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From

EFFECTS OF CHANGES IN THE MIX OF WORKFORCE ON PAY GROWTH.

Main message: Compositional effects are dragging down on pay by 0.8% in the year to 2015Q1. The main factors dragging down on pay growth are occupation, qualifications, tenure and age. Stripping out compositional effects, annual regular pay growth would be around 3%.

Q1 compositional effects

1 Using the mincer-style equation as set out in compositional effects are dragging down on annual pay growth (relative to normal) by 0.8% in the year to 2015Q1 (**Chart 1)**.

2 The cumulative effect of compositional effects since the end of 2007 remains greater than normal, suggesting that there may be more of a drag to come (**Chart 2**).

3 Once compositional effects are stripped out, annual growth in whole economy regular AWE pay is around 3% in 2015Q1 (C**hart 3**). Assuming labour productivity growth is affected by the same amount as employee pay growth, compositional effects suggest productivity growth may have picked up from around zero in mid-2013 to around 1½% in 2015Q1 (**Chart 4)**.

Changes in the mix of the workforce

4 The main drivers of the compositional effects are occupation, tenure, age and qualifications with other[1] and industry partially offsetting this (**Chart 1**).

5 Occupation is the largest driver in the drag down on annual pay growth, contributing -0.3pp in Q1. The biggest wage mark-up is for highly skilled occupations, with little difference between medium and low skilled occupations. As seen in **Chart 5** the reason for the drag down on pay is because the proportion of highly skilled occupations is 2% below trend in 2015Q1 (the effects of a classification change between 2010Q4 and 2011Q1 as the data moved from SOC2000 to SOC2010 were removed from the estimate of compositional effects in 2011).

6 Changes in tenure account for 0.2pp of the drag on pay in Q1. The proportion of workers who have been in their job for less than a year has been steadily increasing since 2013Q2 as job to job flows and the job finding rate has picked up. They account for 17% of the total in

[1] Other includes region, part-time/full-time and public/private sector

2015Q1, whereas those that have been employed for 2-5 years, 10-20 years and 20years+ had remained fairly flat at around 20% (**Chart 6)**. Those that have been employed for 5-10 years have continued to fall since 2013. As seen in **Chart 7**, the longer the tenure of an employee the larger the wage mark-up, therefore the increase of the proportion of employees with shorter tenure would cause a drag on pay.

7 Employees who report their top qualification are GCSEs, other qualification or no qualification, which is shown as 'other' in C**hart 8** has been reducing in recent years and is 3% below the 1993-2007 trend in 2015Q1. 32% of employees that reported having degrees as their highest qualification in 2015Q1, which is 4% above the trend. This accounts for some of the positive contribution to pay growth during the recession, but as it returns to trend it is dragging on pay growth.

8 Around 70% of the working population are aged between 25-54 (**Chart 9)**. There has been an increase of 300,000 16-24 year olds in the workforce since 2008Q1 and is 1% above the 1993-2007 trend in 2015Q1. As younger workers have a lower wage mark-up, this would cause a drag on pay (**Chart 10**). 55-64 year olds are 1.5% below trend, although there has been an increase of 220,000 employees since 2008Q1.16-24 year olds and 55-64 year olds both account for around 15% of employees. 65+ year olds have seen an increase of 270,000 employees and are 1% above trend in 2015Q1. This would also cause a drag on pay as average weekly pay starts declining past age 40-44.

9 Although public administration and defence, education and health and social work (SIC codes O, P and Q) employ around 35% of employees (**Chart 11)**, there has been little change from the 1993-2007 trend, so would have little impact on pay. Manufacturing (C) has seen the largest shift from trend, but as the wage mark-up remains around the average there would be only a very slight boost to pay (**Chart 12**). Construction (F) is around 2% below trend in 2015Q1, as the wage mark-up is slightly above average this would cause a drag on pay. Information and communication (J) would also cause a drag on pay, as it has a large wage mark-up and is around 0.7pp below trend.

10 The other characteristics of region usual residence, Full-time/part-time and public sector/private sector have remained relatively on trend, therefore producing little news on the quarter (**Charts 13, 14, 15**).

Chart 1: Compositional effects on wage growth relative to normal

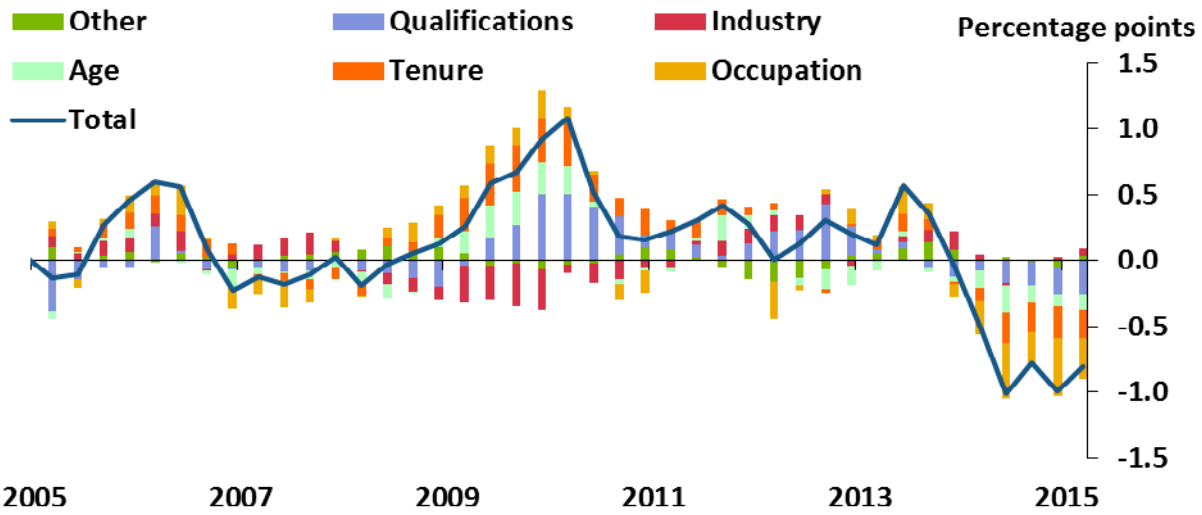


Chart 2: Cumulative compositional effects since 2007Q4 (relative to normal trend)

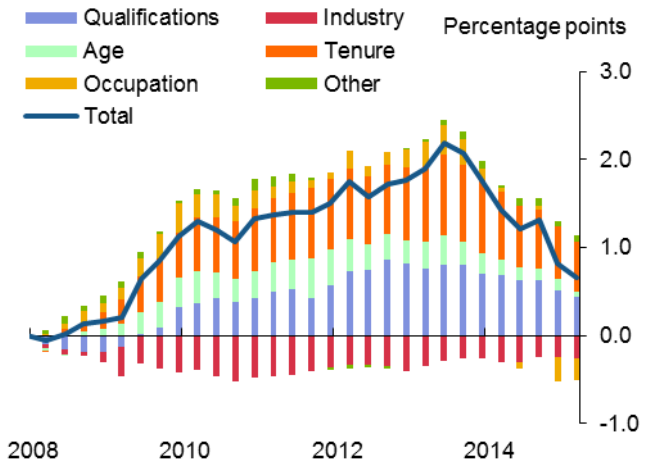
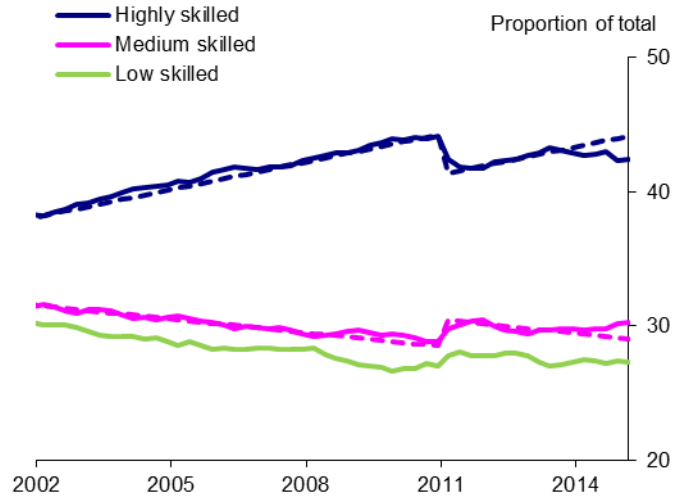


Chart 3: Whole economy regular pay growth

Chart 4: Whole economy productivity growth

Chart 5: Employment by occupation[(a)(b)]



a) Dotted lines indicate 1993-2007 trend.

b) The break in the trend in 2011 is due to the change in the classification of occupation. This has been accounted for in the mincer-style regression.

Chart 6: Employment by tenure

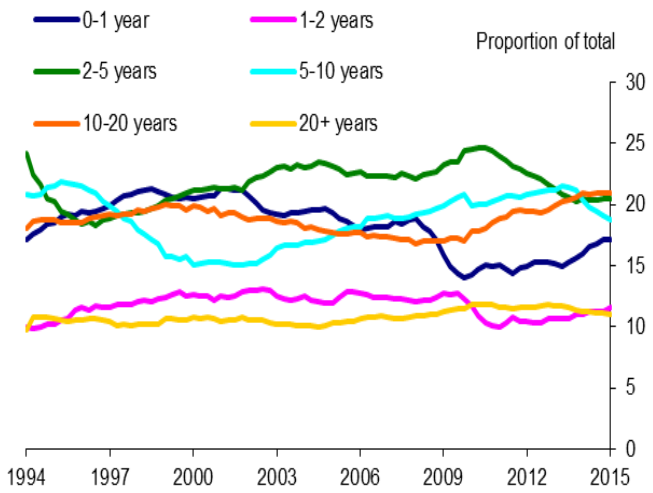


Chart 7: Wage mark-up by tenure (relative to pay of newly employed workers)

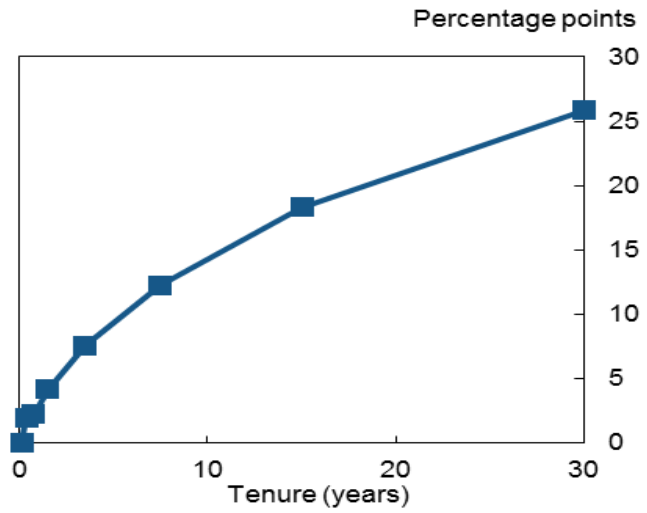
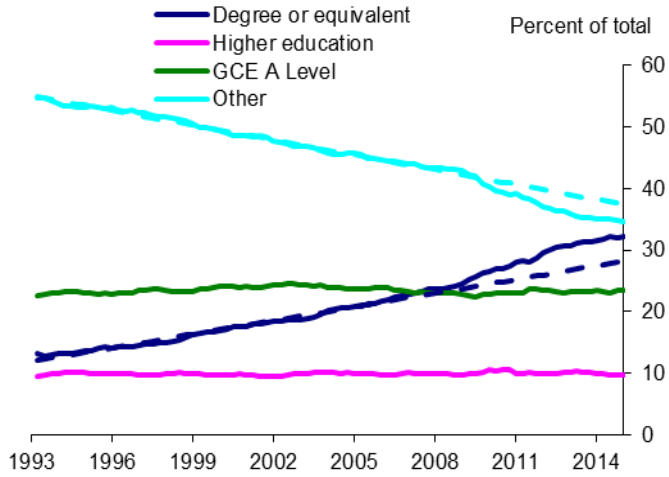


Chart 8: Employment by qualification[c]



c) Dotted lines indicate 1993-2007 trend.

Chart 9: Employment by age

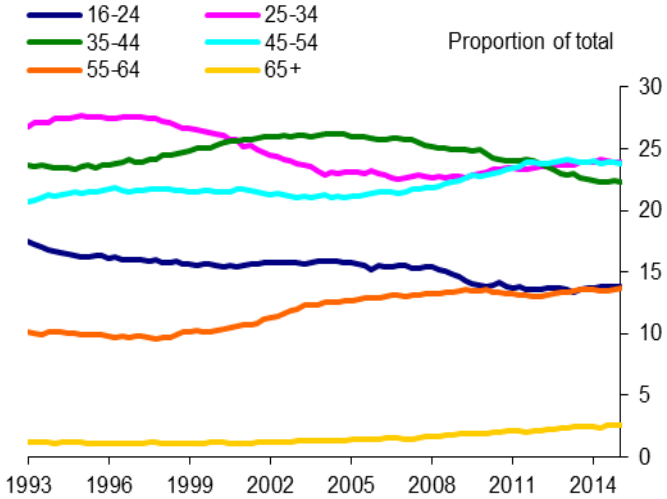


Chart 10: Wage mark-up by age (relative to pay of 16-19 year olds)

Chart 11: Employment by industry

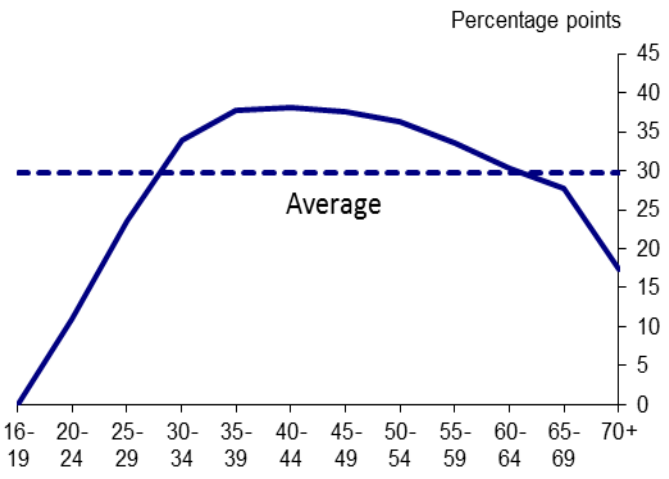


Chart 12: Wage mark-up by industry (relative to of the agriculture and farming industry)

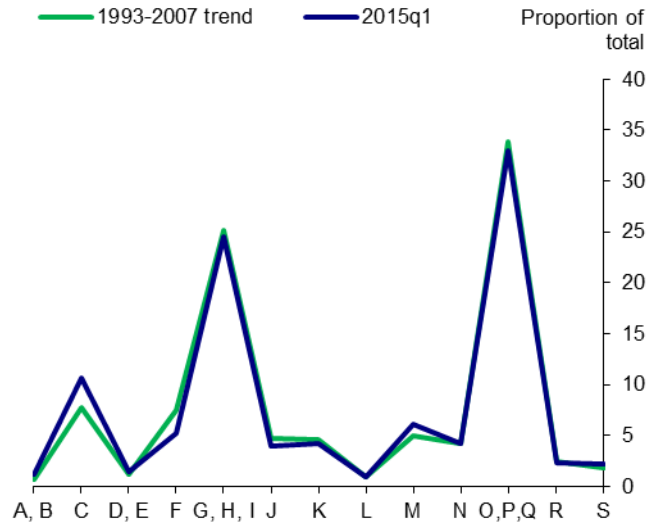


Chart 13: Employment by region

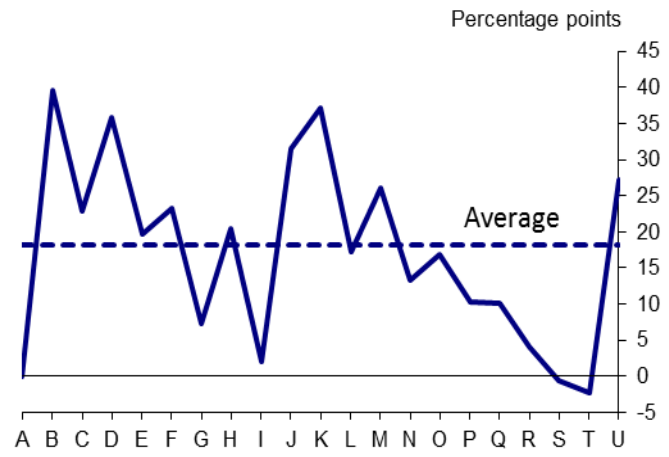


Chart 14: Employment by full-time or part-time

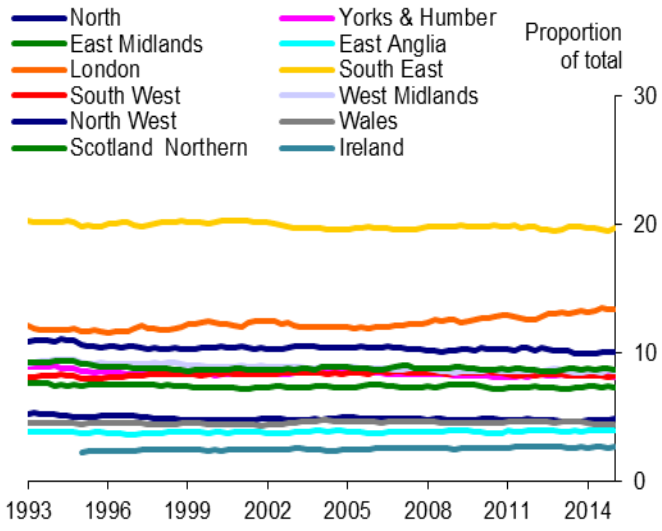
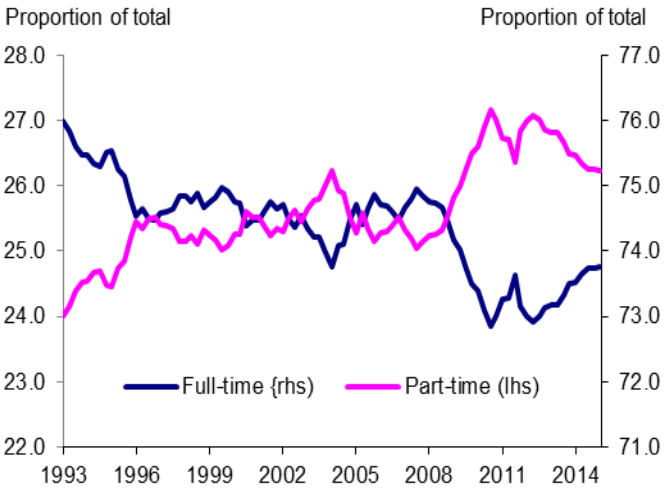
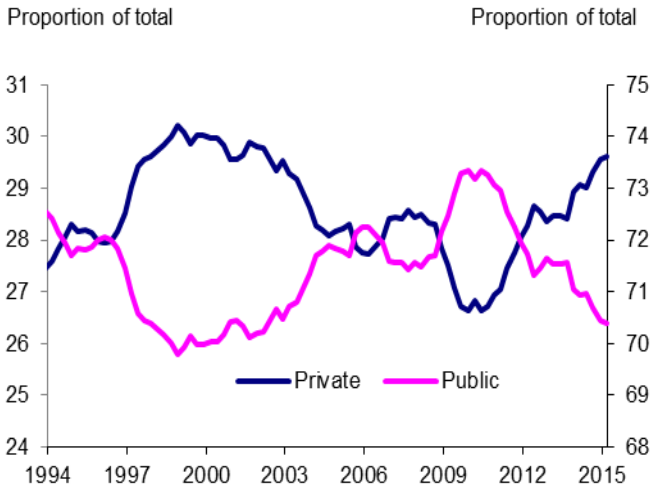


Chart 15: Employment by public or private sector





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