

The Return of Falling Real Wages

David Blanchflower

Department of Economics, Dartmouth College, University of Stirling and NBER

Rui Costa

Department of Economics, University College London and Centre for Economic Performance, London School of Economics

Stephen Machin

Department of Economics and Centre for Economic Performance, London School of Economics

May 2017

1. Introduction

The falling real wages experienced by most UK workers between 2008 and 2014 were followed by modest growth in 2015 and 2016. But it has now reversed back as real wages have once again started to fall. This is courtesy of the post-Brexit rise in price inflation that has occurred, coupled with the persistent 2 percent nominal wage growth norm that seems to have become firmly established in the UK labour market.

As such, the future prospects for real wage growth do not look good. First of all, it seems that the UK economy is starting to slow. At the same time, the UK labour market is no longer creating jobs as employment fell in December 2016-February 2017 versus November 2016 -January 2017 by 13,000. Nominal wage growth has also continued to stall as the 3-month average on 3-month average measured by average weekly earnings (AWE) grew by just 2.3% in both February and March 2017.

The Bank of England, however, remains hugely optimistic. Their most recent forecasts on the economy and on real wage growth were released on Thursday 11 May. In our view, neither are credible and are much too optimistic. The forecast for the economy is driven by the Bank's collective view that nominal wages will rise steadily over the next couple of years. They predict wage growth will be above 3% and price rises will be below 3% implying positive real wage growth. In the post-Brexit world, both predictions seem most unlikely. Indeed, the Monetary Policy Commission (MPC) claimed that "wage growth is expected to recover significantly", to 3½% in 2018 and 3¾ % in 2019, up from their forecasts in February.

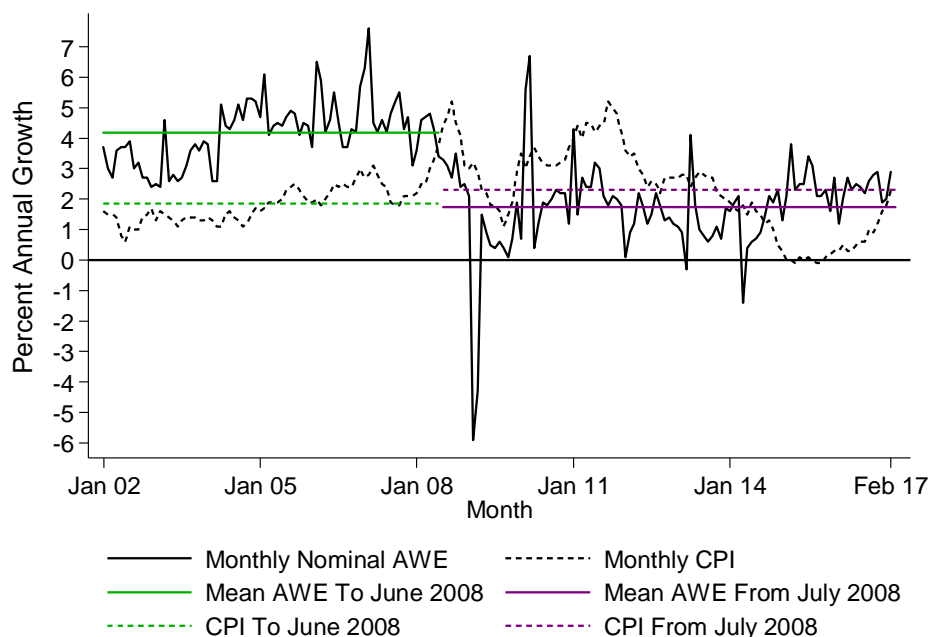
In this real wage update, we first consider the most recent wage growth numbers and appraise the Bank of England forecasts. Next we consider what has been happening to real wages for different groups of workers. Then, in the light of the recent employment patterns, we discuss another key feature of the UK labour market, the rise in low wage self-employment. We end with some conclusions.

2. The Most Recent Wage Growth Numbers

a) Falling real wages are back

As shown in Figure 1, between 2002 and 2008 average weekly earnings rose at an average of 4% a year and prices at just 2%, from July 2008 onwards the opposite occurred: pay growth fell to 2%, whilst inflation exceeded this.¹ Real wages did not grow until a modest bounce back began in September 2014. Growth in real wages since then were mainly due to a decrease in price inflation, rather than significant increases in nominal wage growth, which appear to have become stuck at a 2 percent norm.

Figure 1: Monthly Nominal AWE and CPI Growth, 2002 to 2017



Notes: Average weekly earnings (AWE) and CPI (three month averages) from ONS.

¹ The two exceptions of March and April 2010 are the two months which show growth because of the large fall in the corresponding months of the previous year, which was driven by bonuses.

Since the result of the June 2016 referendum on EU membership, real wages have been affected by rising inflation and have very recently started to fall again. Sterling has depreciated by 13% against the dollar since the eve of the vote and according to the Bank of England's most recent May 2017 Inflation Report, the sterling depreciation will lead to higher import costs, raising consumer price inflation above target, hitting 2.6% in the next two years.² Unless nominal wage rises offset this rise in prices, inflation associated with sterling depreciation threatens to undo the modest recent improvements in real wage growth.

b) The continuing two percent nominal wage growth norm

According to the most recent XpertHR press release³, the first quarter of 2017 is the fourth consecutive rolling quarter to show a median wage growth norm of 2%.

Based on a sample of 260 pay awards, wage growth quartiles have been 1.5%, 2% and 2.3% respectively. This represents the highest range in pay awards seen since May 2016. The wage growth progress for the average employee seems to be close to neutral with 32.2% of employees receiving pay awards higher than in the previous year and 36.8% reporting a lower pay award over the same period.

XpertHR estimates that the manufacturing-and-production sector has fared marginally better than its service counterpart, with an average pay award of 2% versus the 1.8% seen in the service sector of the economy. The MPC reports that private sector wage settlements in the first quarter of 2017 were 1.2%.

c) The economy seems to be slowing

Future prospects also do not look good as the economy seems to be slowing. Quarterly GDP growth of 0.3% in the first quarter of 2017 was not good, although the latest PMIs were reasonably strong so this may be a temporary soft spot. Markit's Household Finance Index for April 2017 indicated that consumer demand was holding up, driven by higher borrowing and dissaving, but this could not last for long. The saving ratio has reached the lowest since records began in 1963. Two days later, the Office for National Statistics released the March retail sales numbers which missed expectations in March. Sales of cars in the UK were also down, by nearly 20%, year on year in April. Diesel cars were down 27%. The oil price seems headed down, recently hitting five month lows. CPI inflation 12-month rate was also 2.3% in March 2017, unchanged from February. The RPI used in wage settlements was 3.1%.

² Inflation Report May 2017. Bank of England

³ <http://www.xperthr.co.uk/topics/pay-and-benefits/pay-levels-and-awards>

UK mortgage approvals have also hit a six-month low. According to Nationwide, house prices dipped 0.4% in April, following a decline of 0.3% in March which was the first monthly fall since mid-2015. Meanwhile, the annual rate of growth slowed to 2.6 per cent, the weakest it has been since June 2013. The Halifax found that prices remained unchanged in March 2017 compared with February, for the second month in a row. Right now, the housing market is clearly slowing.

d) MPC wage growth forecasts

Table 1 shows the MPC nominal wage growth forecasts of May 2017. First, it confirms what the MPC has been wrongly claiming in their last ten forecasts. For example, in all four forecasts in 2015 they predicted that wage growth would be 4% or higher in 2017. In February 2017 they lowered the forecast to 3% and now in the latest forecast to 2%. Average annual pay settlements in the three months to March 2017 were only 1.2%.

Second, the MPC has upped its wage forecast since February despite the fact that earnings growth, as measured by the National Statistic (the AWE shown above) has slowed. Over the last four months for which we have data the growth rate of total pay, measured by the 3month average was 2.8% in November; 2.6% in December; and 2.3% in January and February 2017. Since January 2010 the AWE has average a growth rate of 1.9%. We see no reason why this is about to change any time soon. A key question – to us at least - is why does the MPC not seem to learn from its past errors and why are no members of the MPC challenging the base?

Table 1: May 2017 Bank of England Nominal Wage Growth Forecasts

	2014	2015	2016	2017	2018	2019
May-17				2	3½	3¾
Feb-17			2¾	3	3¼	3¼
Nov-16			2½	2¾	3¾	3¾
Aug-16			2¾	3	3½	
May-16			3	3¾	4	
Feb-16		1¾	3	3¾		
Nov-15		2½	3¾	4		
Aug-15		3	3¾	4¼		
May-15		2½	4	4		
Feb-15	1¾	3½	4	4		

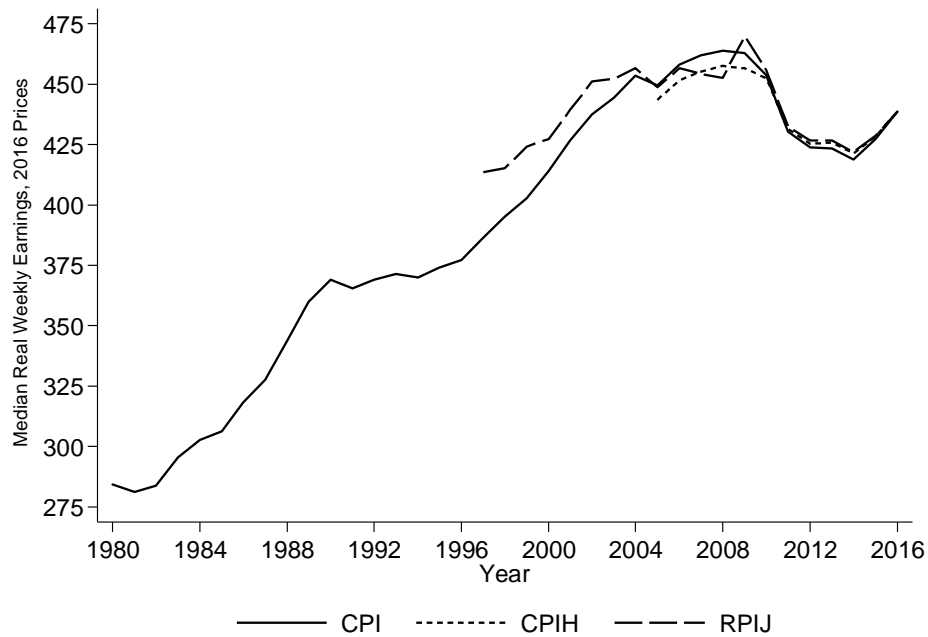
Notes: Source: Inflation Report May 2017. Bank of England

3. ASHE Trends Across Groups

Longer run trends up to 2016 (currently the most recent available year of data) can be looked at in detail from Annual Survey of Hours and Earnings (ASHE) data.

a) Median real wage growth 1980 to 2016

Figure 2: Annual ASHE Median Real Weekly Earnings, 1980 to 2016



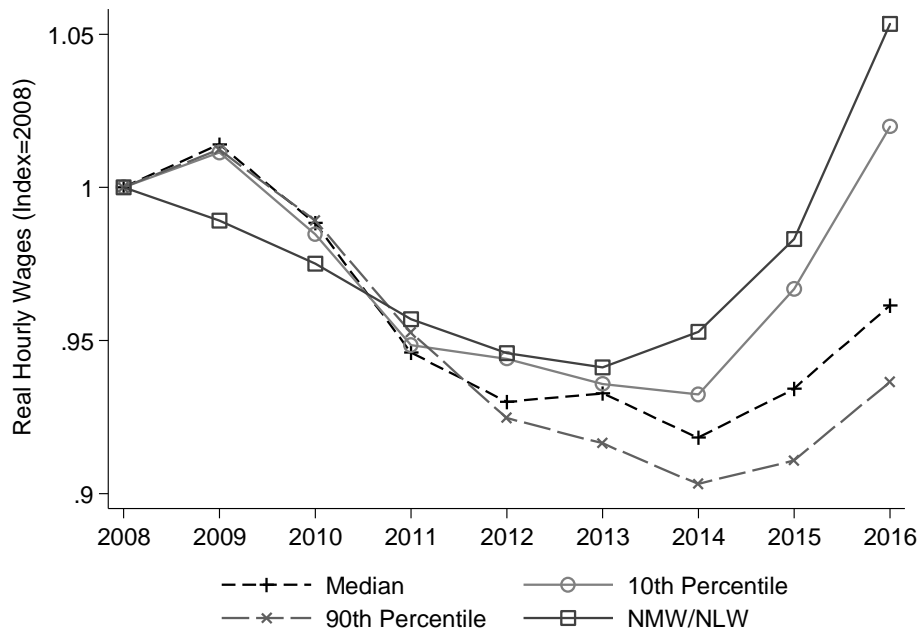
Notes: Weekly earnings deflated by CPI, CPIH and RPIJ. Source: Annual Survey of Hours and Earnings (ASHE).

Figure 2 corroborates the trends in real wages described earlier by showing growth in median real weekly wage earnings using different measures of price inflation. Between 2008 and 2014, and despite productivity having returned to close to its pre-crisis level, median real wages in the UK fell by 8%, a drop unprecedented in modern history. Their slight recovery since 2014, reduced the fall to around 3-5% (depending on which measure of inflation is used as a deflator – the consumer price index, CPI, the housing cost augmented version CPIH or the retail price index RPIJ). This corresponds to almost a 20% drop relative to the trend in real wage growth from 1980 to the early 2000s.⁴

⁴ Calculation is made assuming a counterfactual 2% growth per year trend in real wages since 2008.

b) Real wage growth across groups

Figure 3: Percentiles of Real Hourly Wage and NWM/NLW, Indexed to 2008



Notes: NMW stands for National Minimum Wage and NLW stands for National Living Wage. Source: Annual Survey of Hours and Earnings (ASHE) hourly

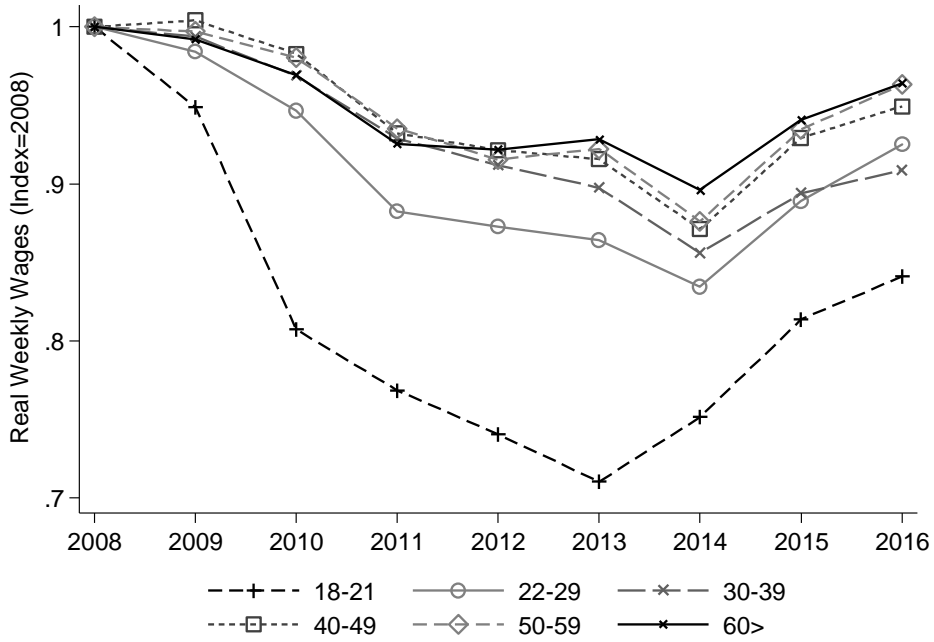
Figure 3 offers a closer look at real hourly wages at different points in the wage distribution. At the bottom, the introduction of the National Minimum Wage by the Labour Government in 1999 and the Conservative introduction of the National Living Wage in April 2016 have driven pay up⁵, resulting in those at the 10th percentile recovering at a considerably faster rate since 2014. In fact, a worker on the National Minimum Wage (NMW) and the NLW when it came in experienced 5 percent real wage growth between 2008 and 2016.

c) Real wage growth by age

These recent real wage developments show significant differences by age (Figure 4). Those aged 18 to 21 have seen a 16% fall in real weekly earnings. A significant fraction of this can be attributed to a fall in the number of those in full-time employment and in hours worked. In contrast, for individuals in the same age band, the hourly and weekly wages of those in full-time work only decreased by a small amount, at 1% and 3% respectively. The increased prevalence of self-employment arrangements among young workers additionally contributes to worsening the position of this age group as detailed later.

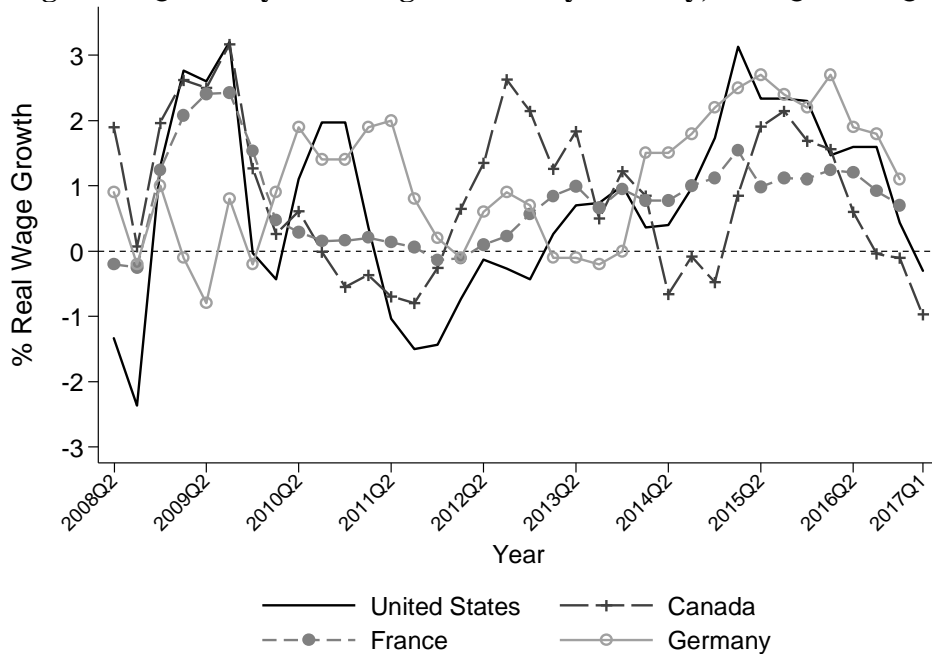
⁵ Bell, B and S Machin (2018) Minimum Wages and Firm Value, *Journal of Labor Economics*, forthcoming.

Figure 4: Median Real Weekly Wage by Age Groups, Indexed to 2008



Notes: Source: Annual Survey of Hours and Earnings (ASHE).

Figure 5: Quarterly Real Wage Growth by Country, 2008Q2-2017Q1



Notes: US wages are calculated based on the production nonsupervisory employees. France wages exclude the agricultural sector. Sources: *BLS*, US; *Statistics Canada*, Canada; *INSEE and OECD Stats*, France; *Statistisches Bundesamt*, Germany

d) Real wages are slowing elsewhere as well

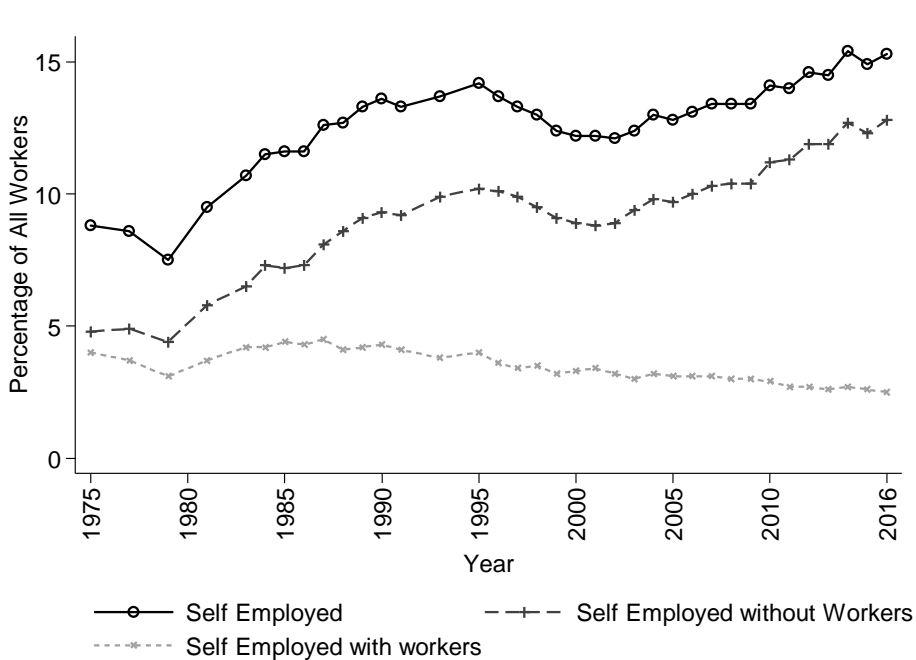
Figure 5 shows real wages slowing recently elsewhere as well. Whilst real wage growth in the selected countries shown in the Figure – Canada, France, Germany and the United States – has been better than the in the UK, the pattern since 2016 Q1 or Q2 (depending on country) is down. Like the UK, real wage growth has turned negative in Canada and the United States in 2017.

4. The Rise in Low Wage Self Employment

a) The rise in self employment

During the period in analysis, the composition of the labour market has been affected by a substantial increase in self-employment and alternative working arrangements since the economic downturn.

Figure 6: Percentage of Self-Employed Types in the Workforce



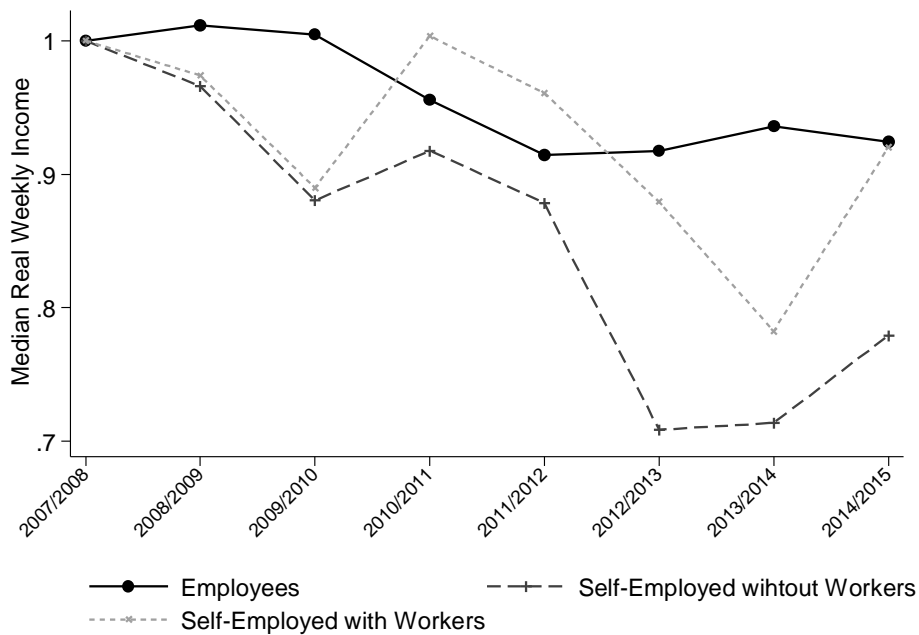
Notes: Numbers calculated from QLFS, ONS. Source: QLFS, ONS

As is shown in Figure 6, the proportion of self-employed individuals has risen significantly. However, all the increase was in terms of individual in self-employed positions who do not have any employees. This has been steadily increased since the 1980s, but since 2000 the

proportion has increased from 9% to 13% of all those in work. This group are often employed in “gig economy” positions, with little access to non-wage benefits that employees receive. Examples include the right to be paid the National Living Wage, sick pay, holiday pay, employment security and pensions.

b) Real wage growth by employment/self-employment

Figure 7: Real Weekly Income Growth By Employment/Self-Employment Status

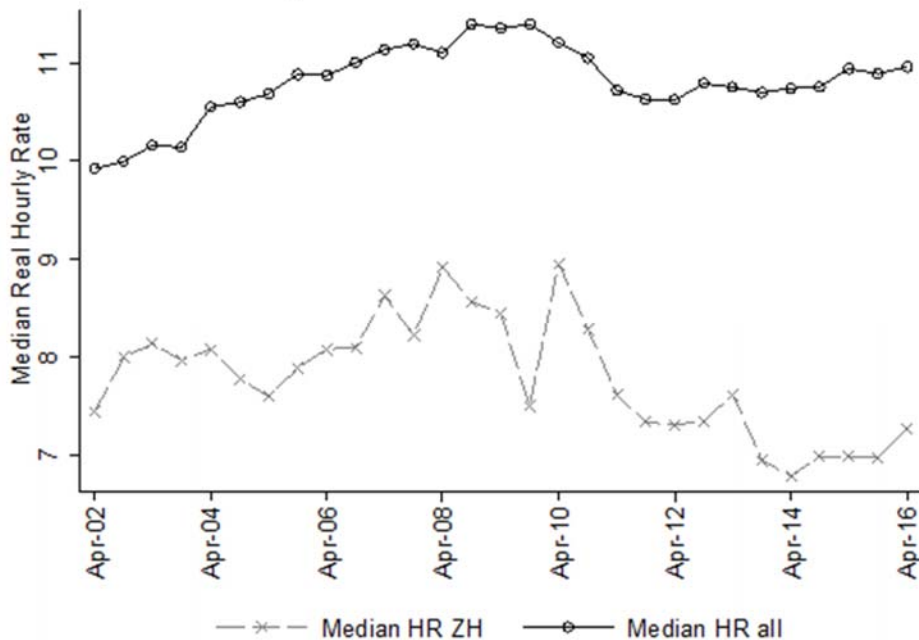


Notes: 2007/08=100. Source: Family Resources Survey (FRS).

While for some such working arrangements may be preferable, especially those performing more specialist skilled tasks where the pay rate is high (e.g. consultants and programmers), other workers whose main source of income is derived from such work would benefit from a more secure working arrangement. Figure 7 confirms that self-employed without workers have seen their median real weekly income drop significantly since 2007/2008, experiencing close to a 20% loss in real terms by 2014/2015. Both employees and the self-employed with workers have had milder drops compared with individuals in independent self-employed work arrangements.

c) Zero hour contract real wages

Figure 8: Median Real Wages of Zero Hour Contract Workers and All Workers



Notes: HR stands for hourly and ZH stands for zero hours. Source: QLFS, ONS.

Figure 8 shows that the median hourly wage rate for zero hour contract workers is approximately 35% less than that for all workers. Furthermore, the median wage rate for zero hour contract workers has fallen in real terms by around 12.5% over the past five years while the median hourly rate for all workers has stayed relatively flat.

5. Conclusions

The reality is that the AWE nominal wage growth of 4% observed in the UK labour market before the Great Recession is long gone. Yet, the Bank of England and other forecasters continue to state that within eighteen months wage growth will mean revert to approximately 4% once again. This is much the same forecast that they made in each of the last ten forecasts and these simply did not turn out to be true. At the very least, this continual inability of the MPC to learn from their forecast failures in the labour market increasingly brings into question their credibility. The Bank of England needs to gain a better understanding of what has been happening in the UK labour market

Prices over the next few years seem likely to rise faster than wages driven by the fall in the exchange rate. Coupled with uncertainty over Brexit there is also a downside risk to the economy and to living standards as firms scale back their plans to hire and invest. The

likelihood also is that consumers will cut back their spending further as real wages fall. The evidence suggests the nominal wage growth norm of 2% that we have written about several times before remains in place.⁶ Many of the new self-employment positions being created have very low wages associated with them. Finally, as prices have risen post-Brexit, real wages have just turned negative again, and the key question that is fundamental to UK workers and their living standards is for how long this time.

⁶ See Blanchflower, D. and S. Machin (2016) The Current 2% UK Wage Growth Norm, CEP Real Wage Update, <http://cep.lse.ac.uk/pubs/download/rwu005.pdf>, and the earlier CEP real wage updates at http://cep.lse.ac.uk/_new/publications/series.asp?prog=CEPRWU.