRC does collect and publish very timely data on *income tax and National Insurance receipts*, and, for example how much of these come from Pay-As-You-Earn sources as opposed to self-assessment sources (which include self-employed earnings). What we don't know is how easily these elements can be disaggregated into employee and self-employed receipts specifically, and whether such *receipts at the aggregate level* can be related to *individual earnings*. With a better understanding of the data that underlies this timely publication, there may be the potential to use it to generate an all worker version of our existing wage measures.
- » Improving and adding to the *Bank of England's NMG Consulting survey* to capture the earnings of employees and the self-employed. This would likely involve a larger sample, the development of rigorous questions that capture individual earnings as well as household incomes, and potentially increasing the frequency too (e.g. to a quarterly basis). This might entail a more significant change of focus than many of the other options set out here but, given the importance of accurate data on pay (and self-employment) to the MPC's decisions about interest rates, this investment could easily be justified.
- » Developing a new survey of the self-employed specifically designed to run alongside our existing wage measures, with the sole purpose of extending their results to cover all workers. This could be monthly (to run alongside AWE) or annual (to run alongside ASHE, with the results potentially fed through to adjust the monthly AWE series as other aspects of ASHE already are). Although a new survey is potentially a big undertaking, it could be very focused on capturing self-employed earnings accurately and therefore not as extensive and costly as other individual and household surveys.

Given the lumpy and seasonal nature of the receipts and expenses of many self-employed workers, it is likely that the 'reference period' for self-employed earnings questions would need to be annual. It would be possible to derive monthly or weekly earnings from the annual figure and to ask questions about annual earnings each quarter or month, but such approaches warrant further consideration in terms of the comparability of employee and self-employed earnings data in the options proposed above.^[13]

There are likely to be a range of creative ideas on how best to solve the problem we have identified in this paper, and there will be other ways in which we want to see our data improved along the way. We want to see a broad and open debate about the deficiencies in our existing measures and the potential for a better suite of tools.

[13] In addition, the approach would need to consider that individuals can be employees and self-employed at the same time, so, if sampled from different surveys, the two populations would not necessarily be exclusive. However, our existing earnings measures (AWE and ASHE), capture wages at the job level rather than the individual level, and so do not account for the fact that many workers have more than one employee job. In this light, the addition of 'self-employed jobs' to the population of jobs that we measure earnings for would seem consistent. This difference between total individual earnings from employment and earnings from each employment source merits attention in the wider debate about how we measure earnings.



Conclusion

The measures that we use to track earnings exclude the one in seven workers who are selfemployed. Given continually rising self-employment and our knowledge that their earnings have taken a big hit in recent years, this is a major deficiency. This note has estimated what our most regular measure of earnings would look like with the self-employed included. Our more concrete estimates are dated and our figures for the most recent years are very speculative, but what we have shown here is as clear a picture as we can get of the earnings of all workers given the absence of better data. As such, this estimate shouldn't be taken as a 'true' reflection of earnings across the workforce – it isn't. Rather, it is an informed provocation to think about what we measure and how we use the results.

Our analysis suggests that, at points, Average Weekly Earnings would have been higher had the data captured the self-employed as well as employees, but since the downturn they would have been consistently and significantly lower. Including the self-employed in our most timely earnings barometer would have worsened our view of the fall in earnings since the pre-recession peak by between 20 and 30 per cent.

We are not simply making an academic point about measurement. Earnings and incomes are central to key questions of economic policy, our understanding of how much slack there is in the labour market, and therefore the timing and scale of interest rate increases. Significant economic and monetary policy decisions are made on the basis of our official data – it ought to be fit for purpose. We need a suite of better tools for understanding earnings, incomes and living standards. This will likely include better data on the earnings of employees, better data on the earnings of the self-employed and all workers combined, and more regular accurate data on household incomes. As the most glaring gap in the current employment context, this note addresses the self-employment earnings challenge in particular.

As a first step towards better earnings and incomes data, we call for an improved official measure of earnings that captures all workers, not just employees. Our analysis suggests that relatively high levels of self-employment are here to stay; their earnings count in terms of the growth of our economy, and therefore they should be counted. We have offered some tentative suggestions as to how an all worker earnings measure might be developed, but we acknowledge that this will be a complex endeavour that will require much more careful consideration than our initial view has given. We hope this analysis provokes a much-needed debate about how such a materially important project can be taken forward.

Resolution Foundation

Resolution Foundation is an independent research and policy organisation. Our goal is to improve the lives of people with low to middle incomes by delivering change in areas where they are currently disadvantaged. We do this by:

- » undertaking research and economic analysis to understand the challenges facing people on a low to middle income;
- » developing practical and effective policy proposals; and
- » engaging with policy makers and stakeholders to influence decision-making and bring about change.

For more information on this report, contact:

Laura Gardiner

 RF

Senior Research and Policy Analyst laura.gardiner@resolutionfoundation.org 020 3372 2954