9: London's labour market

9.1 Key points

- The percentage of London residents who are in work is at record-levels, with the latest estimates showing over 73 per cent in employment in early 2016. That is over six percentage points higher than the lows recorded in 2011 and 2012. Similar trends were recorded for unemployment which, at under 6 per cent, is also at historically low levels.
- Despite the improvement in London's labour market, the employment rate remains below, and the unemployment rate remains above, that for the UK. Nevertheless, these gaps have narrowed in recent years.
- The employment rate gap between London and the UK is in part due to London's unique characteristics, such as its more ethnically diverse and younger population. Other factors that may influence London's employment rate include its share of full-time and part-time jobs and higher living costs that raise the opportunity cost of working.
- The average (median) gross hourly wage was £17.16 for full-time roles and £9.60 for part-time jobs in London in 2015. These compared to £13.36 and £8.48 respectively for the UK. Men had a higher full-time hourly rate than women in London. This pay gap was larger than that for the UK as a whole and was also wider at higher levels of earnings. In contrast, part-time women in London had a higher hourly wage than their male counterparts.
- The percentage of workers in London who were underemployed that is, individuals who are in work but want to work more hours was 8.8 per cent in 2015. Underemployment was more prevalent for part-time workers, low-skilled occupations and younger age groups. In contrast, the overemployment rate that is, the percentage of people who are in work but want to work fewer hours was estimated at 8.3 per cent. Generally, underemployment has exceeded overemployment in each year since 2009 suggesting that there is, arguably, more spare capacity in London's labour market than indicated by the official unemployment rates.

- Around one-third of employers in London reported staff skills that were underused in 2015, which was the third-highest rate among the English regions. This, again, could be due to London-specific characteristics, such as London having a larger proportion of migrant workers than England as a whole. For example, analysis suggests that non-UK born individuals who are equally qualified to UKborn employees are less likely to be in high-skilled roles and instead more likely to be in low-skilled jobs. This could be because of employers not recognising the value of overseas qualifications, though this effect should decrease over time. Others suggest it is because of the lower quality of overseas qualifications and the poor transferability of knowledge.
- London's labour market has seen a change in its occupation structure between 2004 and 2015, with an increase in high-skilled and service-orientated jobs, but a decline in middle-skilled, Secretarial & Admin roles.
- The number of young people aged 16-24 who were not in education, employment or training (NEET) was 89,000 in Q1 2016. London had a lower proportion who were NEET than the England average, which could partially be linked to a higher percentage of students achieving at least five A*-C grade GCSEs including English and Maths (60.9 per cent versus 53.8 per cent in 2014-15) – a risk indicator for being NEET.
- Whilst the majority of older people aged 65 and over were retired and therefore economically inactive, 17 per cent of men and 8.9 per cent of women aged over 65 were still in employment in 2015. Half of these did so as they were not ready to stop work, though one-in-five (18.1 per cent) said it was to pay for essential items such as bills. Moreover, older people also participate in the informal labour market by caring for adults, childcare and volunteering.

9.2 London's labour market

London's labour market performance over time is shown in Figure 9.1. The latest estimates from the ONS showed over 73 per cent of London residents aged 16-64 years were in employment during early 2016¹. That was up over six percentage points from the lows recorded in 2011 and 2012.





Source: ONS Labour Force Survey

Comparably, there were around 277,500 unemployed residents aged 16 years and over² in London during early 2016. That gives an unemployment rate of less than 6 per cent, which is at historically low levels for this measure as can be seen in Figure 9.2. The unemployment rate was lower for men (approximately 5.5 per cent) than for women (around 6.4 per cent). Furthermore, by age groups³, the unemployment rate was highest for the young and generally falls as age increases.



Figure 9.2: London's unemployment rate, residents aged 16 years and over, three-month rolling average, 1992 to 2016

Source: ONS Labour Force Survey

A different measure of unemployment is the Claimant count⁴. There were approximately 105,000 people claiming unemployment benefit in London in early 2016. This is the lowest number since the late 1970s. The Claimant count unemployment rate was meanwhile estimated at just under 2 per cent (Figure 9.3). By gender, men had a higher Claimant count unemployment rate than women. Furthermore, approximately one-in-four claimants had been claiming unemployment benefit for more than 12 months⁵.

12%





Another indicator is the number of people who are economically inactive – that is, those who are not seeking or able to start work. In early 2016, the percentage of London residents who were inactive was around 22 per cent (Figure 9.4). The economic inactivity rate has been relatively stable since 1992, although it has fallen in recent years.





Note: residence-based proportions Source: ONS Claimant Count

The majority of people of working age (16-64) who were economically inactive in London cited this was because they did not want a job (74.7 per cent)⁶. More detailed breakdowns are shown in Figure 9.5 and indicate that being a student (31.6 per cent) and looking after the family or home (30.3 per cent) were the most commonly reported reasons. Women were more likely to cite looking after the family or home than men (43.3 per cent versus 5.6 per cent).





Note: Data has been reweighted in July 2016 Source: ONS Annual Population Survey

When comparing with the year to December 2005, the proportion of economically inactive residents who did not want a job had fallen – 76.4 per cent did not want work in 2005 compared with 74.7 per cent in 2015. Moreover, whilst the most commonly cited reasons for being inactive in 2005 were looking after the family or home (31.1 per cent) and being a student (28.5 per cent), there were proportionally more being either temporarily or long-term sick (19.9 per cent versus 18.3 per cent).

Another labour market breakdown is by employees and those that are self-employed. Most people in London had employee roles (81.4 per cent in 2015), with the remainder largely self-employed (18.1 per cent)⁷. Nonetheless, self-employment has seen a faster rate of growth since 2004 and can partly explain the overall rise in the number in employment in London. For example, whilst employee roles have increased 22.4 per cent since 2004, growth in self-employment has been more than twice as strong at 46.1 per cent (Figure 9.6). At the UK-level, the ONS noted that the rise in self-employment has been greater than that indicated by simple demographics, such as population growth and an aging population⁸. This means that other factors like changes in participation and the propensity of being self-employed have had a bigger impact on self-employment.



Figure 9.6: Self-employed and employee workers in London, residents, 2004 to 2015

Note: January to December periods and has been reweighted in July 2016 Source: ONS Annual Population Survey

The majority of people who were self-employed in 2015 were aged 25-49 years (64 per cent)⁹. This age group has historically had the largest share of self-employed people. However, in terms of rates of growth, the strongest expansion was for the over 65s with the number of people of this age in self-employment having more than doubled since 2004 (Figure 9.7). Similar trends were observed at the UK-level of which the ONS noted that the increase in self-employment among older workers appears to be related to workers deferring or managing their transition to retirement differently¹⁰.



Figure 9.7: Self-employment by age groups for London, residents, 2004 to 2015

Note: January to December periods and are not seasonally adjusted or reweighted. Self-employed jobs include both first and second jobs.

Source: ONS Annual Population Survey

In 2015, most self-employed jobs were in the Construction (19.3 per cent) and Professional, Scientific & Technical (17.4 per cent) sectors as shown by Figure 9.8. This compares with data in in Chapter 1, which shows the largest sector in terms of all workforce jobs whether they are self-employed jobs or not as being Professional, Scientific & Technical, Administrative & Support Services and Human Health & Social Work.



Figure 9.8: Number of self-employed jobs by industry for London in 2015, residents aged 16 years and over

Note: January to December periods and is not seasonally adjusted or reweighted. Self-employed jobs include both first and second jobs. The figure for Primary & Utilities is based on a small sample size and potentially unreliable. Source: ONS Annual Population Survey

Almost half of self-employed workers (45.5 per cent) were in Professional and Associate Professional occupations in 2015 (Figure 9.9). In contrast, the smallest proportions were for Sales & Customer Service (1.5 per cent) and Administrative & Secretarial (3 per cent) occupations.



Figure 9.9: Share of self-employed jobs by occupation in London during 2015, residents aged 16-64 years

Note: January to December periods and is not seasonally adjusted or reweighted. Self-employed jobs include both first and second jobs.

Source: ONS Annual Population Survey

Over time, labour intensive roles like Process, Plant & Machine Operatives and Elementary occupations have seen the fastest rates of growth in self-employment as shown in Figure 9.10. These occupations are also traditionally low paid as discussed later in this chapter. Overall, Sales & Customer Services was the only group to have seen a decline in the number of self-employed workers in London, down 9.3 per cent between 2008 and 2015.





Note: January to December periods and not seasonally adjusted or reweighted. Source: ONS Annual Population Survey

A further labour market characteristic is full and part-time employment. The split by full-time and part-time working age employees in 2015 was 77.8 per cent and 21.7 per cent respectively. Of those working part-time, 62.7 per cent reportedly did not want a full-time job, but an additional 20.9 per cent commented that they could not find a full-time position (compared with 9.7 per cent of people citing this reason in 2004)¹¹. In particular, the number of part-time workers in London has grown 34.2 per cent since 2004 (compared with 21.6 per cent growth for full-time workers) and can also partly explain the rise in total employment as shown in Figure 9.11.



Figure 9.11: Full-time and part-time workers in London, residents aged 16-64 years, 2004 to 2015, 2004=100

Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

Both men and women were more likely to be working full-time in London than to be working parttime. However, a greater share of men were in full-time work (87.2 per cent of all male workers in 2015) than women (66.5 per cent). Concurrently, 61 per cent of all full-time workers were male, whereas 69.4 per cent of all part-time workers were female (Figure 9.12).



Figure 9.12: Share of full-time and part-time workers by gender in London, residents aged 16-64 years, 2004 to 2015

Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

Table 9.1 shows the share of full and part-time workers by gender and occupation in London during 2015. The majority of full-time workers were in the high-skilled roles of Managers, Directors & Senior Officials, Professional and Associate Professional occupations. There was no noticeable difference between men and women working full-time in these high-skilled roles, though differences do emerge for other occupations – men working full-time were more likely than women to be in middle-skilled and labour-intensive roles, whereas the reverse was true for women working full-time in service-intensive occupations. Similar trends were seen for part-time workers. For example, 30.2 per cent of men working part-time were in labour-intensive roles, in comparison with 18.6 per cent for women. Moreover, 31.4 per cent of women working part-time were in service-intensive roles which was in contrast with 21.8 per cent of men.

Table 9.1: Share of full and I	part-time workers by gender	and occupation in London durir	ıg
2015, residents aged 16-64	years	-	_

Occupation	Full-	time	Part-	-time	
	Male	Female	Male	Female	
Managers, Directors & Senior Officials	15.5%	10.9%	6.4%	4.2%	
Professional Occupations	25.3%	28.1%	14.7%	17.6%	
Associate Professional & Technical Occupations	18.3%	20.3%	11.0%	11.2%	
Administrative & Secretarial Occupations	5.8%	15.2%	5.9%	15.2%	
Skilled Trades Occupations	13.1%	1.7%	10.0%	1.9%	
Caring, Leisure & Other Service Occupations	2.7%	12.6%	5.2%	17.0%	
Sales & Customer Service Occupations	4.1%	5.0%	16.5%	14.4%	
Process, Plant & Machine Operatives	7.0%	1.0%	8.9%	0.9%	
Elementary Occupations	8.2%	5.2%	21.3%	17.6%	
Total	100.0%	100.0%	100.0%	100.0%	

Note: January to December periods and has been reweighted in July 2016. Figures do not include occupations that are disclosive or are unreliable due to small sample sizes. Source: ONS Annual Population Survey

Box: 9.1 Part-time employment in London

As noted above, the strong growth in the number of part-time workers can partly explain the rise in total employment in London in the past decade or so. Indeed, when comparing with UK trends as shown in Figure 9.13, growth in part-time workers since 2004 was stronger in London (34.2 per cent versus 12 per cent). Despite this, the share of part-time workers in London (21.7 per cent in 2015) is lower than the UK as a whole (25.4 per cent).





Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

The same trends are observed when looking at the number of part-time jobs (instead of people)¹². When looking at the growth in part-time jobs between Q1 2008 and Q1 2016, the biggest risers were in the Other Service Activities industry. Additionally, the occupations¹³ that saw the biggest increases between 2008 and 2015 in part-time roles were in Managerial, Skilled Trades and Process, Plant & Machine Operative occupations.

Therefore, one common explanation for the lower share of part-time jobs in London as compared with the UK is the differing industry and occupational mixes within the respective economies. However, previous analysis by GLA Economics that applied the UK's occupational shares to London and used the London full-time/part-time split across each occupation suggested that this only accounted for 37.2 per cent of the gap¹⁴.

To try to explain the remaining difference, GLA Economics also looked at the gender and parental differences in part-time employment. Generally, female employment rates (both full and part-time) in London have historically been lower than male employment rates as shown in Figure 9.18 in the next section. Moreover, whilst 66.1 per cent of part-time jobs in London were taken by women, this share remains below the 70.6 per cent level for the UK and, since Q3 1996, much of the increase in part-time jobs in London has been amongst men. Consequently, in 2013, 20.8 per cent of women were employed part-time in London compared with 28.7 per cent for the rest of the UK. This difference is emphasised when solely looking at women with dependent children (which is also discussed in greater

depth in the next section) -27.1 per cent of these women work part-time in London compared with 36.8 per cent for the rest of the UK.

Given this, it is important to understand the reasons why women (with dependent children) have a lower part-time employment rate in London. Some possible reasons include:

- London-specific factors such as the higher costs of living (which are arguably not effectively accounted for by the national tax and benefits system) and higher costs of travelling to work as discussed in Chapter 5;
- Individual characteristics such as ethnicity which is looked at later in this chapter; and
- Factors on the demand side including factors that prevent firms from offering part-time jobs (based on the belief that part-time workers may be more costly to employ and less committed than full-time workers).

There were 247,500 temporary workers¹⁵ in London during 2015 representing 6.9 per cent of all employees. As shown in Figure 9.14, the rate of growth in temporary workers was much the same as for all employees (22.7 per cent versus 22.4 per cent between 2004 and 2015). London also has a slightly larger share of temporary workers than the UK as a whole (6.9 per cent versus 6.1 per cent) and has seen faster rates of growth in temporary workers over the past decade or so.





Note: January to December periods for London and October to December periods for the UK and has been reweighted in July 2016.

Source: ONS Annual Population Survey

Almost a third (32.2 per cent) of temporary workers in 2015 said this was because they could not find a permanent job, though a further 20.7 per cent said that they did not want a permanent job¹⁶. Compared with the reasons given in 2004, there was an 8.8 percentage point rise in those that said they could not find a permanent job (Figure 9.15).



Figure 9.15: Reason for temporary working in London, residents aged 16 years and over, 2004 to 2015

Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

London's labour market also varies spatially. Tables 9.28-9.30 in Appendix 9.1 provide details of London's labour market at a borough level.

Figure 9.16 shows that London has had a lower employment rate than the UK since 1992. For example, in the three months to May 2016, the UK's employment was 74.4 per cent – 1 percentage point above London. That said, since late 2013, this difference has not been statistically significant meaning it could instead be due to the measurement approach. This trend has also not always been the case with previous GLA Economics analysis showing London having a higher employment than the UK prior to 1990¹⁷.





Source: ONS Labour Force Survey

London has historically had a higher unemployment rate than the UK and this trend is generally statistically significant (Figure 9.17).

Figure 9.17: Unemployment rates in London and the UK, residents aged 16 years and over, three-month rolling average, 1992 to 2016



Source: ONS Labour Force Survey

More recently, the gap between London and the UK has narrowed which can partly be explained by London having a stronger recovery from the 2008-09 recession. For instance, London's employment rate has risen 6.6 percentage points since its recessionary low compared with a 4.3 percentage point rise for the UK.

Previous analysis by GLA Economics suggested that this difference can be explained by the unique characteristics of London's population¹⁸¹⁹. For example, London has a higher proportion of Black, Asian and Minority Ethnic (BAME) residents than the UK. The following charts and tables look at the employment rates by demographic breakdowns to see whether London-specific characteristics can still explain this difference.

9.2.1 Gender

Figure 9.18 shows the male and female employment rates for London and the UK²⁰. The first observation is that the male employment rate has historically been higher than the female employment rate for both London and the UK. Indeed, in 2015, London's male employment rate was 79.5 per cent compared with the female employment rate of 66.5 per cent. The second observation is that the difference between the male employment rates for London and the UK is relatively small and generally not statistically significant, but is larger and significant for females. Other GLA Economics analysis suggested women may appear to be 'disadvantaged' in comparison to men due to individual characteristics and factors which are peculiar to London, such as the higher cost of childcare, transport and, more generally, the cost of living which can influence the opportunity cost of women working²¹.

Figure 9.18: Employment rates by gender in London and the UK, residents aged 16-64 years, 2004 to 2015



Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

Interestingly, the gap between the male and female employment rates for London and the UK has narrowed in recent years, particularly when looking further over time when these gaps widened in the mid-1990s and early 2000s²². In fact, the male employment rate for London has been marginally higher than the UK between 2013 and 2015. This suggests that the closing of these gaps could partly explain the convergence of London's and the UK's headline employment rates.

9.2.2 Age

Figures 9.19-9.21 plot the employment rates for the 16-24, 25-49 and 50-64 age groups for London and the UK. The largest gap in London and the UK's employment rates is for the 16-24 age group²³ and is statistically significant at the 95 per cent level. That said, this has narrowed from a 12.2 percentage point difference in 2004 to a 7.3 percentage point difference in 2015 and was one of the drivers for the closing of the gap at the headline level.



Figure 9.19: Employment rates for the 16-24 age group for London and the UK, residents, 2004 to 2015

Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

There has also been a convergence between employment rates for the 25-49 age group to a point where there is little difference between London and the UK.



Figure 9.20: Employment rates for the 25-49 age group for London and the UK, residents, 2004 to 2015

Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

The employment rates for the 50-64 age group are broadly the same for London and the UK and have been for the past decade or so.





Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

Box 9.2: Employment rates for the 16-24 age group

As shown by Figures 9.19 to 9.21, the employment rates for the 16-24 age group are below those for the 25-49 and 50-64 age groups. This in part can be attributed to full-time students who would be classed as being economically inactive and affects the 16-24 age group proportionally more.

This can clearly be seen in Figure 9.22 which shows the UK's employment rate for individuals aged 16-24yrs who were in full-time education and for those who were not in full-time education²⁴. The employment rate for those not in full-time education was over 74 per cent for the UK in early 2016, compared with approximately 30 per cent for those in full-time education. In fact, the employment rate for the 16-24 age group was comparable to other age groups if full-time students were excluded.

Figure 9.22: Employment rates for the 16-24 age group by full-time education status for the UK, residents, 1992 to 2016, three month rolling



Source: ONS Labour Force Survey

Table 9.2 shows the employment, unemployment and economic inactivity rates for full-time students in London and the rest of the UK. This looks at the 18-24 age group to remove individuals in compulsory education. London had a statistically lower employment rate than the rest of the UK for 18-24 year old full-time students. Moreover, London had a higher unemployment rate, but this difference was not statistically significant.

Table 9.2: Employment,	unemployment and	economic inactivity	y rates for full-time s	students
in London and the rest	of the UK, residents	aged 18-24 years,	2010 to 2014	

	2010	2011	2012	2013	2014
Employment rate					
London	27.9%	21.2%	23.9%	23.2%	24.3%
Rest of the UK	43.4%	38.3%	38.2%	37.8%	39.4%
Unemployment rate					
London	10.8%	10.6%	11.2%	10.8%	10.7%
Rest of the UK	8.0%	8.9%	10.6%	9.9%	6.9%
Economic inactivity rate					
London	61.2%	68.2%	64.9%	66.1%	64.9%
Rest of the UK	48.6%	52.7%	51.1%	52.3%	53.7%
Note: July to September periods	and not seasonally	/ adjusted. Source:	ONS Labour Forc	e Survey.	

Employment rates by age groups and gender are also presented in Appendix 9.2. Interestingly, whilst the employment rates for men and women in London were broadly similar for the 16-24 age group, differences emerge for the 25-49 and 50-64 groupings. This gender gap was largest for the 25-49 age group. Moreover, London's male employment rate for the 25-49 age group was broadly in line with that for the UK, but there was a gap for the associated female employment rate. This could partly be due to women with dependent children having a lower employment rate in London than the rest of the UK, which is discussed in greater depth in the following section.

Whilst individuals aged 65 and over are not included in the employment rate statistics as they are outside of the working age population definition (16-64 years), London has consistently had a higher employment rate than the UK as a whole (Figure 9.23). The latest estimates indicate that London's employment rate for the over 65 age group was 12.5 per cent in 2015, compared with 10.3 per cent for the UK.



Figure 9.23: Employment rates for the over 65 age group for London and the UK, residents, 2004 to 2015

Note: Janaury to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

In fact, there has been a steady rise in the number of people in employment and aged 65 years and over (Figure 9.24).





Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

9.2.3 Ethnicity

An interesting trend emerges when looking at employment rates by ethnicity for London and the UK. Firstly, employment rates are higher for the 'White' grouping than the ethnic minority group as a whole. For example, the employment rate for the White ethnicity group was 78.3 per cent in London during 2015, compared with 65.1 per cent for all ethnic minorities. Secondly, London generally posted higher employment rates than the UK as a whole for the White and all ethnic minority groupings as shown in Figure 9.25. However, this trend is only statistically significant for the White ethnicity group was 78.3 per cent in London during 2015, which was statistically above the UK estimate of 75.1 per cent. Similarly, the employment rate for all ethnic minorities was 65.1 per cent in London, compared with 63 per cent for the UK, but this was not a statistically significant difference.

Figure 9.25: Employment rates by ethnicity for London and the UK, residents aged 16-64 years, 2004 to 2015



Note: January to December periods and has been reweighted in July 2016. Due to changes in the ethnicity questions during 2011, estimates from this date should not be compared with its history. Source: ONS Annual Population Survey

Further breakdowns are provided in Tables 9.3 and 9.4 and suggest that employment rates in London were higher than the UK for the Indian, Pakistani or Bangladeshi, Black or Black British and 'other' ethnicity groups. London only had a lower employment rate for the 'all mixed ethnicities' grouping.

Year	White	Indian	Pakistani or	Black or Black	All mixed	All other
			Daligiadestil	DITUST	ethnicities	etimicities
2004	73.4%	67.7%	43.2%	57.3%	59.3%	54.7%
2005	73.4%	67.6%	42.8%	57.7%	62.1%	55.2%
2006	73.6%	68.2%	43.8%	59.2%	62.8%	54.7%
2007	73.7%	69.4%	43.7%	61.9%	59.7%	57.8%
2008	74.4%	69.4%	46.0%	59.0%	61.5%	60.2%
2009	73.6%	65.9%	48.5%	57.5%	59.7%	56.4%
2010	72.3%	69.2%	48.6%	58.5%	60.0%	56.9%
2011	73.0%	70.1%	50.4%	55.0%	57.9%	57.5%
2012	73.7%	69.6%	51.5%	58.6%	58.0%	58.6%
2013	75.0%	69.4%	51.5%	60.4%	61.7%	60.6%
2014	76.8%	71.4%	55.2%	62.3%	60.5%	61.8%
2015	78.3%	73.7%	56.7%	66.1%	62.3%	63.2%

Table 9.3: Employment rates by detailed ethnicity groups London, residents aged 16-64 years, 2004 to 2015

Note: January to December periods and has been reweighted in July 2016. Also, due to changes in the ethnicity questions during 2011, these estimates should only be used as a time series before and following this change. Source: ONS Annual Population Survey.

Table 9	9.4: Employment	rates by detaile	d ethnicity <u>c</u>	groups for the U	UK, residents a	ged 16-64
years,	2004 to 2015	-				-

Year	White	Indian	Pakistani or Bangladeshi	Black or Black British	All mixed ethnicities	All other ethnicities
2004	73.9%	67.9%	44.4%	59.9%	62.0%	56.9%
2005	74.0%	68.6%	44.1%	61.0%	62.4%	58.5%
2006	73.9%	69.0%	44.6%	62.3%	64.7%	57.6%
2007	73.9%	69.5%	44.8%	63.3%	63.5%	59.4%
2008	73.7%	69.0%	46.3%	61.4%	60.2%	60.7%
2009	72.1%	68.3%	46.7%	58.4%	59.8%	59.3%
2010	71.6%	70.0%	46.4%	60.1%	61.3%	57.5%
2011	71.5%	70.3%	48.5%	56.8%	60.1%	57.3%
2012	72.1%	69.1%	48.4%	60.1%	59.6%	58.1%
2013	72.9%	69.0%	48.5%	60.7%	61.4%	57.7%
2014	73.9%	71.3%	52.0%	62.1%	62.8%	59.6%
2015	75.1%	71.3%	53.2%	65.0%	64.2%	61.6%

Note: January to December periods and has been reweighted in July 2016. Also, due to changes in the ethnicity questions during 2011, these estimates should only be used as a time series before and following this change. Source: ONS Annual Population Survey.

Given the employment rate for ethnic minorities is lower than the 'White' group and that London has a larger proportion of ethnic minorities than the UK (see Chapter 8); it could be argued that this is one explanation for London's headline employment rate being below the UK. Indeed, if it is assumed that London's population had the same proportions of ethnic groups as the UK and London employment rates by ethnicity remained the same, London's headline 'adjusted' employment rate²⁵ would then be above the UK as shown in Figure 9.26.



Figure 9.26: London adjusted employment rate based on ethnicity groups and the UK employment rate, residents aged 16-64 years, 2004 to 2015

Notes: January to December periods and has been reweighted in July 2016. Due to changes in the ethnicity questions during 2011, these estimates should not be used as a time series. Source: ONS Annual Population Survey

9.2.4 Parents

Figure 9.27 shows the employment rates of parents with dependent children²⁶ for London and the UK between 2012 and 2015. This shows that parents resident in London and aged 16-64 years are less likely to be in work than parents living in the UK as a whole. For example, the employment rate for parents with dependent children in London was 73.7 per cent in 2015, compared with 79.8 per cent for the UK overall.





Note: April to June periods. Source: ONS Labour Force Survey household datasets

Perhaps unsurprisingly, the employment rates of parents are lowest when their dependent children are youngest (Figure 9.28). For instance, the employment rate for parents with dependent children aged 0-4 years was 72.2 per cent in 2015 for London, but this rises to 74.5 per cent for children aged 16-18 years. This trend is more evidenced for lone parents where the employment rate rises from 49 per cent for children aged 0-4 years to 68.9 per cent for children aged 16-18 years. One possible explanation for this could be due to the cost of childcare. This might also explain why employment rates are lower in London than the UK as a whole as childcare costs are on average higher in London (see Chapter 10) and, assuming all other factors like wages are constant across the country, raises the opportunity cost of being in work.



Figure 9.28: Percentage of parents in employment by age of youngest dependent child for London and the UK, residents aged 16-64 years, April to June 2015

Note: April to June period. Source: ONS Labour Force Survey households data

Figure 9.28 also shows the employment rates for lone and couple parents. Here, parents who are part of a couple have higher employment rates than lone parents. For example, the employment rate for couple parents of dependent children of all ages was 75.9 per cent for London in 2015, which was higher than the rate for lone parents of 62.5 per cent.

These employment rates have generally increased since 2012. This can be seen in Figure 9.29 that shows the percentage point change in employment rates between 2012 and 2015. The largest changes were for lone parents and parents with dependent children aged 0-4 years and 5-10 years. Also, London has generally seen a larger increase in employment rates for parents with dependent children as a whole than the UK. Analysis suggests that greater engagement of Jobcentre Plus with single parents in London, dating back to 2008, and the progressive introduction of worksearch conditionality on lone parents are potential explanations for these changes²⁷.





Note: April to June periods. Source: ONS Labour Force Survey households data

Alternatively, Figure 9.30 plots the employment rates of parents with dependent children by gender for London and the UK from 2012. Parents in London have a lower employment rate than parents across the UK. This difference is mostly reflective of women with dependent children in London having a lower employment rate than that for the UK as a whole. For example, despite the employment rate for women with dependent children rising 4.6 percentage points between 2012 and 2015 in London, it was still 8.9 percentage points lower than that for the UK as a whole.



Figure 9.30: Employment rates of parents with dependent children by gender for London and the UK, residents aged 16-64 years, 2012 to 2015

Note: April to June periods. Source: ONS Labour Force Survey household datasets

The same information is replicated in Figure 9.31, but for those without dependent children. Women without dependent children in London have a higher employment rate (68 per cent in 2015) than women with dependent children (61.9 per cent). However, the reverse is true for women across the UK where parents have consistently had a higher employment rate than non-parents.



Figure 9.31: Employment rates of non-parents by gender for London and the UK, residents aged 16-64 years, 2012 to 2015

Note: April to June periods. Source: ONS Labour Force Survey household datasets

Indeed, whilst the employment rate for women without dependent children in London is broadly the same as the UK, the rate for women with dependent children was much lower than for the UK. The same trend is evident for men, though not to the same degree. This can clearly be seen in Figure 9.32 which shows the information for 2015 only.





Note: April to June periods. Source: ONS Labour Force Survey household datasets

One possible explanation as to why women with dependent children are less likely to be in work in London compared with the UK as a whole is the higher cost of living, including childcare²⁸, though some consideration should be given to the total household income as partners may be earning enough to cover costs and so this could be down to choice. Consequently, this could be a further explanation as to why London's headline employment rate is below that for the UK.

Box 9.3: Workless households in London

Data for London shows that it had one of the lowest percentages of working households (53.3 per cent) of all the UK regions in October-December 2015 (Table 9.5). Working households are those where all members aged 16 years and over are in employment. That said, London had a below average percentage of workless households (13.3 per cent versus the UK average of 15.1 per cent) – that is, households where no one aged 16 years or over are in employment, but are instead unemployed or inactive. This was higher in inner London (14.7 per cent) compared with outer London (12.3 per cent).

Region	Working households	Mixed households	Workless households	Total
North East	56.1%	25.1%	18.9%	100.0%
North West	57.2%	25.5%	17.2%	100.0%
Yorkshire & Humber	56.5%	26.3%	17.2%	100.0%
East Midlands	57.1%	27.7%	15.2%	100.0%
West Midlands	54.3%	29.5%	16.2%	100.0%
East	61.8%	26.2%	12.0%	100.0%
London	53.3%	33.4%	13.3%	100.0%
Inner London	54.2%	31.2%	14.7%	100.0%
Outer London	52.7%	35.0%	12.3%	100.0%
South East	59.9%	28.2%	11.8%	100.0%
South West	60.3%	26.4%	13.3%	100.0%
Wales	55.1%	27.9%	17.0%	100.0%
Scotland	57.7%	25.3%	17.0%	100.0%
Northern Ireland	51.7%	26.4%	22.0%	100.0%
UK	57.1%	27.7%	15.1%	100.0%

Table 9.5: Households by combined economic activity status of household members for the UK regions in October-December 2015, percentage of all households

Notes: this only includes households which have at least one person aged 16-64yrs. Also, mixed households contain both working and workless members.

Source: ONS Labour Force Survey household datasets

One of the key reasons for worklessness in workless households in London is the proportion of students, although unemployment – that is people actively looking for work – is also higher than for most other regions (this refers to the October to December 2014 period – see http://bit.ly/2d584eu). Being sick, disabled or taking early retirement are much less likely as reasons for being workless in London than elsewhere.

The pattern of fewer households with all adults in work and more in mixed households with both working and non-working adults appears even starker when considering the proportion of children in such households (Table 9.6). London (and especially inner London) had a much lower proportion of children in households with all adults in work (i.e. working households).

Region	Working households	Mixed households	Workless households	Total
North East	60.3%	23.3%	16.5%	100.0%
North West	58.0%	27.6%	14.4%	100.0%
Yorkshire & Humber	54.3%	30.9%	14.7%	100.0%
East Midlands	55.8%	32.4%	11.8%	100.0%
West Midlands	53.1%	34.2%	12.7%	100.0%
East	60.2%	31.4%	8.5%	100.0%
London	45.6%	41.5%	12.8%	100.0%
Inner London	44.8%	40.9%	14.3%	100.0%
Outer London	46.1%	42.0%	11.9%	100.0%
South East	61.5%	32.0%	6.6%	100.0%
South West	61.2%	28.6%	10.2%	100.0%
Wales	56.0%	28.1%	15.8%	100.0%
Scotland	59.4%	28.1%	12.5%	100.0%
Northern Ireland	59.8%	24.4%	15.8%	100.0%
UK	56.3%	31.7%	12.0%	100.0%

Table 9.6: Children in households by combined economic activity status of household members for the UK regions in October-December 2015, percentage of all households with children

Notes: this only includes households which have at least one person aged 16-64yrs. Also, mixed households contain both working and workless members.

Source: ONS Labour Force Survey household datasets

Some workless households include members who have never had a job, though these are rare contributing less than 10 per cent of all workless households in the UK during 2012²⁹. The regional distribution of never worked households is shown in Figure 9.33. Overall, London (and, in particular, inner London) had the largest share of never worked households in the UK, though this has fallen since previous years. This in part can be attributed to the difficulty faced by some young people finding their first job after leaving education, as well as the difficulty faced by lone parents, disabled people and ethnic minorities. For example, 44 per cent of never worked households across the UK were lone parents, 65.1 per cent were headed up by women and 34.3 per cent had heads of households that were from ethnic backgrounds.



Figure 9.33: Regional distribution of never worked households across the UK, 1996, 2005 and 2012

Qualifications

In London, 58 per cent of the working age resident population who were in employment had NVQ Level 4 or higher (the equivalent of higher education) in 2015. A further 12.9 per cent had Level 3 (A Levels) and 8.8 per cent had Level 2 (GCSE grade A*-C). Comparably, the UK as a whole had a lower proportion of workers with level 4 than London, but a higher proportion of employees with Level 3 and 2 (Table 9.7)³⁰.

Table 9.7: Percentage of those in employment by highest qualification for London and the UK in 2015, residents aged 16-64 years

Highest qualification	London	UK
No qualifications	4.3%	5.2%
Other qualifications	8.0%	6.3%
NVQ1 only	6.6%	10.1%
NVQ2 only	8.8%	15.2%
Trade Apprenticeships	1.4%	3.6%
NVQ3 only	12.9%	17.1%
NVQ4 or higher	58.0%	42.4%
Total	100.0%	100.0%

Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

Employment rates by qualification for London and the UK are shown in Tables 9.8 and 9.9. These show that employment rates in London were generally lower than for the UK as a whole across most qualifications and can therefore not explain the difference between the London and UK headline employment rates. The notable exceptions were for those with either no qualifications or NVQ Level 4 or higher where the employment rates for London were slightly higher than those for the UK in recent years.

Table 9.8: Employment rates by qualification for London, residents aged 16-64 years, 2004to 2015

Year	No qualification	Other qualifications	NVQ1 only	NVQ2 only	Trade apprentices	NVQ3 only	NVQ4 or higher
2004	41.3%	67.2%	64.2%	66.4%	79.3%	69.4%	85.6%
2005	42.2%	66.5%	65.6%	62.8%	80.5%	67.6%	85.1%
2006	41.5%	66.1%	61.5%	63.4%	80.0%	67.2%	86.0%
2007	42.8%	69.8%	60.8%	62.3%	77.5%	66.7%	84.9%
2008	39.9%	68.9%	58.4%	63.1%	83.8%	65.6%	84.2%
2009	39.6%	64.9%	58.3%	60.2%	75.7%	64.6%	82.8%
2010	37.0%	65.3%	53.7%	57.8%	75.1%	61.7%	82.6%
2011	39.2%	61.8%	55.5%	56.1%	72.2%	62.7%	80.9%
2012	38.0%	65.0%	53.0%	57.8%	74.0%	62.4%	81.5%
2013	40.1%	66.8%	54.9%	57.0%	74.6%	62.0%	82.5%
2014	38.3%	68.7%	56.9%	58.6%	73.9%	66.5%	83.8%
2015	43.1%	68.8%	60.1%	58.4%	77.6%	67.0%	85.0%

Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey and GLA Economics calculations

Table 9.9: Employment rates by qualification for the UK, residents aged 16-64 years, 2004 to 2015

Year	No qualification	Other qualifications	NVQ1 only	NVQ2 only	Trade apprentice	NVQ3 only	NVQ4 or higher
2004	51.0%	72.8%	72.9%	75.0%	81.0%	77.6%	86.9%
2005	49.9%	73.0%	72.8%	74.6%	81.8%	77.4%	87.1%
2006	49.6%	73.9%	71.6%	73.9%	81.9%	76.8%	86.8%
2007	49.4%	75.1%	71.0%	73.3%	81.6%	76.8%	87.0%
2008	44.2%	72.1%	67.9%	71.5%	80.2%	75.9%	84.9%
2009	42.2%	69.1%	65.2%	69.0%	77.5%	74.0%	83.6%
2010	40.5%	68.8%	63.0%	67.4%	77.2%	72.7%	83.7%
2011	40.2%	68.2%	62.6%	66.9%	77.7%	72.8%	82.4%
2012	39.7%	68.5%	63.0%	66.9%	77.0%	72.3%	82.8%
2013	40.7%	69.7%	63.2%	67.0%	78.8%	72.2%	83.4%
2014	41.1%	71.4%	64.3%	67.8%	79.7%	73.1%	83.9%

Note: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey and GLA Economics calculations
Box 9.4: Hard to fill vacancies in London

The UKCES Employer Skills Survey showed that 19.7 per cent of all employers in the UK had at least one vacancy in 2015 (Figure 9.34). A larger proportion of employers in London had at least one vacancy (22.7 per cent) and this was statistically higher than most other regions except for the South East. Some of these vacancies were hard to fill. In London, 8 per cent of employers had hard to fill vacancies which was broadly in line with other regions.





By occupation, 44.1 per cent of London employers who reported having at least one hard to fill vacancy in 2015 were in Manager, Professional and Associate Professional roles. In fact, London posted the highest incidence of hard to fill Associate Professional vacancies among the UK regions (Table 9.10). In contrast, only 8.3 per cent and 8 per cent of London employers reported hard to fill Sales & Customer Service and Elementary vacancies respectively – that was below average for the UK as a whole. Overall, this suggests that London employers find it relatively easy to fill low-skilled jobs (and in comparison with other regions), but relatively difficult to fill high-skilled roles.

Source: UKCES Employer Skills Survey

Table 9.10: Incidence of hard to f	ill vacancies b	y occupation	and UK region in	i 2015,
employer base			-	

Region	Managers	Professionals	Associate Professionals	Administrative/ Clerical staff	Skilled Trades	Caring, Leisure & Other Services staff	Sales & Customer Service staff	Machine Operatives	Elementary	Unclassified
East Midlands	3.6%	16.1%	11.5%	9.4%	26.3%	13.9%	7.5%	9.6%	13.4%	0.8%
East of England	3.1%	13.9%	13.2%	6.0%	21.7%	14.5%	11.7%	7.9%	16.9%	0.0%
London	3.3%	17.5%	23.3%	8.3%	19.2%	16.0%	8.3%	4.1%	8.0%	0.2%
North East	5.4%	18.0%	11.9%	5.5%	23.1%	12.5%	8.1%	12.1%	14.0%	2.0%
North West	3.4%	13.3%	14.1%	8.1%	20.5%	15.6%	11.3%	7.6%	19.4%	0.0%
South East	3.9%	16.3%	16.6%	8.9%	23.0%	16.7%	8.3%	6.1%	12.7%	1.2%
South West	3.3%	10.7%	9.7%	5.3%	27.1%	14.5%	10.6%	7.2%	20.1%	0.0%
West Midlands	4.1%	15.9%	13.0%	3.2%	27.5%	12.7%	10.1%	7.7%	13.3%	2.2%
Yorkshire & The Humber	3.2%	16.7%	16.6%	10.0%	21.3%	11.7%	8.2%	8.7%	15.0%	0.0%
All employers	3.6%	15.4%	15.5%	7.4%	23.0%	14.8%	9.3%	7.0%	14.1%	0.6%

Note: May not sum as employers may report more than one vacancy across more than once occupation. Source: UKCES Employer Skills Survey

This in part is reflective of the structure of London's economy. For example, Chapter 1 shows that London's largest sectors in terms of their output were Financial & Insurance, Real Estate Activities and Professional, Scientific & Technical Activities. These industries had some of the highest incidences of hard to fill high-skilled vacancies and some of the lowest service and labour-intensive hard to fill vacancies as shown for the UK as a whole in Table 9.11.

				y empreyer zaze
Sector	High-skilled	Middle-skilled	Service-intensive	Labour-intensive
Agriculture	4.3%	21.9%	15.0%	61.8%
Manufacturing	27.8%	52.3%	4.3%	23.0%
Electricity, Gas and Water	29.7%	41.6%	6.6%	34.3%
Construction	26.0%	54.2%	1.3%	22.8%
Wholesale and Retail	17.7%	32.0%	39.6%	18.3%
Hotels and restaurants	6.0%	46.3%	5.3%	59.3%
Transport, Storage and Comms	44.7%	24.7%	9.5%	25.5%
Financial services	52.2%	39.4%	11.0%	3.1%
Business services	58.4%	28.8%	7.6%	11.2%
Public admin.	47.6%	18.5%	32.9%	12.5%
Education	54.0%	9.1%	34.8%	8.9%
Health and social work	41.0%	8.6%	52.8%	6.0%
Arts and Other Services	12.4%	14.5%	71.3%	8.7%
All sectors	32.9%	30.1%	24.1%	20.8%

Table 9.11: Incidence of hard to fill vacancies by industry for the UK in 2015, employer base

Note: Respondents were allowed to select more than one reason. Source: UKCES Employer Skills Survey.

One possible reason why London employers may find it less difficult to fill low-skilled vacancies is due to the level of labour supply. Although Table 9.12 refers to all vacancies regardless of occupation or skill level and survey respondents can select more than one answer, 67.8 per cent of London employers cited that the main cause of having a hard to fill vacancy was due to the quality of applicants (the highest of any region) compared with 28.2 per cent citing the quantity of applicants (the second-lowest of any region).

Region	Quality of applicants	Quantity of applicants	Contextual factors
East Midlands	63.9%	34.5%	45.9%
East of England	59.8%	27.3%	33.9%
London	67.8%	28.2%	32.9%
North East	58.6%	31.6%	44.0%
North West	54.7%	32.7%	27.4%
South East	58.7%	38.8%	40.4%
South West	47.8%	29.2%	38.8%
West Midlands	65.3%	40.3%	37.9%
Yorkshire & The Humber	62.2%	34.2%	37.3%
All amployars	60.2%	33.3%	37.0%

Table 9.12: Percentage of employers citing the main cause of having hard to fill vacancies by UK region in 2015, employer base

9.2.5 Disabilities

The percentage of the working age population who were disabled³¹ in London was estimated at 16.2 per cent in 2015. In comparison, approximately 19.5 per cent of people aged 16-64 were disabled across the UK.

The employment rates for disabled and non-disabled people for London and the UK are shown in Figure 9.35. In London, the employment rate for disabled people was 50.1 per cent in 2015, compared with 77.4 per cent for non-disabled people. Notably, the employment rate for those who were disabled was broadly the same as the UK (49.2 per cent), but lower for non-disabled individuals (79.5 per cent).



Figure 9.35: Employment rates by disability for London and the UK, residents aged 16-64 years, 2004 to 2015

Note: Data for 2004 to 2012 is based on the Disability Discrimination Act definitions, whilst data for 2014 is based on the Equalities Act definition. The two are inherently different and cannot be compared. January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

Box 9.5: International comparisons

This box compares London's labour market with other global cities. However, from the outset, international comparisons are fraught with difficulty – differences in definitions, geography and data collection methods are well documented³². This analysis uses various national definitions and statistics which, as a result, means many of these differences are likely to remain. This means that this analysis needs to be treated with some caution.

Acknowledging the above, Figure 9.36 shows the employment rates for residents aged 16-64 years for several global cities in 2015. London had a higher employment rate than Paris and New York in 2015. It was also broadly in line with Singapore, but below that for Dubai.



Figure 9.36: Employment rates for the global cities in 2015, residents aged 16-64 years

City	Definition	Source	Notes	Employment rate
Beijing		· · ·		
Berlin	Berlin NUTS1	Eurostat	1	69.0%
Dubai	Emirate of Dubai	Dubai Statistics Centre	1,3	82.4%
Hong Kong	Hong Kong SAR	HK Census & Statistics Department	1,3	59.1%
London	London NUTS1	ONS		73.0%
New York	New York City	US Bureau of Labor Statistics	2,3	56.5%
Paris	Ile-de-France NUTS1	Eurostat	1	66.2%
Shanghai				
Singapore	Singapore	SingStat	1	72.6%
Sydney	Greater Sydney	Australian Bureau of Statistics	1,4	62.6%
Tokyo	Tokyo metro area	Tokyo General Affairs Bureau Statistics Division	1	74.9%

Notes: (1) Definitions include 15 year olds. (2) Refers to 2014. (3) Refers to residents aged 16 years and over. (4) Annual average. Source: see table.

Meanwhile, London had a lower unemployment rate than Paris, Berlin and New York in 2015, but a higher rate than all other global cities considered (Figure 9.37).



Figure 9.37: Unemployment rates for the global cities in 2015, residents aged 16 years and over

City	Definition	Source	Notes	Unemployment rate
Beijing	Beijing province	National Bureau of Statistics of China	2,4	1.3%
Berlin	Berlin NUTS1	Eurostat	1	9.4%
Dubai	Emirate of Dubai	Dubai Statistics Centre	1	0.4%
Hong Kong	Hong Kong SAR	HK Census & Statistics Department	1	3.3%
London	London NUTS1	ONS		6.1%
New York	New York City	US Bureau of Labor Statistics	2	7.3%
Paris	Ile-de-France NUTS1	Eurostat	1	9.6%
Shanghai	Shanghai province	National Bureau of Statistics of China	2,4	4.1%
Singapore	Singapore	SingStat	1	3.8%
Sydney	Greater Sydney	Australian Bureau of Statistics	1,3	5.1%
Tokyo	Tokyo metro area	Tokyo General Affairs Bureau Statistics Division	1	3.6%

Notes: (1) Definitions include 15 year olds. (2) Refers to 2014. (3) Annual average. (4) Registered unemployed in urban areas only. Source: see table.

As noted earlier in this chapter, the employment rate for men is higher than women in London (Figure 9.18). This is similarly the case for all global cities, though the extent of this varies (Figure 9.38). For example, the difference in employment rates for men and women in London was 13 percentage points in 2015. However, this ranged from 44.6 percentage points in Dubai (reflective of near full employment for men) and 5 percentage points in Berlin.





City	Definition	Source Notes Emp		ployment rate		
				Male	Female	All
Beijing						
Berlin	Berlin NUTS1	Eurostat	1	71.5%	66.5%	69.0%
Dubai	Emirate of Dubai	Dubai Statistics Centre	1,3	94.9%	50.3%	82.4%
Hong Kong	Hong Kong SAR	HK Census & Statistics Department	1,3	66.4%	53.1%	59.1%
London	London NUTS1	ONS		79.5%	66.5%	73.0%
New York	New York City	US Bureau of Labor Statistics	2,3	62.9%	50.9%	56.5%
Paris	Ile-de-France NUTS1	Eurostat	1	69.0%	63.5%	66.2%
Shanghai						
Singapore	Singapore	SingStat	1	79.9%	65.5%	72.6%
Sydney	Greater Sydney	Australian Bureau of Statistics	1,4	69.1%	56.4%	62.6%
Tokyo	Tokyo metro area	Tokyo General Affairs Bureau Statistics Division	1	83.2%	66.2%	74.9%

Notes: (1) Definitions include 15 year olds. (2) Refers to 2014. (3) Refers to residents aged 16 years and over. (4) Annual average. Source: see table.

Similarly, as discussed earlier, employment rates for young (16-24 years) and older people (65 years and over) were lower than for the rest of the labour market (i.e. 25-64 years) in London. This trend can also be seen for other global cities as shown in Table 9.13.

	use sits. Employment fates by age group for the grobal entes in 2013, residents								
City	Definition	Source	Notes	Employment rate					
				16-	25-	35-	45-	55-	+65vrs
				24yrs	34yrs	44yrs	54yrs	64yrs	TOJYIS
Beijing									
Berlin	Berlin NUTS1	Eurostat	1	37.1%	74.4%	79.7%	78.4%	63.3%	6.1%
Dubai	Emirate of Dubai	DSC	1,3						
Hong Kong	Hong Kong SAR	HK C&S Dep.	1,3						
London	London NUTS1	ONS	••	46.3%	81.8%		76.1%		12.5%
New York	New York City	US BLS	2,3						
Paris	Ile-de-France	Eurostat	1	24.6%	76.2%	83.5%	82.7%	57.4%	3.8%
Shanghai									
Singapore	Singapore	SingStat	1	36.8%	86.6%	86.1%	81.7%	67.2%	24.7%
Sydney	Greater Sydney	ABS	1,4						
Tokyo	Tokyo metro area	TGAB Statistics	1	42.0%	82.5%	81.9%	83.2%	71.9%	25.0%

Table 9.13: Employment rates by age group for the global cities in 2015, residents

Notes: (1) Definitions include 15 year olds. (2) Refers to 2014. (3) Refers to residents aged 16 years and over. (4) Annual average. Source: see table.

This table also shows interesting trends for specific age groups. For example, the employment rate for people aged 16-24 years was highest in London, though this could partly be a result of differences in the age of school leavers. Moreover, whilst one-in-eight people aged 65 years and over were in employment in London during 2015, this was one-in-four for Singapore and Tokyo.

More detailed international comparisons looking at the labour market can be found in the GLA Economics Current Issues Note 48³³, whilst comparisons looking at indicators like tourism and city rankings can be found in Chapter 5.

9.2.6 Earnings

London's wages are higher than those for the UK as a whole. In 2015, the mean hourly gross wage for a full-time job was £21.07 in London³⁴ which was 31.4 per cent higher than the UK (£16.03). Meanwhile, the mean hourly wage for a part-time job was £13.45 in London, compared with £11.15 for the UK.

A better measure of average earnings is the median hourly gross wage (Figure 9.39) given the structure of London's labour market where some workers are paid high wages and would therefore affect the mean. On this basis, London's median hourly wage for full-time jobs was £17.16 in 2015, which was 28.4 per cent higher than the UK (£13.36). Even for part-time roles, the hourly wage in London was 13.2 per cent higher (£9.60 versus £8.48).



Figure 9.39: Gross nominal median hourly earnings in London and the UK, workplace basis, 1997 to 2015

Note: A classification change in 2011 (and subsequent years) means that care should be taken when making comparison with earlier years.

Source: ONS Annual Survey of Hours and Earnings

By gender, the average (median) full-time hourly wage was £18.23 for men and £16.06 for women in London. This suggests that women earn, on average, 13.5 per cent less than men in London. Even using a different approach to calculating the gender pay gap – looking at hourly earnings excluding overtime and using earnings for men as the denominator – suggests that, on average, men earn 11.8 per cent more than women in London. Historically, male full-time workers have been paid more than their female equivalents (using the first approach) as illustrated in Figure 9.40, though the pay gap has reduced slightly in recent years. Moreover, since 2005, this pay gap for full-time workers has been larger in London than the UK as a whole. However, the reverse is true for part-time workers in London. The median hourly wage was £9.14 for men and £9.88 for women in 2015 – a difference of (-) 7.5 per cent. One possible explanation as to why men working part-time have a lower hourly wage than women in London could be due to male part-time workers being in lower skilled jobs as shown earlier – see Table 9.1.



Figure 9.40: Nominal median pay gap between male and female workers by full-time and part-time for London and the UK, workplace basis, 2006 to 2015

Note: A classification change in 2011 (and subsequent years) means that care should be taken when making comparison with earlier years.

Source: ONS Annual Survey of Hours and Earnings

Notably, the gender pay gap is larger when looking at mean hourly wages. For example, the pay gap between male and female full-time workers in London during 2015 was 25.3 per cent for mean earnings compared with 13.5 per cent for median wages. This in part can be explained by the gender pay gap being wider at higher rates of hourly earnings which would affect the mean. This can be seen in Figure 9.41 which plots the gross hourly earnings by wage percentile (i.e. the 75th percentile earnings show the wage earned by the person who sits three-quarters along the wage distribution when arranged from lowest to highest). For instance, the gender pay gap for full-time workers in London at the 10th percentile of earnings was 7.1 per cent in 2015, but this was 41 per cent at the 90th percentile. Moreover, London had a larger gender pay gap for high earners than for the UK as a whole – the UK pay gap at the 90th percentile was lower at 22.8 per cent.





Source: ONS Annual Survey of Hours and Earnings

It should be noted that all these are 'simple' comparisons of the wage paid to men and women; they do not attempt to account for differences in characteristics between the two groups. There are a number of reasons why these 'simple' pay gaps exists. For example, factors that could potentially answer why the pay gap is larger in London compared with the UK include age, ethnicity, occupation, employment sector, hours worked and the size of the workplace.

These headline earnings figures mask significant differences between London's industrial sectors as shown in Figure 9.42. This is partly a reflection of the structure of London's economy where there are significant specialisations in certain industries. For example, the median full-time wage in the Financial & Insurance sector was £31.48 in London which was 61.6 per cent larger than that for the UK (£19.48) in 2015. In fact, the median full-time wage in London was almost equivalent to the UK's wage at the 75th percentile. Other notable differences were for the Transportation & Storage (29.8 per cent) and Human Health & Social Work (26.4 per cent) sectors. There was only one industry where London had a lower wage than the UK and this was for the Water Supply, Sewage & Waste Management sector where the average wage was £11.97 in London compared with £12.88 across the UK.



Figure 9.42: Median gross hourly earnings for full-time jobs by sector in London and the UK during 2015, workplace basis

Note: SIC 2007 breakdowns. Source: ONS Annual Survey of Hours and Earnings

By gender, men and women in London had a higher hourly wage than the UK as a whole for most of the sectors in 2015, with the sole exception of Water Supply, Sewage & Waste Management. That said, this gap was larger for women in percentage terms. The same trend was evident when looking at full and part-time jobs by gender. However, women working part-time in London also had a lower wage than the UK as a whole if they worked in the Construction or Administrative & Support Services sectors (Table 9.14).

Industry	Male Female					
	Full-time	Part-time	All	Full-time	Part-time	All
Agriculture, Forestry & Fishing	х		х	17.1%		17.4%
Mining & Quarrying	х		х	20.0%		24.8%
Manufacturing	12.0%	-9.5%	9.9%	10.1%	2.6%	12.4%
Electricity & Gas	6.4%		6.0%	х		х
Water Supply, Sewage & Waste Mgt.	-8.2%		-6.9%	х	-4.8%	х
Construction	25.0%	х	23.3%	26.7%	-7.3%	22.0%
Wholesale & Retail Trade	19.5%	7.6%	13.4%	25.8%	8.6%	18.6%
Transportation & Storage	29.8%	13.7%	32.9%	30.1%	81.5%	39.6%
Accommodation & Food	9.1%	5.7%	10.3%	9.0%	7.5%	13.2%
Information & Communication	15.6%	2.5%	15.2%	14.3%	32.8%	18.5%
Finance & Insurance	52.3%	х	54.2%	50.5%	34.9%	59.5%
Real Estate	31.0%	х	28.0%	21.6%	4.0%	30.1%
Professional, Scientific & Technical	24.7%	х	25.9%	27.6%	42.9%	35.9%
Administration & Support Services	18.7%	4.3%	18. 9%	31.0%	-1.2%	20.7%
Public Administration & Defence	13.8%	х	15.3%	15.3%	40.7%	22.8%
Education	18.4%	35.9%	19.7%	16.2%	23.9%	27.4%
Human Health & Social Work	23.2%	35.4%	24.9%	27.5%	23.5%	30.0%
Arts, Entertainment & Recreation	22.9%	20.7%	30.1%	27.7%	10.8%	30.7%
Other Service Activities	27.5%	8.8%	23.1%	28.4%	9.6%	37.3%
All sectors	30.5%	12.7%	31.1%	27.9%	15.0%	36.8%

Table 9.14:	Nominal pay	gap between Lon	don and the U	K in 2015 by	gender and	full and
part-time jo	obs, median g	gross nominal hou	rly wage, work	place basis		

Note: This table shows the percentage difference between the nominal gross hourly wage for London and the UK. This is split by gender, full and part-time jobs, and industry. For example, London's median gross hourly wage for men working full-time in the Finance & Insurance sector was 52.3 per cent higher than that for the UK as a whole. Figures that are unreliable due to small sample sizes are shown by an 'x' and figures that are disclosive are shown by a '..'. Source: ONS Annual Survey of Hours and Earnings.

Looking over time, the nominal median gross hourly wage has increased 8.4 per cent between 2008 and 2015 in London. That was the slowest rate of increase across all 12 UK regions as shown in Figure 9.43, with the average rate of growth 11.5 per cent for the UK. The same can be said when looking at the mean gross hourly wage where London's growth rate of 5.9 per cent was slower than the UK average rate of 10 per cent. (It should be noted that hourly earnings does not equal household income, which is instead discussed in Chapter 10).



Figure 9.43: Growth in nominal median gross hourly earnings for full-time jobs between 2008 and 2015 by UK region, workplace basis

Source: ONS Annual Survey of Hours and Earnings

Similar trends are observed when looking at full-time hourly wages by private and public sectors³⁵. Figure 9.44 shows the rates of nominal wage growth for the UK regions between 2009 and 2015 (note that this is a slightly different time period to the above analysis³⁶). Nominal hourly wages in London's private sector grew 3.4 per cent over this period and this was the slowest rate in the UK and, whilst hourly earnings growth in the public sector was faster at 6.9 per cent, it was nonetheless the second weakest across the UK.



Figure 9.44: Growth in nominal median gross hourly earnings for full-time jobs between 2009 and 2015 by private and public sector and by UK region, workplace basis

Note: the number and proportion of jobs is for indicative purposes and not an accurate estimate of employee job counts. Source: ONS Annual Survey of Hours and Earnings

In fact, consumer prices have largely grown at a faster rate than average (mean) weekly wages across the UK since 2008 to mid-2014 as shown in Figure 9.45. That said, since the second half of 2014, annual average weekly earnings inflation has consistently stood above price inflation, though this is largely a reflection of record-low rates of Consumer Price Index (CPI) inflation due to falling oil prices rather than particularly strong earnings growth.



Figure 9.45: Average (mean) nominal weekly earnings inflation for the UK and CPI inflation, 2001-2016

Note: AWE refers to total pay for the UK's whole economy. Source: ONS Annual Survey of Hours and Earnings, ONS CPI

Meanwhile, Figure 9.46 shows the gross hourly wage for full-time workers by wage percentile across London and the UK. This chart shows that higher earners earn comparatively more in London than across the UK as a whole. For example, at the 10th percentile, earnings in London were 15.5 per cent higher than the UK in 2015; but at the 90th percentile, this difference was larger at 38.9 per cent.





Source: ONS Annual Survey of Hours and Earnings

Overall, the UK has seen faster wage growth than London for all wage percentiles between 2008 and 2015 (Figure 9.47); this was particularly true for those at the higher and lower ends of the wage distribution. Within London (and for the UK as a whole), wage growth was fastest at the bottom end of the scale and slowest at the top.



Figure 9.47: Growth in average full-time hourly nominal earnings between 2008 and 2015 by wage percentile for London and the UK, workplace basis

Note: nominal average hourly earnings. Source: ONS Annual Survey of Hours and Earnings

This was generally the case when looking at the rates of wage growth by public and private sector as shown in Figure 9.48 (which looks at the change between 2009 and 2015). The sole exception was the 80th percentile in the public sector where London saw a stronger rate of growth than the UK as a whole.





Note: nominal average hourly earnings. Source: ONS Annual Survey of Hours and Earnings

9.3 Current topics in London's labour market

Having discussed London's labour market characteristics and how this compares with the rest of the UK, this section will explore some of the current topics facing London including the extent of under and overemployment, the underutilisation of labour and the changing labour market structure.

9.3.1 Under and overemployment

The previous section focussed on the employment rate to characterise the labour market. However, despite being in employment some individuals want to work more hours than they are employed to do, some less. Subsequently, this section looks at underemployment and overemployment. The former describes individuals who are in work but want to work more hours either in their current job or by switching to a replacement job. In contrast, overemployment describes individuals who want to work fewer hours in their current or in a new job.

Box 9.6: Why are people under and overemployed?

Under and overemployment is generally caused by a mismatch of demand and supply of labour at its most basic level. That is, individuals are willing to accept jobs (such as part-time roles) that do not offer their desired amount of hours if there is no better alternative.

There are also individual factors that can explain under and overemployment. For example, individuals may be underqualified and, so whilst they may want to work more hours, they lack the qualifications and experience to do so. Another illustration is that personal circumstances, such as being close to or beyond retirement or family reasons, may mean that individuals want to work fewer hours without leaving the labour market completely.

The numbers of people who were under and overemployed in London were 374,000 and 348,000 respectively in 2015. This gives under and overemployment rates³⁷ of 8.8 per cent and 8.3 per cent, which were both below the UK readings³⁸ of 9 per cent and 10.4 per cent respectively. London has historically posted lower rates than the UK as can be seen in Figure 9.49, though less so for underemployment.





Notes: January to December periods and has not been reweighted. Source: ONS Annual Population Survey

The difference between under and overemployment rates can provide an indication as to the efficiency of the labour market at meeting demands for working more and fewer hours. Focussing on London, the underemployment rate has exceeded the overemployment rate in each year since 2009, with this difference peaking at 2.6 percentage points in 2013. This suggests that there has recently been net underemployment in London – that is, there are more workers wanting more hours of work than less – which could be an indication of slack in the labour market. In contrast, there has been net overemployment in 2014 and 2015 across the UK as a whole. An impact of net underemployment is that individuals are not working to their full capacity.

Box 9.7: Does the rise in zero-hour contracts constitute underemployment?

Zero hour contracts (ZHC) are employment contracts that offer no guarantee of a minimum number of hours³⁹. Given their nature, it can be expected that some individuals on ZHC may be underemployed in the sense that they want to work more hours over and above what is being offered. This box provides a brief overview of the extent and characteristics of those on ZHC and discusses whether underemployment is a common issue.

ZHC in the UK were uncommon prior to the 2008-09 recession, but it was during the recovery that there has been a sharp rise particularly during 2012 and 2015 (Figure 9.50). However, despite these increases, the number employed on a ZHC was 801,000 in the three months to December 2015 and accounted for 2.5 per cent of all employment in the UK. In London, there were approximately 95,000 people on ZHC, equivalent to 2.2 per cent of all those in employment.



Figure 9.50: Zero-hour contracts rate across the UK, 2000 to 2015

Note: October to December periods. Source: ONS Labour Force Survey

People on ZHC were more likely to be female or in young or older age groups. Moreover, employees on ZHC were more likely to be working in the Accommodation & Food and Health & Social Work sectors and be in Elementary and Caring, Leisure & Other Service occupations.

Notably, 36.8 per cent workers on ZHC wanted to work more hours in the three months to December 2015 (Figure 9.51). The comparable figure for all those not on ZHC was 10.4 per cent. This suggests that underemployment is higher among ZHC workers than non-ZHC employees, though this could partially be due to more ZHC being part-time workers.



Figure 9.51: Percentage of workers on zero-hour contracts that are looking for another job or more hours in the UK, October to December 2015

Most individuals who were underemployed in London wanted to work more hours in their current role (69.7 per cent), though 19.1 per cent wanted a new job and 11.2 per cent wanted an additional job in 2015. On average, underemployed people wanted to work an additional 11.5 hours a week which was broadly in line with the figure for 2008 (11.7 hours).

Similarly, most overemployed people in London wanted to work less hours in their current job (95.5 per cent) and work on average 11 hours less each week. That was down from 11.4 hours in 2008.

Underemployment was more prevalent for part-time workers in London. Over one-fifth (21.1 per cent) of part-time workers were underemployed in 2015, having fallen from a peak of 25.9 per cent in 2013 (Figure 9.52). The proportion of full-time workers who were underemployed also increased during the 2008-09 recession (a 2010 peak of 5.7 per cent), but has since fallen to 5.2 per cent. The reverse is true for overemployment in that full-time workers were more likely to be overemployed (9.8 per cent in 2015) and this trend has been broadly stable since 2006.



Figure 9.52: Percentage of full and part-time workers that were either under or overemployed in London, residents aged 16 years and over, 2006 to 2015

Note: January to December periods and has not been weighted in July 2016. Source: ONS Annual Population Survey

By occupation, underemployment was most common in lower skilled occupations such as Elementary (19.5 per cent) and Sales & Customer Service (14.2 per cent) roles as shown in Figure 9.53. However, again, the reverse is true for overemployment where Managers, Directors & Senior Officials (11.8 per cent) and Professional (11.5 per cent) occupations had the highest proportion of workers who wanted to work fewer hours.





Note: January to December periods and has not been reweighted in July 2016. Source: ONS Annual Population Survey

Figures 9.54 and 9.55 show the percentages of each age group that were underemployed and overemployed in London over time. The 16-24 years group historically had the highest concentration of underemployed workers, with this at 13.9 per cent in 2015. In comparison, the lowest underemployment rate was recorded for the over 65 years group at just 4.6 per cent. That said, all age groups had seen an increase in the proportion of underemployed workers since 2006 (though down from the peaks seen during the 2008-09 recession), with the largest rise for the 16-24 and 50-64 years groups.



Figure 9.54: Percentage of each age grouping that were underemployed in London, residents, 2006 to 2015

Note: January to December periods and has not been reweighted in July 2016. Source: ONS Annual Population Survey

Meanwhile, the 50-64 years and over 65 years groupings had the highest proportion of overemployment at 11.8 per cent and 11 per cent respectively in 2015. In particular, the over 65 years category had seen the percentage of overemployed workers rise from 10.2 per cent in 2006.



Figure 9.55: Percentage of each age grouping that were overemployed in London, residents, 2006 to 2015

Note: January to December periods and has not been reweighted in July 2016. Source: ONS Annual Population Survey

Box 9.8: A comparison between unemployment and underemployment

A simple comparison between the unemployment and underemployment rates calculated by ONS is shown in Figure 9.56. Underemployment has historically been higher than unemployment and, in fact, the difference between the two has been increasing since 2010. The latest estimates for which a comparison can be made is for the three months to March 2016. During this period, unemployment across the UK was reported at 5.1 per cent, whilst comparably the underemployment rate was 9 per cent – a difference of 3.9 percentage points.



Figure 9.56: Underemployment and unemployment rates for the UK, residents aged 16 years and over, 2002 to 2016

Notes: quarterly periods. Source: ONS Labour Force Survey

One potential issue with the underemployment rate used above is that it merely counts the number of workers who want more hours (as a percentage of total number of workers), but this does not take into consideration the extent of excess capacity in terms of both the number of jobs and hours. Alternatively, Bell & Blanchflower constructed an index of underemployment which takes into account the number of hours workers say they want to work⁴⁰. This is presented in Figure 9.57 and shows that unemployment and underemployment were closely matched between 2001 and 2008. However, since then, there has been a much larger divergence which the authors attribute to increasing numbers of workers wishing to work more hours and a fall in the number wishing to work less. This suggests that there may well be spare capacity in the labour market allowing for an increase in demand for workers to be met internally (i.e. employers could offer existing workers more hours to avoid recruitment costs) without, necessarily, a reduction in unemployment.



Figure 9.57: Index of underemployment and unemployment rate for the UK, residents aged 16 years and over, 2001 to 2015

9.3.2 Underutilisation of labour

Another aspect of the labour market is whether the skills of employees are being fully utilised in their role. In 2015, 29.6 per cent of employers reported skills that were under-used by employees in England according to the UKCES Employer Skills Survey⁴¹. There was no significant difference between firms of different sizes, but there was greater variance across different sectors. For example, reports of underutilisation was highest in the Hotels and Restaurants sector at 39.7 per cent, whilst the lowest were generally recorded in the primary and manufacturing sectors such as Agriculture at 19 per cent.

Underutilisation was slightly higher in London with 31.8 per cent of employers reporting staff skills that were under-used. That was the third-highest rate among the nine English regions behind the North East and Yorkshire & Humber (Figure 9.58). Therefore, this section will investigate two potential explanations for why underutilisation is more common in London than England as a whole, namely whether this is affected by the higher proportions of migrant and graduate workers respectively.



Figure 9.58: Proportion of enterprises reporting underutilisation of staff skills by English region in 2015

Source: UK Commission's Employer Skills Survey 2013

9.3.2.1 Underutilisation of migrant workers

One potential explanation for why underutilisation of skills is more prevalent in London compared with the UK could be due to migrant workers, of which London has a higher proportion than the UK. This can be assessed by comparing qualifications with occupations for both UK born and non-UK born employees working in London. However, there are some caveats with such simplistic analysis. For example, it does not take into consideration years in the labour market and the experience this brings. Similarly, it does not consider where individuals were educated as it could be possible that some non-UK born workers were educated and now work in the UK.

Acknowledging the above points, Figures 9.59 and 9.60 plot the percentage of employees by occupation and country of birth for each qualification using data from the ONS Annual Population Survey for 2015. Due to sample size, country of birth has only been split into whether an employee was born in the UK including British Overseas Territories or the rest of the world.

Figure 9.59 shows workers who have higher education or above (i.e. higher education, ordinary degree and higher degree) as their highest qualification. This shows that non-UK born workers are less likely to be in high-skilled jobs than UK born workers even though both groups are equally qualified. Instead, non-UK born workers were more likely to be in lower skilled occupations such as Caring, Leisure & Other Services and Sales & Customer Service roles. This trend is also evident for workers with either GCE, A Levels or GCSE grades A*-C as their highest qualification as shown in Figure 9.60.





Note: January to December periods and has not been reweighted in July 2016. Source: ONS Annual Population Survey





Note: January to December periods and has not been reweighted in July 2016. Source: ONS Annual Population Survey

There are several explanations as to why migrant workers are seemingly underutilised in terms of their skills. The ESRC Centre on Migration suggested that this could be due to employers not recognising the value of overseas qualifications, but noted that this effect should decrease over time⁴². Rosso alternatively proposed that the issue could be due to the lower quality of overseas qualification and the poor transferability of knowledge⁴³. Meanwhile, Stirling suggested that pay differentials between country of origin and the destination country can partly explain the greater willingness of migrants to work in lower-level jobs⁴⁴.

9.3.2.2 Underutilisation of graduates

A similar argument can be made for graduates where some may be working in positions that do not necessarily require higher education. For example, the Chartered Institute of Personnel and Development (CIPD) found that 58.8 per cent of graduates in the UK were in non-graduate roles, which was one of the highest rates among the EU countries⁴⁵.

Indeed, analysis by the ONS showed that the percentage of recent graduates across the UK who were in non-graduate roles had increased from 36.8 per cent in Q2 2001 to 47.1 per cent in Q2 2013 (Figure 9.61)⁴⁶. Here a non-graduate role has been defined as one which is associated with tasks that do not normally require knowledge and skills developed through higher education to enable them to perform these tasks in a competent manner. The same trend can be seen for those who graduated more than five years previously (non-recent graduates), rising from 28.7 per cent to 34.1 per cent.





Notes: April to June periods. Non-recent graduates are those who have left full-time education more than five years from the survey date Non-graduate roles are those which are not associated with tasks that require knowledge and skills developed through higher education.

Source: ONS Labour Force Survey Persons Datasets

More recent data is shown in Table 9.15 for the UK as well as for London. The first thing to note is that the extent of graduates working in non-graduate roles is less acute in London compared with the UK. The second thing is that, whilst the percentage of recent graduates in non-graduate roles has dropped since 2011, the proportion of non-recent graduates has increased.

				•		
Year	Lon	don	U	UK		
	Recent graduates	Non-recent graduates	Recent graduates	Non-recent graduates		
2011	42.4%	28.7%	47.4%	32.6%		
2012	42.8%	29.5%	48.8%	33.3%		
2013	41.4%	31.4%	47.2%	33.7%		
2014	41.6%	31.7%	46.7%	34.2%		
2015	41.0%	31.9%	45.8%	35.5%		

Table 9.15: Percentage of recent and non-recent graduates in non-graduate roles in Londonand the UK, residents aged 21-64 years for men and 21-59 years for women, 2011 to 2015

Notes: January to December periods. Non-recent graduates are those who left full-time education more than five years from the survey date. Non-graduate roles are those which are not associated with tasks that require knowledge and skills developed through higher education. Source: ONS Annual Population Survey

There can be a number of explanations for why a large proportion of graduates were in non-graduate roles and remained so after five years (i.e. non-recent graduates). For example, CIPD argued that this was due to growth in graduates exceeding growth in graduate roles⁴⁷. However, CIPD also noted that the presence of graduates being in non-graduate roles does not necessarily mean an underutilisation of graduates' skills⁴⁸. Instead they suggested that non-graduate roles may have been upgraded to better utilise their skills, or that graduates have similar skills to non-graduates with sufficient work experience.

9.3.3 The changing labour market structure

Figure 9.62 shows the UK labour market's occupation structure since 1992⁴⁹. Generally, there has been an increase in high-skilled and service-intensive roles over time, but a decline in middle-skilled and labour-intensive positions⁵⁰. This trend was emphasised by the 2008-09 recession where job losses were concentrated in middle-skilled and labour-intensive roles, whilst the recovery since has been mostly in high-skilled and service-intensive jobs. For example, between Q1 2008 and Q4 2014, the number of high-skilled and service-intensive jobs across the UK had increased by 1.3m and 0.3m respectively, whilst declines of 0.5m and 0.2m were recorded for middle-skilled and labour-intensive roles. This in part is in response to the economy becoming increasingly specialised in service sectors as discussed in Chapter 1.



Figure 9.62: Cumulative change in employment by broad occupation group for the UK, aged16 years and over,1992 to 2015

Note: There is a gap in 2001 due to a break in the occupational coding. Source: Office of National Statistics Labour Force Survey, UKCES analysis. Taken from UKCES (2015).

Figure 9.63 replicates this analysis for London⁵¹ using the same broad occupation group definitions as above. This shows that there has similarly been a very large increase in high-skilled roles within London (+701,000 jobs between 2004 and 2015), whilst middle-skilled jobs has declined slightly (-10,100 jobs). Interestingly, the number of labour-intensive occupations in London has also increased, which is in contrast to falls across the UK as a whole.





Notes: January to December periods and has been reweighted in July 2016. Broad occupation group definitions consistent with UKCES (2015).

Source: ONS Annual Population Survey

The entire decline in middle-skilled jobs in London over this period was because of a fall in Administrative & Secretarial occupations (though this was, in part, offset by a rise in Skilled Trades) as shown by Figure 9.64. In particular, it was due to a decline in the number of Secretarial & Related occupations (down 32.3 per cent) as Administrative jobs were broadly stagnant between 2004 and 2015 (Figure 9.65). At this finer level of occupations, the only other occupation to see a fall in the number of jobs was for Science, Engineering & Technology Associate Professionals roles (down 5.6 per cent). All other occupations saw an increase between 2004 and 2015, with the strongest rates of growth for Caring Personal Service (67.4 per cent) and Health Professionals (44.3 per cent) roles.



Figure 9.64: Growth in employment by occupation between 2004 and 2015 for London and the UK, workplace basis aged 16 years and over

Notes: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey

Figure 9.65: Growth in employment by detailed occupation between 2004 and 2015 for London, workplace basis aged 16 years and over



Notes: January to December periods and has been reweighted in July 2016. Source: ONS Annual Population Survey
9.4 The supply of labour

Having discussed the characteristics of London's labour market, this section will focus on the supply of labour. In particular, it will look at three broad groups of labour: young people who are the future workforce, the current workforce, and the over 65s who are either approaching retirement or have already left the labour force. It does not look at commuting which is another aspect of London's labour supply which is instead discussed in Chapters 2 and 8.

9.4.1 Young people

A key aspect of the supply of labour is young people and whether they are equipped with the right qualifications and skills in order to successfully transition from education to work. Therefore, this section will look at education attainment and the destinations of students in London.

In 2014-15, the percentage of pupils at state-funded schools who achieved at least five GCSEs including English and Maths that were A*-C grade was 60.9 per cent in London – above the England average of 53.8 per cent. Although performance varied across London boroughs, almost all were above the England average, with Kingston-upon-Thames recording the highest success rate overall in London (Figure 9.66).





Source: Department for Education KS4 attainment statistics, 2014-15 revised

Girls tended to do better at GCSEs than boys (Figure 9.67). For example, 65.5 per cent of girls achieved five A*-C grades including English and Maths compared with 57.5 per cent of boys. Moreover, both boys and girls in London did better than England as a whole.



Figure 9.67: Percentage of students achieving at least five A*-C grade GCSEs (including English and Maths) by gender, 2009-10 to 2013-14, state-funded schools only

Note: methodology changes means that the 2013-14 academic year cannot be compared with previous years. Source: Department for Education KS4 attainment statistics

Education attainment in London was generally higher than England as a whole when looking at pupils by ethnicity (Table 9.16). Broadly speaking, the percentage of pupils achieving five or more A*-C grade GCSEs including English and Maths was higher for the Chinese and Asian ethnicity groups; the Black ethnicity group generally had the lowest rates of achievement.

Region	White	Mixed	Asian	Black	Chinese	All pupils
North East	57.0%	58.3%	61.9%	52.6%	78.3%	57.3%
North West	56.0%	54.5%	56.9%	46.7%	79.4%	55.9%
Yorkshire & Humber	56.2%	52.8%	49.9%	47.8%	71.2%	55.1%
East Midlands	55.2%	52.2%	58.3%	47.1%	79.4%	55.1%
West Midlands	53.9%	53.0%	59.7%	47.5%	70.1%	54.2%
East	57.8%	60.9%	61.9%	58.7%	80.7%	58.2%
London	59.9%	61.2%	69.2%	54.0%	79.4%	60.9%
South East	59.2%	62.6%	68.5%	54.5%	82.8%	59.9%
South West	57.9%	59.9%	61.3%	44.4%	69.9%	58.0%
England	57.0%	58.3%	61.9%	52.6%	78.3%	57.3%

Table 9.16: Percentage of pupils achieving at least five A*-C grade GCSEs (including English and Maths) by region and ethnicity group in 2014-15

Source: Department for Education KS4 attainment statistics, 2014-15 revised

There are variations in GCSE outcomes by ethnicity by London borough. For example, GCSE performance for the White ethnicity group varied from 73.7 per cent in Westminster to 45.3 per cent in Newham as shown in Table 9.17.

Table 9.17: Percentage of pupils achieving at least five A*-C grade GCSEs (including Englis
and Maths) by London borough and ethnicity group in 2014-15

Region	White	Mixed	Asian	Black	Chinese	All pupils
Barking and Dagenham	47.1%	48.3%	65.7%	59.7%	(D)	54.0%
Barnet	70.3%	71.0%	83.1%	57.4%	88.5%	70.1%
Bexley	53.5%	61.1%	58.1%	57.5%	75.0%	55.0%
Brent	51.9%	58.7%	66.6%	52.1%	100.0%	60.0%
Bromley	68.5%	68.5%	82.8%	63.1%	(D)	68.0%
Camden	59.8%	59.2%	53.8%	50.5%	(D)	56.4%
City of London						
Croydon	61.7%	55.0%	70.2%	53.4%	82.4%	59.6%
Ealing	63.0%	63.8%	65.7%	53.3%	100.0%	62.1%
Enfield	53.6%	58.6%	77.8%	47.8%	76.5%	54.5%
Greenwich	51.3%	63.5%	69.3%	61.7%	71.0%	57.7%
Hackney	62.7%	65.3%	68.4%	56.3%	78.6%	60.4%
Hammersmith and Fulham	69.4%	58.3%	64.8%	51.0%	(D)	62.6%
Haringey	60.7%	55.0%	60.8%	44.8%	20.0%	54.6%
Harrow	59.0%	57.2%	67.3%	49.4%	(D)	60.5%
Havering	56.9%	48.9%	77.4%	60.5%	72.2%	57.7%
Hillingdon	54.3%	59.8%	68.0%	47.4%	(D)	57.5%
Hounslow	63.9%	71.2%	69.0%	56.5%	(D)	65.2%
Islington	50.9%	58.9%	73.5%	56.3%	(D)	57.9%
Kensington and Chelsea	69.3%	60.3%	83.9%	59.0%	(D)	67.2%
Kingston upon Thames	70.5%	74.2%	81.7%	56.1%	(D)	73.2%
Lambeth	58.2%	61.3%	69.1%	51.9%	64.7%	56.5%
Lewisham	55.2%	53.7%	61.3%	48.3%	45.5%	51.9%
Merton	60.7%	64.6%	67.8%	49.4%	(D)	60.0%
Newham	45.3%	58.5%	66.3%	56.1%	60.0%	59.4%
Redbridge	60.0%	58.9%	69.9%	49.7%	(D)	63.4%
Richmond upon Thames	65.9%	58.6%	64.4%	50.7%	(D)	64.7%
Southwark	65.2%	64.2%	71.8%	61.4%	87.5%	64.3%
Sutton	63.6%	77.4%	90.2%	67.2%	100.0%	70.4%
Tower Hamlets	54.2%	52.1%	68.1%	62.2%	(D)	64.6%
Waltham Forest	57.9%	57.6%	62.7%	48.8%	71.4%	57.4%
Wandsworth	61.5%	65.7%	66.1%	45.6%	(D)	58.2%
Westminster	73.7%	57.8%	75.9%	58.5%	80.0%	67.5%
London	59.9%	61.2%	69.2%	54.0%	79.4%	60.9%
England	57.0%	58.3%	61.9%	52.6%	78.3%	57.3%

Note: ".." means not applicable and (D) means that the figures are disclosive. Source: Department for Education KS4 attainment statistics, 2014-15 revised

Box 9.9: Factors that indicate educational performance

There are a number of factors that can influence educational attainment, such as whether pupils have English as an additional language, are eligible for free school meals or are from disadvantaged backgrounds. As can be seen from Table 9.18, pupils who are eligible for FSM or from disadvantaged backgrounds are less likely to achieve at least five good GCSEs than those without these characteristics. Interestingly, those for which English is not their first language did slightly better than those pupils for whom English is their first language in London – the reverse was true for England as a whole.

Table 9.18: Percentage of pupils achieving at least five A*-C grade GCSEs (including English and Maths) by London borough and different characteristics in 2014-15

Region	English as an additional language		Known to be eligible for free school meals		Disadvantaged pupils	
	Not EAL	EAL	Not FSM	FSM	Not disadvantaged	Disadvantaged
Barking and Dagenham	59.0%	54.1%	62.0%	43.7%	68.0%	47.4%
Barnet						
Bexley	61.1%	59.4%	65.4%	50.8%	69.3%	52.6%
Brent	64.3%	61.0%	68.6%	44.3%	75.5%	48.4%
Bromley	59.5%	50.4%	60.7%	41.5%	65.9%	43.8%
Camden	52.2%	63.0%	66.2%	47.1%	68.4%	52.7%
City of London	66.1%	68.2%	69.1%	59.2%	75.7%	57.0%
Croydon	54.6%	58.9%	62.3%	41.9%	67.7%	47.6%
Ealing	51.9%	52.0%	56.7%	34.7%	60.3%	41.0%
Enfield	57.7%	60.0%	62.0%	52.7%	66.5%	54.5%
Greenwich	62.4%	67.2%	68.2%	54.4%	71.5%	57.3%
Hackney	57.8%	67.1%	69.0%	60.0%	72.3%	61.5%
Hammersmith and Fulham	57.6%	58.9%	61.7%	44.0%	68.2%	46.1%
Haringey	66.9%	67.8%	71.9%	58.4%	76.3%	61.2%
Harrow	51.7%	57.9%	58.2%	39.4%	61.9%	44.0%
Havering	71.7%	68.0%	73.6%	48.0%	77.8%	50.5%
Hillingdon	55.2%	53.8%	57.3%	35.9%	60.6%	36.2%
Hounslow	63.7%	57.1%	61.9%	48.5%	65.0%	50.6%
Islington	68.6%	69.2%	71.0%	37.8%	74.2%	47.3%
Kensington and Chelsea	59.7%	59.1%	63.3%	41.5%	68.2%	42.9%
Kingston upon Thames	62.8%	61.6%	65.9%	47.3%	70.3%	49.8%
Lambeth	57.7%	50.7%	58.8%	36.6%	62.8%	41.4%
Lewisham	53.9%	64.2%	61.2%	42.6%	66.8%	47.6%
Merton	60.9%	60.2%	63.5%	42.3%	67.5%	43.6%
Newham	57.2%	64.3%	59.9%	36.3%	63.1%	38.1%
Redbridge	55.5%	61.4%	61.7%	36.1%	65.4%	39.4%
Richmond upon Thames	65.5%	64.8%	68.0%	50.2%	71.9%	51.0%
Southwark	72.5%	74.8%	76.3%	35.8%	79.0%	45.6%
Sutton	57.7%	64.2%	63.6%	43.8%	67.9%	44.6%
Tower Hamlets	62.6%	64.0%	68.1%	43.3%	71.1%	44.3%
Waltham Forest	64.7%	65.2%	68.7%	35.0%	73.2%	39.1%
Wandsworth	68.8%	77.5%	73.7%	40.4%	75.8%	44.9%
Westminster	57.9%	56.7%	60.5%	43.1%	65.4%	45.8%
London	60.7%	61.3%	64.7%	45.8%	68.8%	48.3%
England	57.5%	56.5%	65.1%	36.8%	65.1%	36.8%

Note: ".." means not applicable and (D) means that the figures are disclosive. Source: Department for Education KS4 attainment statistics, 2014-15 revised

Interestingly, these characteristics are more common in London than England as a whole as shown in Figure 9.68. For example, approximately 16.8 per cent of pupils in state-funded nursey or primary schools and 18.1 per cent in state-funded secondary schools were eligible for and claiming free school meals in London as at January 2016. That compared with 14.5 per cent and 13.2 per cent nationally.



Figure 9.68: Percentage of primary and secondary school pupils by ethnicity, EAL, FSM

Historic comparisons in educational attainment cannot easily be made due to methodology changes in 2013-14 and 2014-15 but, prior to this, London had generally seen an increase in the percentage of pupils achieving at least five good GCSEs and had tended to outperform England as a whole since 2005 (Figure 9.69).



Figure 9.69: Percentage of pupils achiveing at least five A*-C grade GCSEs for London and England, 2005-06 to 2014-15, state-funded schools only

Note: methodology changes in 2013-14 and 2014-15 means that they cannot directly be compared with previous years. Source: Department for Education Key Stage 4 Attainment data

Following GCSEs (or Key Stage 4 more generally) most students remain in education (approximately 93 per cent) in London as shown in Table 9.19. A further 5 per cent did not sustain any particular destination, but 1 per cent was recorded as not being in education, employment or training (NEET).

Table 9.19: Percentage of key stage 4 pupils by destination for London and England	in
2013-14	

Destination	London	England
All education, employment or training destinations	93%	92%
Education destination	93%	90%
Employment or training destination		1%
Combined education and employment/training destination		1%
Destination not sustained	5%	5%
Destination not sustained/NEET	1%	2%
Activity not captured	2%	1%

Note: ".." means the percentage is less than 0.5 per cent but greater than 0 per cent. Data reported to zero decimal places. Source: Department for Education National Pupil Database

Box 9.10: International comparisons of education

Comparisons between London's education system and other international cities can be made for the student/teacher ratio and the average expenditure per student. Further international comparisons looking at qualifications achieved can be found in Chapter 5.

Firstly, Figure 9.70 shows the student/teacher ratio in London and other global cities. London's situation (20.9) is relatively good when compared with Barcelona (22.7) and Los Angeles (22.6), but had larger class sizes than Shanghai (15.8), Melbourne (14.7) and Helsinki (11.6). Note, that there is some information on school places in London in Chapter 8.



Figure 9.70: Primary education student/teacher ratio in selected world cities

Source: World Council for City Data

Data for expenditure per student is only available at the national level as shown in Table 9.20. The UK ranks well on expenditure per primary education student, but less well on other measures such as spending on tertiary education.

Table 9.20: Annual expenditure per student at different education levels, converted into US\$ using PPP

Country	Pre-primary education	Primary education	Secondary education	Tertiary education (including R&D)
Argentina	\$19,788	\$21,673	\$30,337	
Australia	\$107,341	\$86,712	\$103,544	\$162,673
Austria	\$89,330	\$105,997	\$136,073	\$148,949
Belgium	\$63,329	\$92,809	\$117,325	\$154,204
Brazil	\$23,486	\$26,735	\$26,623	\$109,019
Canada		\$92,321		\$232,258
Chile	\$50,831	\$45,511	\$44,950	\$83,328
Colombia	\$34,910	\$20,410	\$22,070	\$68,820
Czech Republic	\$43,023	\$45,870	\$72,701	\$93,919
Denmark	\$141,475	\$94,335	\$109,372	\$212,538
Estonia	\$26,181	\$53,282	\$63,887	\$78,679
Finland	\$56,998	\$81,593	\$97,918	\$180,016
France	\$66,151	\$69,170	\$111,091	\$153,748
Germany	\$83,507	\$75,789	\$102,752	\$167,228
Greece				
Hungary	\$45,636	\$45,664	\$45,741	\$92,097
Iceland	\$91,382	\$103,387	\$84,696	\$86,121
Indonesia	\$2,048	\$5,869	\$5,216	\$11,732
Ireland		\$85,200	\$115,018	\$160,951
Israel	\$40,579	\$68,226	\$57,118	\$115,537
Italy	\$78,680	\$84,485	\$85,848	\$99,900
Japan	\$55,912	\$82,803	\$98,857	\$164,460
Korea	\$68,606	\$69,759	\$81,988	\$99,265
Latvia	\$43,589	\$49,818	\$49,982	\$75,516
Luxembourg	\$250,742	\$238,712	\$161,820	
Mexico	\$25,679	\$26,220	\$29,434	\$78,891
Netherlands	\$80,204	\$80,359	\$121,001	\$175,494
New Zealand	\$110,884	\$80,841	\$93,117	\$105,822
Norway	\$67,297	\$124,588	\$139,387	\$188,402
Poland	\$64,094	\$62,334	\$58,702	\$96,589
Portugal	\$56,736	\$58,654	\$86,758	\$96,398
Russia			\$44,704	\$74,242
Slovak Republic	\$46,528	\$55,169	\$49,382	\$81,773
Slovenia	\$81,357	\$92,601	\$85,675	\$104,135
Spain	\$67,254	\$72,876	\$96,147	\$131,729
Sweden	\$69,147	\$102,951	\$109,384	\$208,183
Switzerland	\$52,675	\$129,074	\$158,913	\$228,817
Turkey	\$24,120	\$22,176	\$27,360	\$81,931
United Kingdom	\$96,916	\$98,573	\$96,488	\$142,229
United States	\$100,104	\$109,585	\$127,306	\$260,213
OECD average	\$74,281	\$82,958	\$92,805	\$139,577
Highert	\$250,742	\$238,712	\$161,820	\$260,213
righest	Luxemburg	Luxemburg	Luxemburg	United States
Lowest	\$2,048	\$5,869	\$5,216	\$11,732
	Indonesia	Indonesia	Indonesia	Indonesia

As noted in Table 9.19 above, most young people continue on to Key Stage 5. Popular subjects in London for the 2014-15 academic year included English (7.9 per cent), Biological Sciences (7.8 per cent) and Mathematics (6.9 per cent). In fact, 35.7 per cent of A Level entries were in STEM subjects⁵².

The percentage of students at state-funded schools achieving AAB or better in their A Levels was 17.7 per cent in 2014-15. Males performed slightly better than females (18.4 per cent versus 17.2 per cent). Moreover, London performed slightly above the England average of 17 per cent.

Figure 9.71 shows the percentage of students achieving AAB or better at A Level for London and England over time. Historically, London has performed marginally better than England when solely looking at state-funded schools⁵³. However, if colleges were also included, then London performed below the England average. For example, the percentage of students achieving AAB or better in London state-funded schools and colleges⁵⁴ was 15.9 per cent in 2014-15, compared with 19.2 per cent for England as a whole. This implies that London colleges do not perform as well as London state-funded schools. Potential reasons for this include London colleges having higher proportions of students from ethnic backgrounds with lower GCSE attainment compared to state-funded schools, as well as colleges taking on students that may have left their school sixth form⁵⁵.

Figure 9.71: Percentage of students achieving AAB or better at A Level for London and England, 2010-11 to 2014-15



Source: Department for Education 2014/15 16-18 attainment data

There were quite significant differences by borough when looking at the percentage of students getting AAB or better at A Level from state funded schools and colleges (Figure 9.72). For example, Sutton had 33.1 per cent of students getting these grades, compared with 6.2 per cent for Waltham Forest.



Figure 9.72: Percentage of students achieving AAB or better at A Level by London borough in 2014-15, state-funded schools and colleges

Note: City of London is excluded for disclosure reasons. Source: Department for Education 2014/15 16-18 attainment data

Following A Levels, most young people at state-funded schools remain in some form of education, employment or training (79 per cent). As Table 9.21 shows, the most popular destination was education with 75 per cent attending university or other education destinations. Although continued education was also the most popular destination for young people across England, the proportion was lower at 72 per cent. Interestingly, the percentage of young people entering any type of employment or training destination was approximately 4 per cent in London – half the proportion for England as a whole. Moreover, the percentage of students who were NEET after leaving school was only 2 per cent in 2013-14, on par with the England average.

Table 9.21: Percentage of key stage 5 pupils by destination for London and England in2013-14

Destination	London	England
All education, employment or training destinations	79%	79%
Education destination	75%	72%
Employment or training destination	3%	7%
Combined education and employment/training destination	1%	1%
Destination not sustained	6%	7%
Destination not sustained/NEET	2%	2%
Activity not captured	14%	13%

Note: figures refer to state-funded schools only.

Source: Department for Education National Pupil Database

Box 9.11: NEETs in London

Whilst most successfully move into sustained work, some young people find themselves not in education, employment or training (NEET). There were approximately 89,000 individuals aged 16-24yrs who were NEET in London in Q1 2016, equivalent to 9.3 per cent of the population (Figure 9.73). Of this, 76,000 were aged 19-24yrs (11.1 per cent) implying that 13,000 were aged 16-18yrs. However, it should be noted that this data is seasonal in that it reflects the academic year.





Source: ONS Labour Force Survey

London has seen a lower percentage of people aged 16-24 years who are NEET than England as a whole, and differences emerge when looking at the age breakdowns. For example, the NEET rate for those aged 16-18yrs for London was broadly the same as for England as a whole (until recently where the rate for London is now below that for England), and was below for the 19-24yrs age group (Figure 9.74).



Figure 9.74: Percentage of individuals who were NEET in London and England as a whole, residents, January to March periods, 2000 to 2016

Box 9.12: Apprenticeships in London

The number of apprenticeship starts in London was 45,550 in the 2014-15 academic year. That was up from 40,050 in 2013-14, though the trend had been declining since 2011-12⁵⁶ (Figure 9.75). There are in fact four levels of apprenticeships that vary in skills and qualifications: intermediate, advanced, higher and degree. Although there is no information on the number of degree level apprenticeships, almost six in every ten (58.5 per cent) apprenticeship starts in London during 2014-15 were for the intermediate level, which is the equivalent of achieving five A*-C grades at GCSE. A further 37.4 per cent were at the advanced level (the equivalent of A Levels), but only 4 per cent were at the higher level (the equivalent of higher education). These trends by level were broadly similar for England as a whole.

Note: the data for the 16-18yrs group is implied from the 16-24yrs and 19-24yrs groups. Also, January to March periods. Source: ONS Labour Force Survey



Figure 9.75: Number of apprenticeship starts by level in London, 2005-06 to 2014-15 academic years

By age, almost half of starts were by individuals aged 25 years and over (47 per cent), with the 'under 19 years' and 19-24 age groupings representing 21.9 per cent and 31 per cent respectively. All age groups were most likely to start apprenticeships at the intermediate level, though the proportions doing advanced or higher level apprenticeships increased for the older age groups (Table 9.22).

year				
Apprenticeship level	Under 19 years	19-24 years	25 years and over	All ages
Intermediate level	13.8%	17.7%	27.0%	58.5%
Advanced level	7.8%	12.3%	17.3%	37.4%
Higher level	0.3%	1.1%	2.7%	4.0%
All levels	21.9%	31.0%	47.0%	100.0%

Table 9.22 Apprenticeship starts by level and age group for London in 2014-15 academicyear

Source: Skills Funding Agency

Table 9.23 shows the sector subject that the apprenticeship starts were in during 2014-15. The most popular areas were Business, Administration & Law (34.2 per cent) and Health, Public Services & Care (26.1 per cent). Concurrently, Construction, Planning & the Built Environment saw the largest percentage rise since 2011-12.

Note: Figures for 2011-12 onwards not directly comparable to earlier years. Source: Skills Funding Agency

able 9.23: Apprenticeship starts by sector subject area in London in 2014-15 academic year					
Sector subject area	Number	Percentage	Change since 2011-12		
Agriculture, Horticulture and Animal Care	570	1.3%	7.5%		
Arts, Media and Publishing	300	0.7%	-18.9%		
Business, Administration and Law	15,580	34.2%	-4.8%		
Construction, Planning and the Built Environment	1,260	2.8%	48.2%		
Education and Training	920	2.0%	-17.1%		
Engineering and Manufacturing Technologies	4,420	9.7%	-7.5%		
Health, Public Services and Care	11,870	26.1%	14.9%		
Information and Communication Technology	1,940	4.3%	1.0%		
Languages, Literature and Culture					
Leisure, Travel and Tourism	1,340	2.9%	-54.4%		
Preparation for Life and Work					
Retail and Commercial Enterprise	7,350	16.1%	-8.4%		
Science and Mathematics	10	0.0%	0.0%		
Unknown					
Total	45,550	100.0%	-3.6%		

Source: Skills Funding Agency

By region, London had one of the lowest shares of all apprenticeship starts in England (9.2 per cent). In fact, only the North East posted a lower proportion in 2014-15 (Figure 9.76). This was particularly true for the 'under 19' and 19-24 age groups, though London performed slightly better for the 25 years and over group (fifth out of the nine regions).





There were approximately 1.7m undergraduate and 0.5m postgraduate students in the UK during 2014-15 (Figure 9.77). That was the lowest student population in ten years and partly a reflection of a drop in the number of students that were from the UK. For example, the number of undergrads from the UK was 1.5m in 2014-15, which was down from 1.7m in 2009-10. The number of undergrads from the rest of the EU (excluding the UK) was broadly stagnant over this period, whilst the number from other countries outside of the EU had increased. Similar trends were observed for postgraduates.



Figure 9.77: Number of undergraduate and postgraduate students in the UK, 2004-05 to 2014-15 academic years

Source: Higher Education Statistics Agency, ONS Mid-Year Estimates

The number of undergraduate and postgraduate students at London higher education providers was 241,800 and 118,200 respectively in the 2014-15 academic year. London had the second-highest share of undergraduates in the UK at 14 per cent, behind the South East. However, it attracts more postgraduate students, with its share rising to 22 per cent.

As Figure 9.78 shows, the most popular degree subject was Business & Administrative Studies and was true for both undergraduate (13 per cent) and postgraduate (19.2 per cent) levels. The next most popular subject for undergraduates was Subjects Allied to Medicine representing 12.3 per cent; the most popular for postgraduates was Education (15.1 per cent).



Figure 9.78: Number of undergraduates and postgraduates by degree subject in the UK during the 2014-15 academic year

Source: Higher Education Statistics Agency

Around three-quarters (74.9 per cent) of UK graduates entered employment after completing their degree in 2013-14, whilst a further 15 per cent went on to further study. Only 4.7 per cent were reportedly unemployed. Employment rates were higher for those completing postgraduate degrees in comparison with undergraduate degrees, though this partly reflects fewer people moving on to further study.

London data is available for 2012-13 and showed that 49.3 per cent of London resident graduates were in full-time work after graduation (Figure 9.79). That was a 2 percentage point increase from the 2011-12 class. A further 15.1 per cent were in part-time work. Overall, the proportion of London resident graduates who were in some sort of work or due to start work was 70.7 per cent. Meanwhile, unemployment stood at 8.7 per cent in 2012-13, an improvement on 11 per cent in 2011-12.



Figure 9.79: Destinations of graduates who were resident in London before attending HE in the 2012-13 academic year

Source: Higher Education Statistics Agency. Taken from London Councils (2015). The higher education journey of young London residents.

Most of the London resident graduates entered professional occupations, with 29.5 per cent and 28.6 per cent entering Professional and Associate Professional & Technical roles respectively (Figure 9.80).





Source: Higher Education Statistics Agency. Taken from: London Councils (2015). The highere education journey of young London residents. 500 GLA Economics Similar information is available on what sectors London resident graduates were working in as shown in Figure 9.81. The top sectors were Wholesale & Retail Trade (18.2 per cent) and Human Health & Social Work (15.1 per cent).





Source: Higher Education Statistics Agency. Taken from: London Councils (2015). The higher education journey of young London residents.

Box 9.13: Career progression of graduates

The Higher Education Statistics Agency performs a longitudinal survey of UK graduates to assess their career progression three-and-a-half years after leaving university. The latest findings for graduates in 2010-11 showed that a greater proportion of graduates were in employment after three-and-a-half years (87.9 per cent) than six months after graduation (76.6 per cent). This in part can be explained by those who previously entered further study entering work at a later stage, although there was also a fall in unemployment (Figure 9.82).





Source: Higher Education Statistics Agency Destinations of Leavers from Higher Education Longitudinal Survey. Taken from HESA press release 221.

As discussed in Chapter 5, London is an attractive place to work. For example, the HESA longitudinal survey showed that 23.1 per cent of all UK graduates were working in London after three-and-a-half years. This in part can be attributed to those previously living in London returning back home, but also graduates who studied at London HE providers remaining afterwards. For example, 82.1 per cent of graduates resident in London before university and 70.4 per cent of graduates of London HE providers were working in London three-and-a-half years after graduating.

It could be the case that London acts as an 'accelerator region' for workers in that they develop their skills and careers in London before moving to other parts of the UK as originally suggested by Fielding⁵⁷. For example, there is evidence outlined in the Future of Cities report that graduates from UK regions move to London to work in the finance, professional and other knowledge-intensive services sectors in the first period of their careers⁵⁸. There they develop their skills at an accelerated pace before choosing to move to other parts of the UK perhaps as their priorities move from their career to starting a family.

Figure 9.83 provides a summary of the education journeys taken by students in London – from key stage 4 to university – which has been discussed separately above. When combining the various destinations data, 58.7 per cent of key stage 4 students could eventually move on to key stage 5 and then on to university. That is, almost six in every ten students studying their GCSEs could eventually have a degree (either ordinary or higher degree) as their highest qualification. Other key stage 4 pupils may not go to university and consequently have different education journeys. As such, a further 10.8 per cent could alternatively go on to higher education and 23.2 per cent might achieve GCE, A-level or equivalent as their highest qualification.



Figure 9.83: Education pathways for London students in 2014

Note: It has not been possible to track the same year group through their entire education pathway due to data limitations. Instead, this analysis is based on the latest destinations data from various sources. In reality, destinations may be affected by both endogenous (i.e. characteristics of the year group itself) and exogenous (i.e. economic conditions) factors and may not be reflective of future cohorts. Furthermore, KS4 destinations by attainment are not available meaning the proportions achieving GCSE grades A*-C or equivalent and no or other qualifications are based on Department for Education attainment data that showed 71.2 per cent of students achieving at least five A*-C grade GCSEs in London. Source: Department for Education National Pupil Database, Higher Education Statistics Agency, GLA Economics calculations

Table 9.24 presents this information as well as the proportion of jobs⁵⁹ in London by highest qualification in 2015 and the projected number of jobs in 2041⁶⁰. Comparing these with the education pathways, students are likely to be equally qualified as those currently in work in London. The exception is for higher degrees where the expected pathways suggest there would be less people at this level (11.2 per cent versus 18.4 per cent). The same can be said when looking at the projected number of jobs in 2041 – although people are expected to be better qualified in the future, based on the current education pathways there is still likely to be a shortfall for higher degrees.

Highest qualification	Proportion of students in 2014 based on expected education pathways	Proportion of jobs in 2015	Projected proportion of jobs in 2041
No qualification	D 10/	4.1%	2.7%
Other qualification	2.170	9.4%	8.0%
GCSE grades A*-C or equivalent	5.2%	12.1%	11.3%
GCE, A-level or equivalent	23.2%	15.9%	15.3%
Higher education	10.8%	7.8%	8.5%
Ordinary degree or equivalent	47.6%	32.4%	37.5%
Higher degree	11.2%	18.4%	16.6%
Total	100.0%	100.0%	100.0%

Note: The approach taken to estimate the education pathways means it has not been possible to disaggregate the percentages of no and other qualifications. Source: ONS Annual Population Survey, Department for Education National Pupil Database, Higher Education Statistics Agency, GLA Economics calculations

The future demand for skills is also illustrated in Table 9.25. These projections of qualifications held by those working in jobs in London suggest that the largest increases will be for higher degrees (1.4 per cent between 2014 and 2041) and ordinary degrees or equivalent (1.1 per cent). Moreover, all types of occupations will see a rise in graduate jobs except for Administrative & Secretarial occupations.

Occupation	Higher degree	Ordinary degree or equivalent	Higher education	GCE, A level or equivalent	GCSE grades A*-C or equivalent	Other qualifications	No qualification	Total
Managers, Directors & Senior Officials	2.0%	1.9%	2.4%	1.2%	1.8%	0.7%	-1.8%	1.7%
Professional Occupations	1.4%	1.4%	1.3%	1.1%	1.0%	0.3%	1.3%	1.3%
Associate Professional & Technical Occupations	0.6%	0.4%	0.6%	0.1%	0.3%	-1.2%	-1.5%	0.3%
Administrative & Secretarial Occupations	-0.8%	-0.8%	-1.3%	-2.0%	-2.1%	-4.3%	-5.5%	-1.6%
Skilled Trades Occupations	1.5%	1.7%	0.8%	-0.1%	0.8%	1.1%	-0.7%	0.6%
Caring, Leisure & Services, and Sales and Customer Service Occupations	1.9%	1.6%	1.2%	0.9%	-0.1%	-0.5%	-1.8%	0.7%
Process, Plant & Machine Operatives and Elementary Occupations	2.2%	1.5%	1.9%	0.9%	1.2%	0.9%	-0.5%	1.0%
Total	1.4%	1.1%	1.1%	0.5%	0.4%	0.4%	-1.0%	0.8%

Table 9.25: Projected annual change in qualification employment by occupations for	•
London, 2014 to 2041	

Source: GLA Economics calculations. Taken from GLA Economics London labour market projections 2016 report (Table 2.6).

9.4.2 Current workforce

The following maps (Map 9.1) show the concentration of residents in employment by qualification across London⁶¹. These show that inner London boroughs had a greater proportion of employed residents with Level 4 qualifications or above (i.e. higher education) in 2011, whilst outer London boroughs were more likely to have workers with Levels 1-3 qualifications. Indeed, Barking & Dagenham and Havering were the only two boroughs to have more than half of employed residents in this group. They were also the only boroughs to have more than 10 per cent of workers with no qualifications.

Generally, workers have higher qualifications than in 2001. For example, whilst nine boroughs had less than 30 per cent of employed residents with Level 4 or 5 qualifications in 2001, there were only three in 2011. Similarly, only inner west London had less than 10 per cent of employed residents with no qualifications in 2001 but, in 2011, this was the case for the majority of boroughs.



Map 9.1: Percentage of employed residents by qualification in 2001 and 2011



Percentage of employees with Level 1-3 qualifications by borough, Census 2001



Percentage of employees with Level 1-3 qualifications by borough, Census 2011



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Percentage of employees with no gualifications by borough, Census 2001

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Percentage of employees with no qualifications by borough, Census 2011

Source: ONS Census 2001 and 2011

9.4.3 The over 65s

This section is focussed on people aged 65 and over⁶². As shown in Figure 9.23 in the earlier section, the employment rate for this age group was 12.5 per cent in 2015, having increased from 7.7 per cent in 2004. When looking across more detailed age bands using Census data, the employment rate drops suddenly for the 60-64 and 65-69 age groups (Figure 9.84). This mostly reflects the fact that the vast majority of older people are economically inactive and in retirement. For example, in London, 78 per cent of men aged 65 and over and 85.9 per cent of women were retired in 2015⁶³.



Figure 9.84: Employment rates by detailed age groups for London, residents, 2001 and 2011 (Census data)

These trends are evident for both men and women in London as shown in Figures 9.85 and 9.86 which alternatively uses ONS Annual Population Survey data. For example, the employment rate for men and women aged 55-59 was 74.4 per cent and 67.8 per cent respectively in 2015, but this dropped to 58.4 per cent and 44.6 per cent for the 60-64 age group.

Source: ONS Census 2001 and Census 2011



Figure 9.85: Economic activity by age groups for men in London during 2015, residents

Source: Office for National Statistics Annual Population Survey



Figure 9.86: Economic activity by age groups for women in London during 2015, residents

Source: Office for National Statistics Annual Population Survey

Interestingly, men were increasingly more likely to be working part-time as they approached the age of 65. For example, the percentage of men who were part-time workers and aged 25-54 was 8.3 per cent, but this increased to 14.6 per cent for the 60-64 age group. This could suggest that older workers are seeking more flexible working arrangements, which the ONS also links to the rise in the

number of older workers choosing (part-time) self-employment (see Figure 9.7)⁶⁴. For example, Table 9.26 shows the average number of hours worked by full-time and part-time main jobs generally declining as people get older though, interestingly, people aged 65 years and over working full-time across the UK as a whole worked the most hours in 2015.

Table 9.26: Mean actual weekly hours of work (including overtime) by full-time and parttime main jobs for London and the UK in 2015, residents

Age group	Full-time main job		Part-time	main job	All jobs		
	London	UK	London	UK	London	UK	
16-24	37.1	36.4	14.6	14.6	29.3	28.4	
25-54	37.8	37.4	17.5	17.5	34.3	33.4	
55-64	36.5	36.8	15.4	15.9	30.7	30.5	
65 and over	34.9	38.6	12.2	12.5	21.3	21.4	
All ages	37.6	37.3	16.3	16.3	33.0	31.9	

Source: ONS Annual Population Survey

As Table 9.27 illustrates, the main reason that older people provided for working past the state pension age in 2015 was that they were not ready to stop work (50 per cent). Paying for essential items such as bills was cited by 18.1 per cent of older people in London, which was a higher proportion than UK (15.2 per cent). In contrast, 6.5 per cent said it was to pay for desirable items such as holidays and that was lower than 8.1 per cent for the UK.

Table 9.27: Main reason for working past state pension age for London and the UK in 2015, residents and for both sexes

Main reason	London	UK
To pay for essential items (such as bills)	18.1%	15.2%
To pay for desirable items (such as holidays)	6.5%	8.1%
To boost pension pot	6.4%	7.0%
Not ready to stop work	50.0%	52.3%
Employer needs your experience or you are needed in the family business	7.6%	7.2%
Due to opportunities to work more flexible hours	1.4%	1.4%
Other	10.0%	8.8%

Source: ONS Annual Population Survey

Aside from participating in the labour market, older people may instead participate in the informal labour market by caring for adults, childcare, or volunteering⁶⁵. Approximately 16 per cent of older people aged 50 or over in London provided care to other adults – 1,700 hours of care per year on average – and 39 per cent are regular volunteers. Moreover, around 85,000 families in London receive childcare from grandparents aged 50 or over amounting to approximately 760 hours per year, but this represents less than 10 per cent and was the lowest rates among the English regions⁶⁶.

One key factor that could affect labour market participation for older people is changes to the state pension age (SPA). There have been a number of proposed changes to the SPA which aim to have the same retirement age for both men and women as well as raise this to 68 between 2044 and 2046⁶⁷. Research by the Department for Work and Pensions (DWP) suggested that raising the SPA by one year would lead to a smaller increase in the labour force than the increase in the working age population itself as some would choose to leave the labour market⁶⁸. Other effects might also include increased consumer spending and business investment (to go alongside an increase in workers).

Another way to illustrate the change in the working age population is through the old age dependency ratio (OADR). Figure 9.87 shows a gradual decline in the OADR since 2001 to around 180 older people per 1,000 people who are working age for London⁶⁹. This was mainly a result of faster growth for

the 16-64 age group than the over 65 years. Without the planned SPA changes, current population projections suggest that the OADR would rise to 260 by 2041. However, the changes to the SPA between 2015 and 2041 could reduce this to 210 per 1,000 people working age.

Figure 9.87: Old age dependency ratio per 1,000 people working age for London, with and without planned SPA changes, residents, 2001 to 2041



Source: GLA Intelligence 2014 round population projections (long-term migration), ONS 2014 round population projections, GLA Economics calculations

Chapter 9 endnotes

- 1 ONS Labour Force Survey.
- 2 This is consistent with the International Labor Organisation (ILO) definition of unemployment. This is those aged 16 years and over who are out of work, have been seeking work in the last four weeks and are able to start work in the next two weeks.
- 3 This covers the year to December 2015.
- 4 This is the number of people claiming Jobseeker's Allowance and out-of-work Universal Credit.
- 5 This is for all claimants aged 16 years and over and not seasonally adjusted.
- 6 For the January 2015 to December 2015 period.
- 7 The remainder includes HM Forces jobs and Government-support trainees.
- 8 ONS (2016). Trends in self-employment in the UK: 2001 to 2015, July 13, 2016. Available at: <u>https://</u> www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/ trendsinselfemploymentintheuk/2001to2015
- 9 Here the definition of self-employed jobs includes first and second jobs.
- 10 ONS (2016). Trends in self-employment in the UK: 2001 to 2015, July 13, 2016. Available at: <u>https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/trendsinselfemploymentintheuk/2001to2015</u>
- 11 All part-time workers aged 16 years and over.
- 12 This is based on workforce jobs.
- 13 The ONS Workforce Jobs series does not provide a breakdown by occupation. Therefore, data for jobs by occupation are taken from the ONS Annual Population Survey. In this case, both the number of main jobs and second jobs are included.
- 14 GLA Economics (2015). Part-time employment in London, GLA Economics, Current Issues Note 42. Available at: https://www.london.gov.uk/what-we-do/business-and-economy/business-and-economy-publications/cin-42-part-time-employment-london
- 15 A temporary worker is an employee who says that their main job in not permanent in one of the following ways: fixed period contract, agency temping, casual work, seasonal work or other temporary work. This is also based on the survey respondent's self-assessment.
- 16 Total includes those who did not give a reason for working temporarily.
- 17 GLA Economics (2008). The evolution of UK and London employment rates, GLA Economics Working Paper 33. Available at: <u>https://www.london.gov.uk/business-and-economy-publications/working-paper-33-evolution-uk-and-london-employment-rates</u>
- 18 GLA Economics (2006). Worklessness in London: explaining the difference between London and the UK, GLA Economics, Working Paper 15. Available at: <u>https://www.london.gov.uk/what-we-do/business-and-economy/business-and-economy-publications/working-paper-15-worklessness</u>
- 19 Other research also point to certain demographic and environmental characteristics as factors in explaining regional differences in employment and unemployment rates including López-Bazo, E & Motellón, E (2013). The regional distribution of unemployment: what do micro-data tell us, Papers in Regional Science, 92, 2, pg. 5-21 and HM Treasury (2007). Employment opportunities for all: tackling worklessness in London, March 2007.
- 20 This uses ONS Annual Population Survey data of which the latest estimates refers to 2015.
- 21 GLA Economics (2015). Part-time employment in London, GLA Economics, Current Issues Note 42. Available at: https://www.london.gov.uk/what-we-do/business-and-economy/business-and-economy-publications/cin-42-part-time-employment-london
- 22 GLA Economics (2008). The evolution of UK and London employment rates, GLA Economics Working Paper 33. Available at: <u>https://www.london.gov.uk/business-and-economy-publications/working-paper-33-evolution-uk-and-london-employment-rates</u>
- 23 Full-time students are classed as being economically inactive and can partly explain why the employment rate for the 16-24 age group is lower than the other age groups.
- 24 The 'not in full-time education' group includes people in part-time education or some form of training and does not refer to the number of people not in employment, education or training (NEET).

- 25 Here it is argued that London-specific characteristics such as a larger proportion of ethnic minorities mean that London's employment rate is not necessarily comparable with the UK's. The adjustment process will instead allow for like-for-like comparisons and is done in a two-step process. First, it is assumed that London has the same proportion of ethnic minorities as the UK as a whole – for example, in 2014, the proportion of the population that were from ethnic minorities was assumed to be 13.4 per cent (the same as the UK), down from its actual figure of 39.6 per cent. The second step is applying the actual employment rates for the various ethnic groups in London to the population estimates, so the actual employment rate of ethnic minorities in London of 65.1 per cent is applied to 13.4 per cent of the population. Overall, this means that the only change during the adjustment process is the percentage of the population who were from ethnic minorities.
- 26 Dependent children are children aged under 16 years and those aged 16 to 18 years that have never married and are in full time education.
- 27 Gaffney, D & Aldridge, H (2015). Trends in parental employment in London. Available at:: <u>http://npi.org.uk/</u> files/1514/4109/3538/Parental_employment.pdf
- 28 GLA Economics (2015). Part-time employment in London, GLA Economics, Current Issues Note 42. Available at: https://www.london.gov.uk/what-we-do/business-and-economy/business-and-economy-publications/cin-42-parttime-employment-london
- 29 Rosso, A et al. (2015). What explains the growth in 'never-worked' households, Joseph Rowntree Foundation. Available at: https://www.jrf.org.uk/report/what-explains-growth-never-worked-households
- 30 Prior to 2011, there was limited information on non-UK qualifications which meant that a large number of respondents were classed as having 'other' qualifications. To correct for this, a proxy for education attainment has been used to improve these classifications and have been retrospectively applied to historical estimates.
- 31 Both core and work-limiting disabilities in line with the Equalities Act.
- 32 See GLA Economics Working Papers 9, 13 and 21 as well as Current Issues Note 17.
- 33 GLA Economics (2016). London in comparison with other global cities, Current Issues Note 48.
- 34 Workplace basis.
- 35 The private sector is comprised of organisations whose legal status is defined as Company, Sole Proprietor or Partnership. The public sector is comprised of those defined as Public Corporation/Nationalised Body, Central Government or Local Authority.
- 36 The 2009 Annual Survey of Hours and Earnings was the first to publish regional breakdowns of private and public sector pay. This excluded Northern Ireland.
- 37 These rates are calculated by dividing the total number of under/overemployed workers by the total number of people in employment that have a known under/overemployment status.
- 38 All UK data refers to the October to December periods instead of the January to December periods for London data.
- 39 This definition may also include other contracts which are not explicitly zero-hours, but ZHC is used here to describe this broad category.
- 40 Bell & Blanchflower (2013). Underemployment in the UK revisited, National Institute Economic Review, 224.
- 41 UK Commission for Employment and Skills 2015 (2016). UKCES Employer Skills Survey 2015. Available at: <u>https://www.gov.uk/government/collections/ukces-employer-skills-survey-2015</u>
- 42 ESRC Centre on Migration (2009). An evidence base on migration and integration in London. Available at: <u>https://www.london.gov.uk/sites/default/files/an_evidence_base_on_migration_and_integration_in_london.pdf</u>
- 43 Rosso, A (2013). Skill premia and immigrant-native wages gap, Centre for Learning and Life Chances in Economies and Societies, Research paper 45. Available at: <u>http://www.llakes.org/wp-content/uploads/2013/10/45.-Rosso.pdf</u>
- 44 Stirling, A (2015). Migrant employment outcomes in European labour markets, Institute for Public Policy Research. Available at: <u>http://www.ippr.org/files/publications/pdf/migrant-employment-outcomes-in-europe-labour-markets_</u> <u>April2015.pdf?noredirect=1</u>
- 45 CIPD (2015). Over-qualification and skills mismatch in the graduate labour market, Policy report, August 2015. Available at: <u>http://www.cipd.co.uk/publicpolicy/policy-reports/overqualification-skills-mismatch-graduate-labour-market.aspx</u>
- 46 ONS (2013). Graduates in the UK labour market, 2013. Available at: <u>http://www.ons.gov.</u> <u>uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/</u> <u>graduatesintheuklabourmarket/2013-11-19</u>

- 47 CIPD (2015). Over-qualification and skills mismatch in the graduate labour market, Policy report, August 2015. Available at: <u>http://www.cipd.co.uk/publicpolicy/policy-reports/overqualification-skills-mismatch-graduate-labour-market.aspx</u>
- 48 This is supported by other research including: Green, F & Zhu, Y (2010). Over-qualification, job dissatisfaction, and increasing dispersion in the returns to graduate employment, Oxford Economic Papers, 62, 4, pg.740-763; Chevalier, A (2003). Measuring over-education, Economica, 70, 279, pg.509-531; and Chevalier, A & Lindley, J (2010). Work-readiness: what employers really want from graduate employees. Paper presented at the International Labour Process Conference 2010, Rutgers University, New Jersey.
- 49 This is taken from UKCES (2015). Growth through people: evidence and analysis. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/410289/GTP_EA_final_v8.pdf
- 50 The definitions used here are consistent with those used by UKCES and are: high-skilled occupations SOC 1-3; middle-skilled occupations SOC 4 and 5; service-intensive occupations SOC 6 and 7; and labour-intensive occupations SOC 8 and 9.
- 51 Workplace basis.
- 52 This is defined as Physics, Biology, Chemistry, Other Science, Mathematics and Further Mathematics, Design & Technology, Computing and ICT.
- 53 A state-funded school covers all state-funded mainstream schools, academies, free schools, city technology colleges and state-funded special schools. Excludes pupil referral units (PRUs), alternative provision, hospital schools, nonmaintained special schools, other government department funded colleges, independent schools, independent special schools and independent schools approved to take pupils with special education needs.
- 54 A college refers to FE sector colleges.
- 55 Hodgson, A & Spours, K (2014). What is happening with 17+ participation, attainment and progression in London? Paper 3: colleges in London. Institute of Education, University of London, September 2014. Available at: <u>http://www.londoncouncils.gov.uk/our-key-themes/children-and-young-people/14-19-young-people-education-and-skills/publications/what</u>
- 56 This is the first year of comparable data.
- 57 Fielding, A (1992). Migration and social mobility: South East England as an escalator region, *Regional Studies*, 26, 1, pg.1-15.
- 58 Future of Cities (2016). Future of cities: graduate mobility and productivity an experiment in place-based open policy-making. Available at: <u>https://www.gov.uk/government/publications/future-of-cities-graduate-mobility</u>
- 59 This is the number of jobs in London for all ages and people using the ONS Annual Population Survey
- 60 This projection is based on those outlined in the GLA Economics London labour market projections 2016 report. Available at: <u>https://www.london.gov.uk/business-and-economy-publications/london-labour-market-projections-2016</u>
- 61 This is based on Census 2001 and 2011 data.
- 62 This definition reflects the timetable that the state pension age will be 65 for men both men and women in April 2016 and also data limitations.
- 63 ONS Annual Population Survey.
- 64 ONS (2016). Trends in self-employment in the UK: 2001 to 2015, July 13, 2016. Available at: <u>https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/trendsinselfemploymentintheuk/2001to2015</u>
- 65 GLA Economics (2013). The economic contribution of older Londoners, GLA Economics, July 2013. Available at: https://www.london.gov.uk/what-we-do/business-and-economy/business-and-economy-publications/economiccontribution-older
- 66 See footnote 64.
- 67 These are covered under the Pensions Acts 1995, 2007, 2011 and 2014.
- 68 Barrell, R et al. (2011). The macroeconomic impact from extending working lives, Department for Work and Pensions, Working Paper 95. Available at: <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/</u> <u>file/214392/WP95.pdf</u>
- 69 The working age population is defined as 16 years to SPA; older people are conversely defined as being the SPA or older.