



A series of background briefings on the policy issues in the June 2017 UK General Election

Immigration in the UK

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#GE2017Economists

Technical Paper



1. Introduction: trends on immigration
2. Assessing the evidence on immigration's effects on jobs and wages
3. The election and immigration: will EU immigration really be restricted after Brexit?

1. Introduction: trends in immigration

Immigration to the UK has grown a lot over the last 20 years and a significant fraction of this growth has been from other EU countries, especially after 2004 and the accession of the eight East European countries ('A8'). There are now around 9 million individuals (and 7.4 million adults of working age) living in the UK who were born abroad. The number of immigrants from EU countries living in the UK has tripled from 0.9 million to 3.3 million over this period.

In the referendum debate, a major argument of the Leave campaign was that Brexit would allow more control over the flow of immigrants to the UK from the EU. Many people continue to be concerned that high levels of immigration have hurt their jobs, wages and quality of life. Higher immigration has increased overall national income (more workers will generate more GDP) and benefited the immigrants who come to the UK since, by and large, they are better off than in their country of origin. But has it been harmful to people born in the UK?

In this briefing, we analyse the most recent data to examine immigration's effects. The first part of the report documents trends in immigration over time and the second part summarises the evidence on the effects of immigration to the UK with an emphasis on how the prospects of UK-born workers are affected by immigration. The third section looks at immigration-related policy decisions that loom following Brexit.

Trends in immigration over time

Immigration has undoubtedly increased in the UK population a lot over the past 20 years. But this is not an unprecedented rise in population. Between 1975 and 1990, the UK working age population grew by around 200,000 a year, on average. This was driven not by immigration, but by a rise in the numbers of UK-born, (baby boomers reaching maturity). Between 1995 and 2016, the working age population also grew by around 200,000 a year. The majority of this later growth was due to immigration. Some 17.9% of the UK working age population are now immigrants, more than double the share 20 years ago.

Table 1: Immigrants in the UK

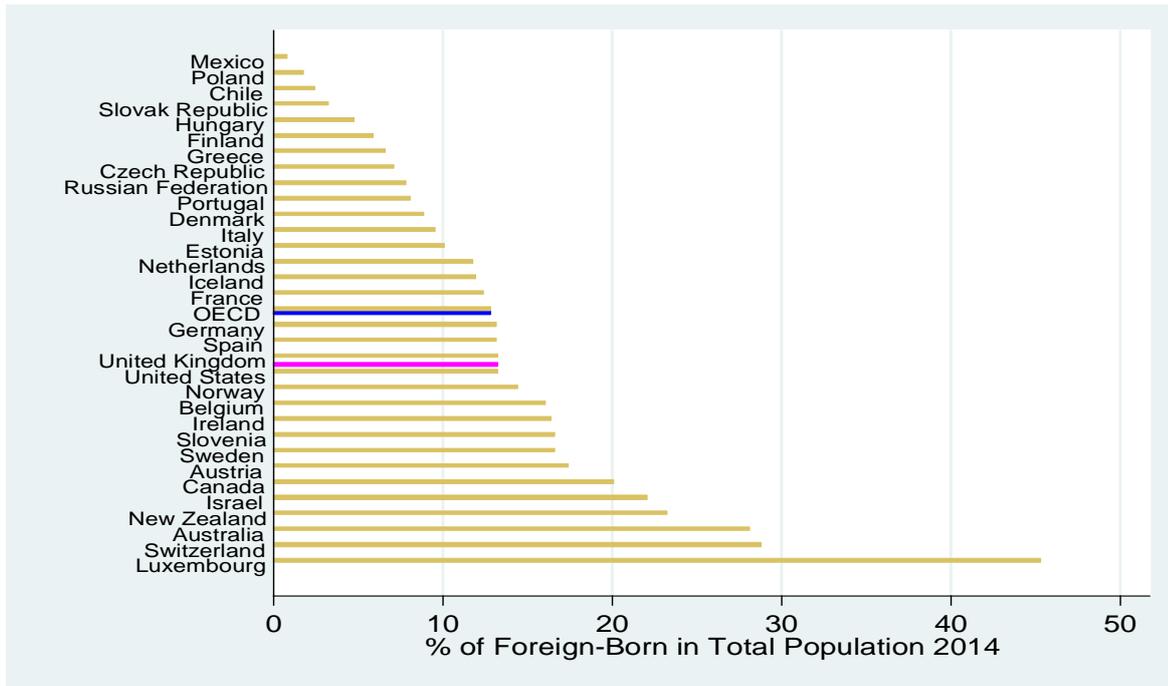
	Total (millions)	UK-born (millions)	Immigrant (millions)	Immigrant share (percentage)	of which EU (millions)
Total					
1975	55.3	52.1	3.2	5.8%	0.9
1990	56.4	53.0	3.5	6.1%	1.1
1995	57.2	53.3	3.8	6.7%	1.1
2016	64.6	55.6	9.0	14.1%	3.5
Working age					
1975	33.6	31.2	2.5	7.3%	0.7
1990	36.4	33.7	2.7	7.5%	0.8
1995	36.4	33.4	3.0	8.2%	0.8
2016	41.0	33.6	7.4	17.9%	2.5

Source: CEP analysis of Labour Force Survey. Working age population is 16-64.

The UK is not however very different from many other OECD countries with regard to its share of immigrants or with regard to the rate of new migrant inflows. The UK is, and has been for some time, a middle ranking country in terms of foreign-born population share (see Figure 1).¹

¹ For international comparison of inflows across countries see OECD (2016) <http://www.oecd-ilibrary.org/docserver/download/8116101e.pdf?expires=1482154921&id=id&accname=ocid71015720&checksum=1ADB280C3559BA80608AC93D389DDF14>

Figure 1: Immigrant shares across the OECD

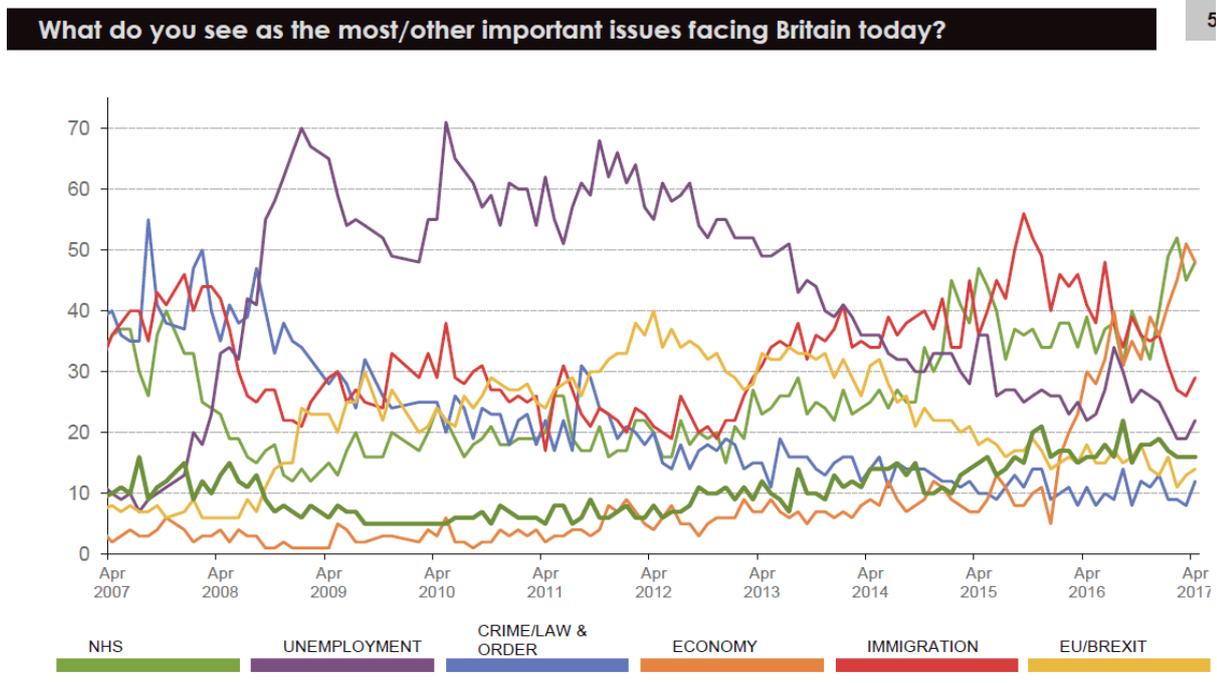


Source; OECD (2016) <https://www.oecd.org/els/mig/keystat.htm>

But according to regular opinion polling, immigration (and Brexit) alongside the NHS continue to be at the forefront of the public’s concerns (see Figure 2), so it is important to try and assess the evidence on immigration’s effects in the labour market and in the wider economy.

Figure 2: Public perceptions of important issues facing the UK

Issues Facing Britain: Ten Year Trends



Source: IPSOS MORI (2017)

Who comes and who goes?

The total population of immigrants depends on both the size of inflows and the length of stay, which in turn is related to the number of outflows of immigrants. If more people arrive than leave, then the immigrant population will rise. If immigrants stay in the UK for longer, then outflows will fall and the immigrant population will rise. The UK government's target of reducing *net* migration (the difference between the number of people entering the UK and the number of people leaving) to tens of thousands requires either a fall in the numbers entering the UK or a rise in the numbers leaving the UK (or both).

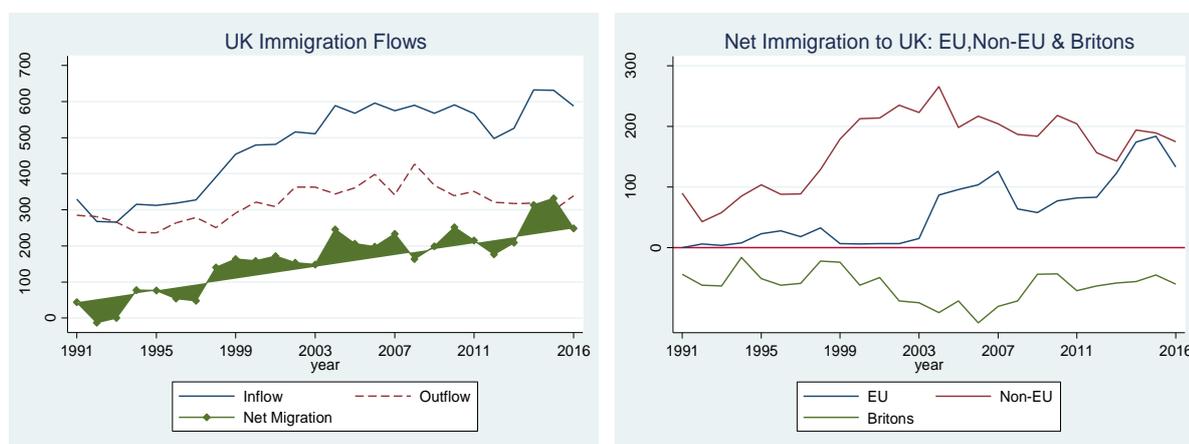
According to the International Passenger Survey (IPS), annual outflows into the UK have been larger than yearly inflows since 1993 (see Figure 3). Inflows have grown steadily over time while outflows have been broadly constant. In the last few years up until 2015, net inflows rose again significantly as the economy recovered.

Net immigration targets (the difference between who comes in and who goes out) are by definition very difficult to control, since government can, at best, only control who comes in and not who leaves.

Net migration has fallen over the last year. The irony is – as Figure 3 shows – that much of this has been driven by either by a rise in emigration out of the UK by EU (mainly A8) citizens, or by a fall in the number of Britons returning to the UK, factors over which the government has little control.²

Figure 6 second panel shows how the net flows have changed for EU and non-EU immigrants. Until last year, immigration from the EU had been growing faster than immigration from elsewhere. Now net immigration from the EU has fallen back. In the year to December 2016, net EU immigration was around 133,000, comprising 250,000 EU nationals arriving and 117,000 leaving. Net immigration for non-EU nationals 175,000.³

Figure 3: Net immigration to the UK, 1991-2016



Source: ONS (2017).

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/datasets/migrationstatisticsquarterlyreportprovisionallongterminternationalmigrationtimestimates>

Who migrates to the UK?

After the A8 countries⁴ joined the EU in 2004, immigration to the UK rose significantly, then fell back during the recession from 2008 and resumed thereafter. By 2016, there were around 3.3 million EU immigrants living in the UK, up from 0.9 million in 1995 – a rise to 5.3% of the population from

² Inflows and outflows of British citizens are included in the official long-term migration estimates.

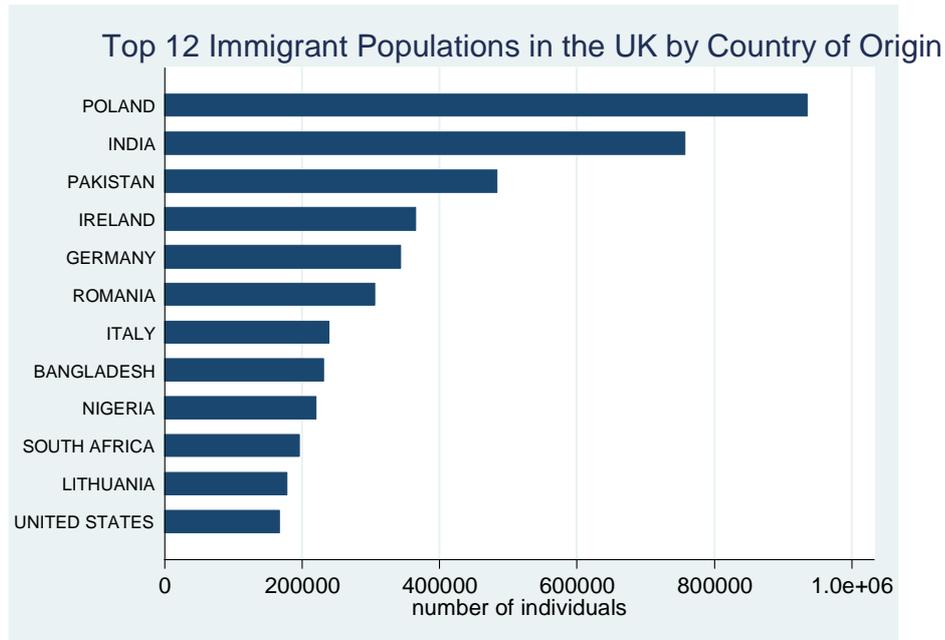
³ The total net migration count is reduced by net emigration of around 50,000 UK nationals (in 2016)

⁴ The A8 is Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

1.5%. Around 2.5 million of these migrants are aged 16-64 and two million are in work. EU countries now account for 35% of all immigrants living in the UK.

The top 12 immigrant sending countries are outlined in Figure 4. These populations reflect the changing history and patterns of immigration to the UK over the last 70 years. Poland is now the largest source country of immigrants – at around 940,000 – followed by India (750,000) and Pakistan (480,000). Lithuania supplies most migrants per head of its own population (180,000 immigrants living in the UK is around 6% of Lithuania’s population).

Figure 4: Immigrants by country of origin, 2016



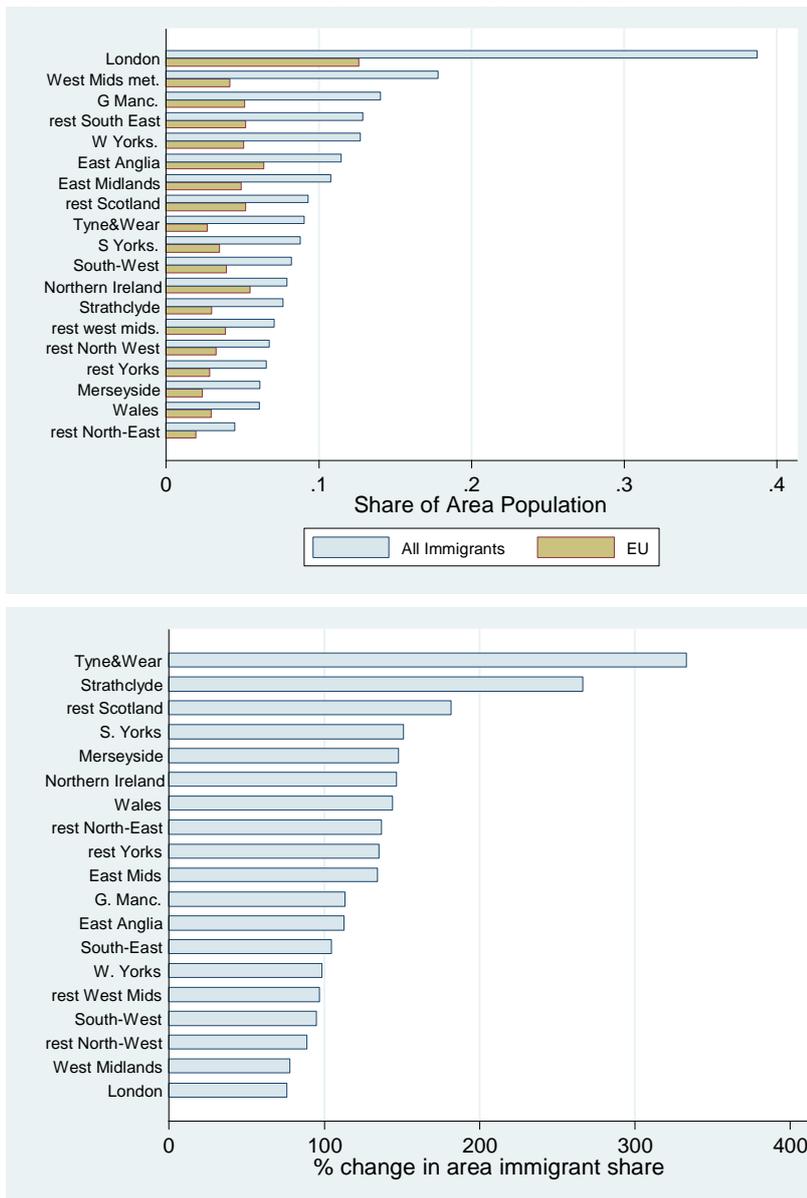
Source: CEP analysis of Labour Force Survey.

Immigration patterns within the UK

There have long been more immigrants in London than in the rest of the country (see Figure 5, panel 1). Almost 40% of London’s population was born abroad. More than a third (37%) of all migrants to the UK live in London compared with only 10% of UK-born. In contrast, less than 5% of the population of the North East (excluding Tyne and Wear) were born abroad. Migrants from the EU are more evenly distributed across the UK, though again London accounts for the largest fraction of EU migrants.

The pace of change in immigration across areas of the UK is quite different (- see Figure 5, panel 2). Immigration has grown proportionately more in areas with relatively little experience of immigration. It may be that the rate of growth of immigration, even when the numbers of immigrants are low, helps shapes people’s perceptions about the effects of immigration.

Figure 5: Share of immigrants in regional populations, 2016



Source: CEP analysis of Labour Force Survey.

Immigrants are, on average, more educated than the UK-born (Table 2) – almost twice as many immigrants have some form of higher education (46% compared with 24% UK-born). Only 18% of immigrants left school at 16 compared with 43% of the UK-born.

Table 2: Educational attainment and immigrant status (working age population), 2016

Age finished education	UK-born	EU immigrants	A8 immigrants	All immigrants
High (21 or older)	24%	45%	38%	46%
Medium (17-20)	33%	42%	53%	36%
Low (16 or under)	43%	13%	8%	18%

Source: CEP analysis of Labour Force Survey.

Notes: The A8 countries are the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia, all of which joined the EU in 2004. Working age population is all aged 16 to 64.

2. Assessing the evidence on immigration’s effects on jobs and wages

National trends

About 70% of EU immigrants say they come to the UK because of work-related reasons, as opposed to coming to study or joining their families (ONS, 2016). Since immigration increases the total number of people in work or looking for employment, does that mean that UK workers *must* have been harmed by this increased competition for jobs?

The short answer is ‘no’. A belief otherwise is called the ‘lump of labour fallacy’. There could be some disadvantages from immigration only if the total number of jobs were fixed and then only where immigrants compete for a particular type of job. But since immigrants also consume local services and goods, this increases demand and so raises job prospects for all who produce those goods and services. Another way to think about this is that over the last 100 years, the UK population has grown by around 50% but the unemployment rate has not trended inexorably upward.

But even if there is no reason to think that immigration should increase unemployment, is it not obvious that an increase in the supply of workers must drive wages down? Again, this isn’t necessarily so. Any supply effects on wages could be offset by the increased demand that a rising population brings. In addition, greater movement of labour allows countries and individuals to specialise in what they are best at, just like increased trade. Firms will change the mix of their products to account for the new skills available to them. Immigrants, especially if they are more skilled, can boost productivity. All these effects will tend to *increase* wages.

Consequently, the impact of immigration on UK-born workers is an empirical question and not a foregone conclusion. We need to look at data for evidence.

The best source of data to explore the impact of immigration is the Labour Force Survey (LFS). This is because it is possible to measure the economic circumstances of people born in the UK and compare them with immigrants from the EU and other countries. The Annex gives more details.

Table 3 shows that EU immigrants are not only more educated, they are also more likely to be in work (78%) than UK-born individuals (72.3%) and less likely to be unemployed or economically inactive. This is particularly true of A8 immigrants: more than 80% of them are in work. Immigrants as a whole are less likely to be in work than the UK–born. This is driven by low levels of labour market participation of women from certain non-EU countries.

Table 3: Employment, unemployment, students and economic inactivity by immigrant status (working age population) 2016

	UK-born	EU immigrants	A8	All immigrants
<i>% of whom:</i>				
Employed	72.3%	78.0%	80.1%	70.7%
Unemployed	3.3%	3.2%	2.5%	3.9%
Student	8.3%	6.4%	5.8%	7.6%
Inactive	16.2%	12.4%	11.6%	17.8%

Source: CEP analysis of Labour Force Survey.

Immigrants are typically younger. Among the working age population, the average age of the UK-born is 40, the average western EU immigrant is 38 and the average A8 immigrant is 34.

Education partly determines the occupations and industries in which an individual will work. In addition, there are restrictions on sectors and occupations in which non-EU migrants can work.

Immigrants make up 17% of the employed workforce. There is a larger than average share of immigrants in professional occupations (Table 4). But there are also more immigrants than average in processing and elementary occupations (such as cleaning and bar work). This is also higher than might be expected given their qualifications. This is particularly so for EU migrants. According to the LFS, 45% of the 250,000 working in ‘elementary processing’ (SOC code 913) are immigrants (30% of the workforce is from the EU). Similarly, nearly one third of science professionals (SOC code 211) are immigrants. In contrast, just 13% of the 90,000 health and social service managers (SOC code 118) are immigrants.

This occupational mix in both high-skilled and less skilled jobs is reflected in the distribution of immigrants across industries. The health, hotel and restaurant sectors employ more migrant workers than other sectors, particularly A8 migrants – who are also concentrated in manufacturing. The energy, agriculture and public administration sectors employ relatively fewer migrant workers (see Table 5). Graduates from the EU account for most EU workers in finance, science and IT (around 5% of the sector workforces). Non-graduates comprise the majority of the EU workforce in the manufacturing and hotel sectors (around 7% and 10%, respectively).

Table 4: Occupational distribution of immigrants and UK-born, 2016

	Percentage of UK-born	Percentage of immigrants	Percentage of EU immigrants	Percentage of occupation who are immigrants	Percentage of occupation who are EU immigrants
Managerial	11.0%	9.4%	6.9%	15.0%	4.7%
Professional	20.0%	22.9%	18.2%	19.2%	6.5%
Assistant professional	14.4%	11.6%	10.9%	14.3%	5.7%
Administrative	10.9%	7.2%	6.5%	11.9%	4.6%
Skilled trades	11.1%	9.3%	12.2%	14.7%	8.2%
Personal service	9.3%	8.8%	7.8%	16.4%	6.2%
Sales	8.1%	6.2%	5.6%	13.7%	5.3%
Processing	5.8%	9.1%	11.0%	24.5%	12.7%
Elementary	9.5%	15.7%	20.95	25.5%	14.5%

Source: LFS

Table 5: Industrial distribution of immigrants and UK-born, 2016

	UK-born	Immigrants	EU	Percentage of industry who are immigrants	Percentage of industry who are EU immigrants
Agriculture	1.2	0.6	1.0	10.3%	7.4%
Manufacturing	9.6	9.8	14.2	17.4%	10.8%
Energy	1.3	0.4	1.2	9.1%	3.7%
Construction	7.5	6.5	9.4	15.2%	9.4%
Retail	13.5	11.6	11.8	15.1%	6.5%
Hotels and restaurants	4.7	8.9	9.8	28.1%	13.2%
Transport	4.7	6.9	6.5	23.2%	9.3%
Finance	3.9	4.5	3.8	19.2%	6.9%
Public administration	6.6	4.0	2.3	9.3%	2.8%
Education	10.9	8.0	6.7	13.2%	4.7%
Health	13.0	14.1	10.3	18.4%	5.7%
Other	23.1	24.7	23.0	13.8%	6.4%

Source: LFS

There is a large amount of research examining the effect of immigration on jobs and wages (summarised in Wadsworth, 2015; Portes, 2016a; Centre for European Reform, 2016; Dustmann et al, 2005, among others). This research concludes that the increase in immigration in the UK has *not* significantly harmed the job and wage prospects of UK-born workers. Most of this work, however, was conducted prior to the global financial crisis and the Eurozone crisis. So it is reasonable to ask whether these findings have changed after the most severe economic downturn for 80 years.

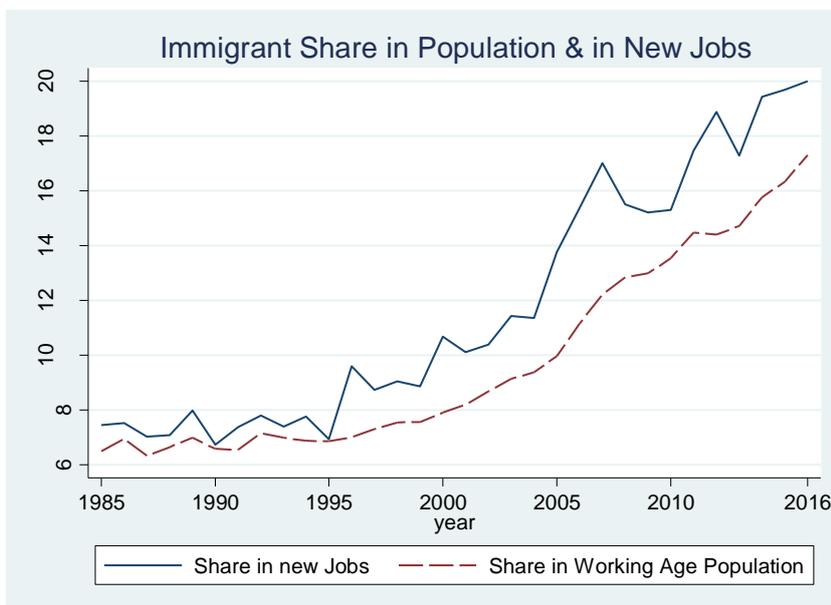
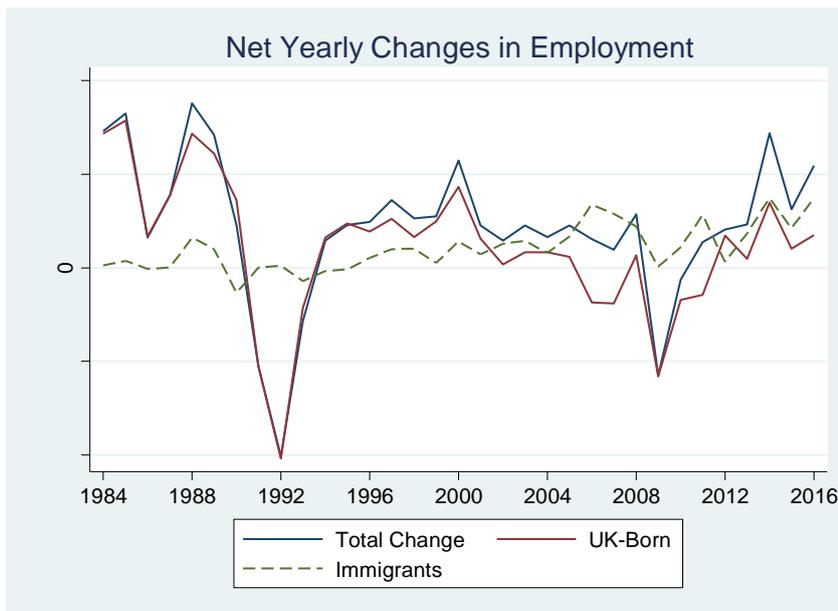
Immigrants and new jobs

It is sometime said – wrongly - that immigrants are taking a majority of all the new jobs generated. This is based on a misinterpretation of *net* changes in aggregate employment data (which is the difference between all jobs created and all jobs lost in any year).

At first glance, the top panel of Figure 6 suggests that immigrants in recent years have accounted for the majority of the net change in employment. Net employment grew by around 500,000 in 2016 and immigrant employment by around 300,000. But this net change is the difference between, approximately, 4 million new jobs being created and 3.5 million jobs being lost. When the immigrant working age population is rising faster than that of other groups, the number of immigrants in work will tend to grow faster (just as the numbers of women or people with freckles in work would grow if their respective populations increased and that of others stayed static).

To look at who gets new jobs we need evidence on *hiring*. The second panel of Figure 6 shows that the actual immigrant *share* in new jobs (jobs that are three months old or less) is – and always has been – broadly the same as the share of immigrants in the working age population. (It is a little higher partly because immigrants tend to be younger and job turnover is higher among the young). So immigrants account for around one in five of all new hires.

Figure 6: Immigrant share in new jobs

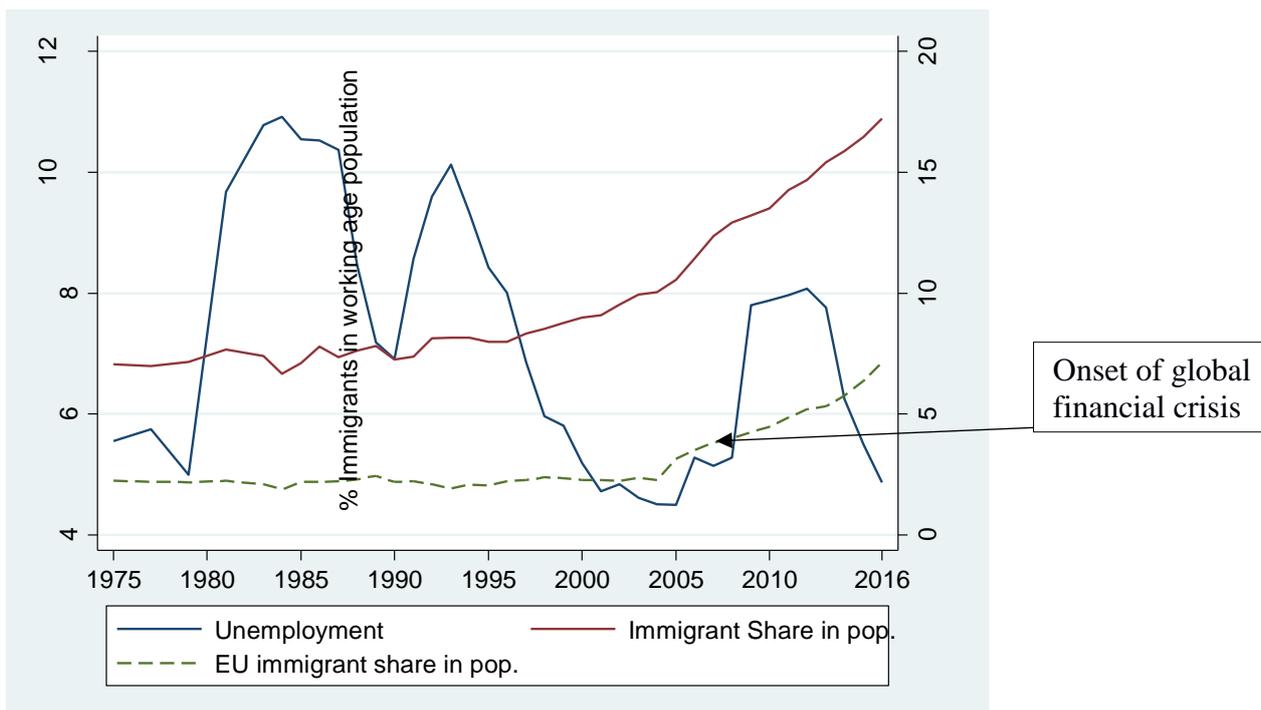


Source: LFS

Is immigration correlated with changes in joblessness and wages?

Figures 7 to 9 plot the unemployment, employment and wage trends for individuals *born in the UK* alongside the trends in immigration in total and from the EU. In Figure 7, at a time when both total and EU immigration has been rising sharply (after 2004), UK unemployment *for those born in the UK* rose – but then fell back to a very low level, while immigration kept on rising. Indeed, despite the global crash, the rise in unemployment for UK-born workers was much less than in previous downturns when immigration was much lower.

Figure 7: Immigration and unemployment of UK-born, 1975-2016



Source: CEP analysis of Labour Force Survey. **Notes:** working age population is 16-64 for men, 16-59 for women.

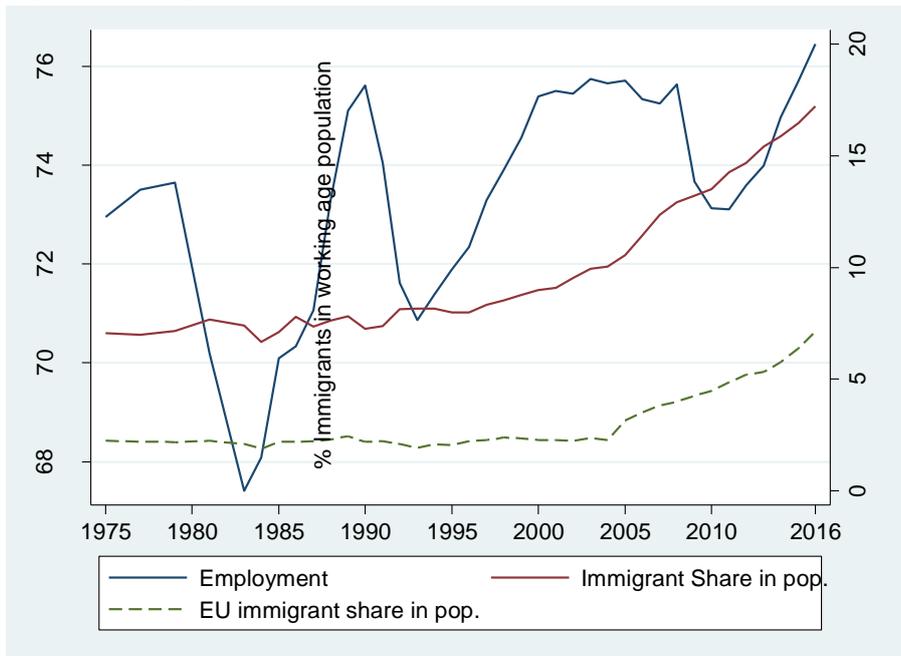
A similar pattern can be seen using the fraction of the working population in jobs (the employment rate) for UK-born workers (see Figure 8).⁵ The employment rate of *UK-born workers* goes up and down with the economic cycle, but has risen recently in the period when both total and EU immigration is also rising. Indeed, the employment rate for UK born is now higher than levels seen at the peak of previous recoveries.

Median real wages for those born in the UK were growing from the late 1990s until the global financial crisis. Since then, wages fell by about 10%.⁶ Such falls in real wages are unprecedented in the post-war period. Real wage growth has begun to grow again recently but remain well below 2008 levels. The story of the latest recession was not that many more people lost their jobs, but that most people’s wages fell. Figure 9 confirms that this fall happened while both total and EU immigration were rising – but equally the big gains in real wages for UK workers were experienced at a time when immigration was also rising. So the cause of the fall of wages is the impact of the Great Recession – not immigration.

⁵ The employment count in Figure 8 excludes any students in work – but the trends are very similar if any students in work are added back in to employment.

⁶ Depending which measure of inflation is used, real wages fell either by 11 % (using the RPI) or by 8% (using the CPI). The CPI is likely to be a lower bound and the RPI an upper bound.

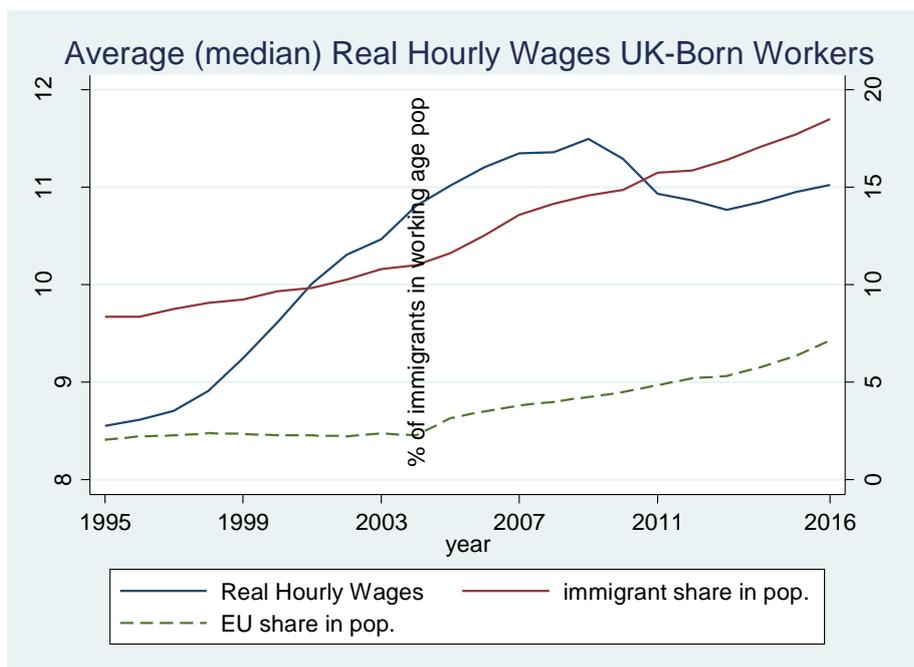
Figure 8: Employment rate of UK-born and immigration, 1975-2016



Source: CEP analysis of Labour Force Survey

Notes: working age population (16-64 for men, 16-59 for women).

Figure 9: Median real hourly wages for the UK-born, 1995-2016



Source: CEP analysis of Labour Force Survey.

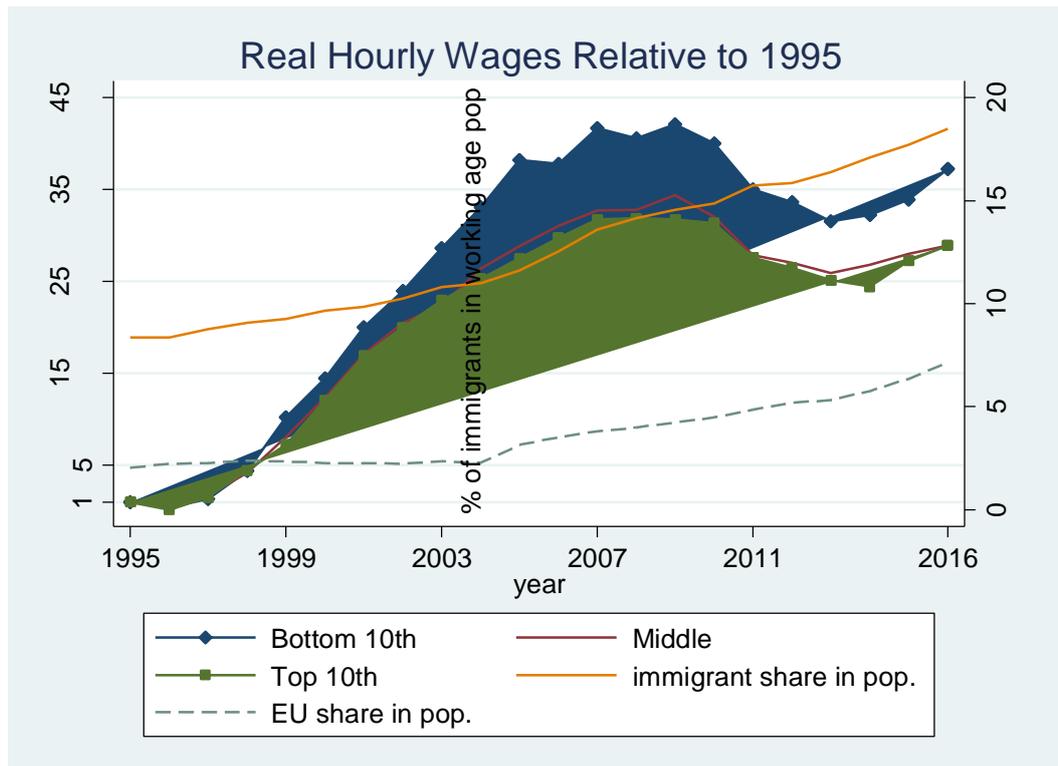
Notes: Median wage is deflated by the CPI.

Immigration, jobs and wages – local areas

Although there appears to be little correlation between immigration trends and the average worker’s jobs or wages, what about an impact on certain types of workers? Even if no one loses on average, could there be certain groups who do suffer badly?

The fact that immigrants are more educated would suggest that, if anything, they put downward pressure on the wages of higher wage people, thus reducing inequality. But there is concern that less skilled workers are hurt if educated immigrants are willing to accept low paying jobs (Migration Advisory Committee, 2014), and as we show in Table 4 above, a third of EU nationals are in the relatively low skilled ‘elementary and processing occupations’ compared with 15% of the UK-born in work. Given that immigrants are more highly educated, this may be because they are not using their skills fully. But it may also reflect the fact that they are younger and so less likely to be in more senior managerial and professional roles.

Figure 10: Wage inequality for UK-born workers and immigration, 1995-2016



Source: CEP analysis of Labour Force Survey

Notes: The Figure tracks growth in real wages (deflated by CPI) relative to level of wages in 1995 for the bottom 10th percentile, the median (50th) and top 10th (90th percentile) of UK-Born workers. For example a value of one indicates the same level as 1995 and a value of 10 indicates real wages 10% above 1995 level. Working age population (16-64 for men, 16-59 for women).

If we track the wages of *UK-born workers* at the top, middle and bottom of the pay distribution over time (Figure 10), we see the sharp fall in real wages since the recession in 2008 hit everyone by broadly the same amount (around 10%). So most people are equally worse off. The introduction of the minimum wage in 1999 gave a boost to pay growth at the bottom, which continued through to the late 2000s. Again, the rise in immigration occurs both in periods of relative wage growth at the bottom wage levels and in periods of relative wage stability at the bottom. So it is hard to see evidence of relative wage falls for low paid UK workers when immigration is rising.

On the face of it, it would seem that the recession coincides with much of the recent bad experiences of UK-born workers with regard to jobs and pay rather than rising immigration.

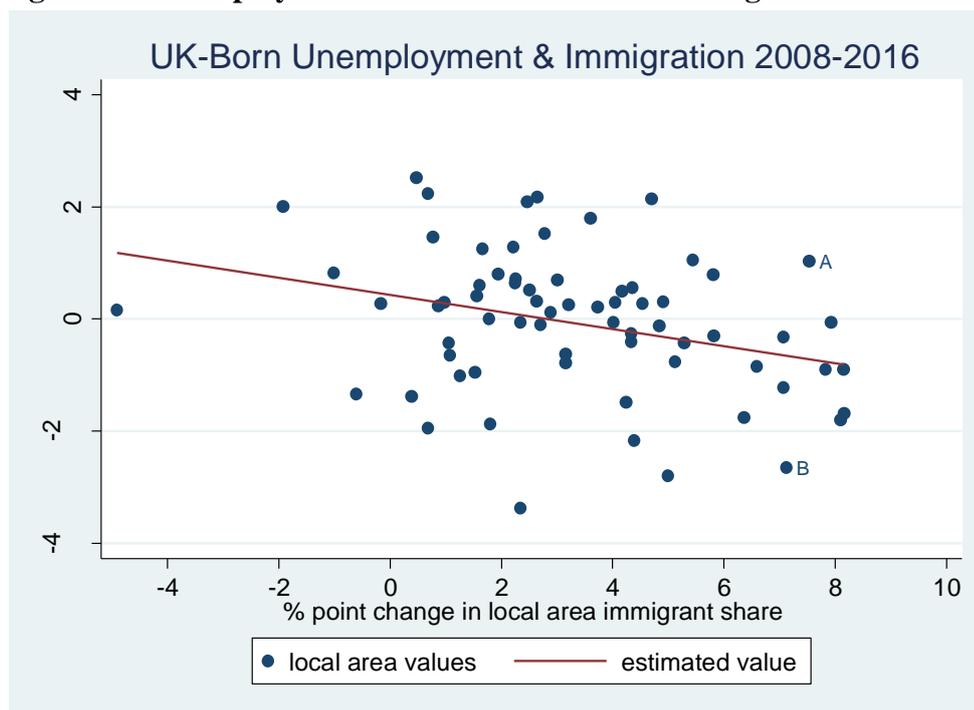
Local area effects

Looking at economy-wide changes might disguise effects in local areas where immigration has gone up by a lot. The most straightforward way to investigate this issue is to examine whether areas of the UK that had larger influxes of immigrants also had worse job and wage outcomes for the UK-born

relative to other areas. Looking at the change over time controls for lots of other features of the local labour market that could also explain unemployment and wages in those areas.⁷

Figure 11 considers changes in the unemployment rates of the UK-born across local areas in relation to changes in immigration between 2008 and 2015 (one dot for each of 69 counties). The solid red line summarises the relationship between immigration and UK-born unemployment rates. If immigration increased unemployment, we would expect a strong *upward* sloping line: more immigrants would mean more unemployment for local workers. It is very clear from the graph that there is no positive relationship between immigration and unemployment rates of those born in the UK. If anything, the relationship is negative, suggesting areas with more immigration experienced larger falls in unemployment for the UK-born over this period.

Figure 11: Unemployment rates of UK-born and immigration



Source: CEP analysis of Labour Force Survey.

Notes: Each dot represents a UK local authority. The solid line is the predicted ‘best fit’ from a regression of changes in unemployment on the change in share of immigrants in each UK local authority. These are weighted by the sample population in each area. Slope of this line is -0.15 with standard error of 0.06, statistically significantly different from zero.

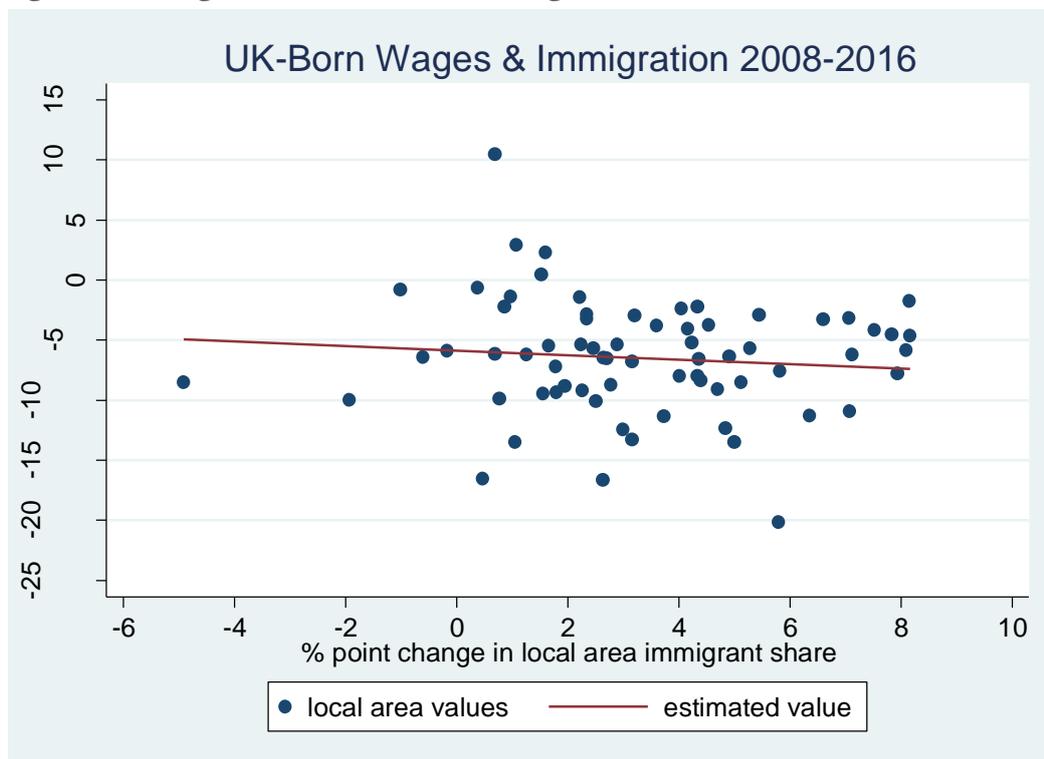
So why do some people think immigration has hurt jobs? Look at two areas – dots A and B in Figure 11. Both have had increases in the EU immigrant share of over 8% – well above the national average. In area A, unemployment for the UK-born has risen by over 3%, which is also above the national average. So in area A, it feels like immigrants are bad for jobs. But area B has had a similar increase in immigration, while unemployment here has fallen by two percentage points. Therefore, just because immigration and unemployment both go up in an area does not mean that immigration is the reason for rising unemployment, since it is quite easy to find areas where immigration went up and unemployment fell. Something else must underlie the ill fortune of UK-born individuals areas with rising unemployment.

Figure 12 provides the same analysis of the impact of immigration on pay. Again, there is no apparent link between changes in the real wages of UK nationals and changes in immigration. Wages of UK-

⁷ The analysis in this section uses total immigration but if done using EU immigration the results are essentially the same. Results available on request.

born workers changed at much the same rate in areas with high immigration as in areas where the change in immigration was low.

Figure 12: Wages of UK-born and immigration



Source: CEP analysis of Labour Force Survey.

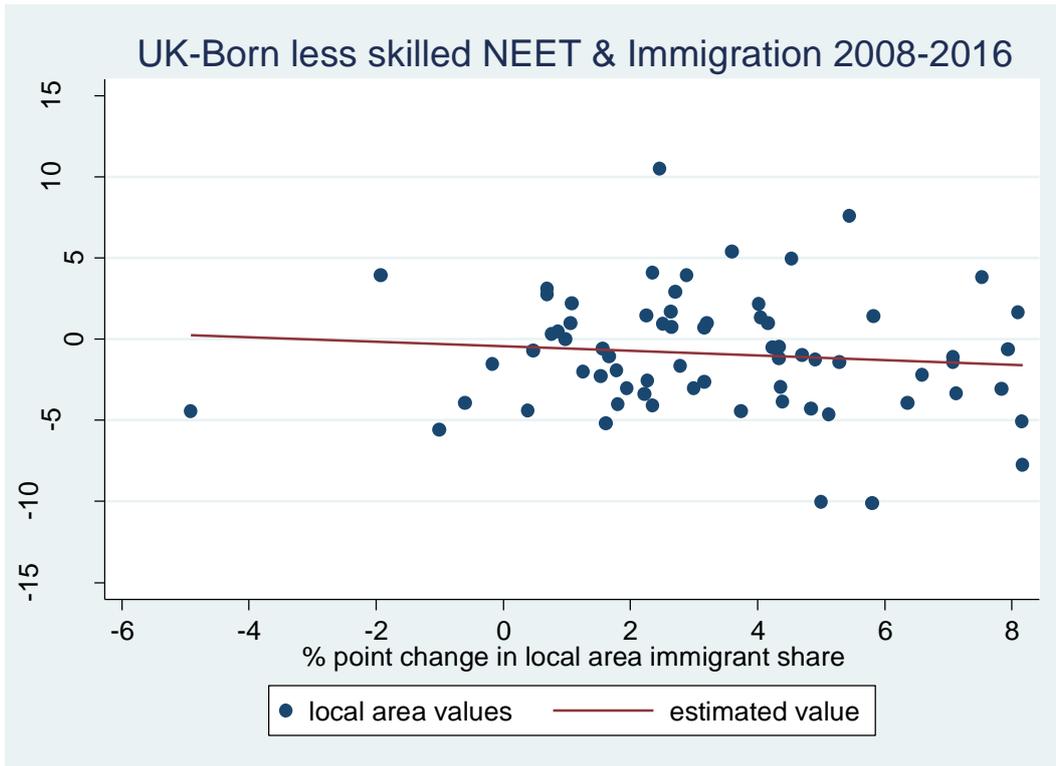
Notes: Each dot represents a UK local authority. The solid line is the predicted ‘best fit’ from a regression of local authority percentage change in wages on the local authority change in share of immigrants. These are weighted by the sample population in each area. Slope of this line is -0.19 with standard error of 0.21, statistically insignificantly different from zero.

To see if employment and wage prospects for *less skilled* UK nationals are associated with EU immigration, Figure 13 looks at the change in the NEET rate (‘not in education, employment or training’) for low skilled UK-born, defined as those who left school at the minimum leaving age or younger. There is again no effect of EU immigration on their job prospects. If anything, the relationship is negative – NEET rates fell furthest between 2008 and 2015 in areas where EU immigration rose faster. But the estimate, like all others, is statistically insignificant. Likewise, Figure 14 shows no obvious link between the pay of less skilled UK-born individuals and changes in the local area population of EU nationals over this period.

The Technical Appendix presents a number of variations of these graphs. For example, we repeat the analysis for other periods such as starting in 2004 when the A8 joined the EU or 2011 when the Eurozone crisis really worsened. We drop London to make sure that the capital is not biasing the relationships.⁸ We use a small level of local area disaggregation. Across all experiments, the results are essentially unchanged: *immigration does not seem to be associated with diminished labour market prospects for UK-born workers.*

⁸ Results available on request.

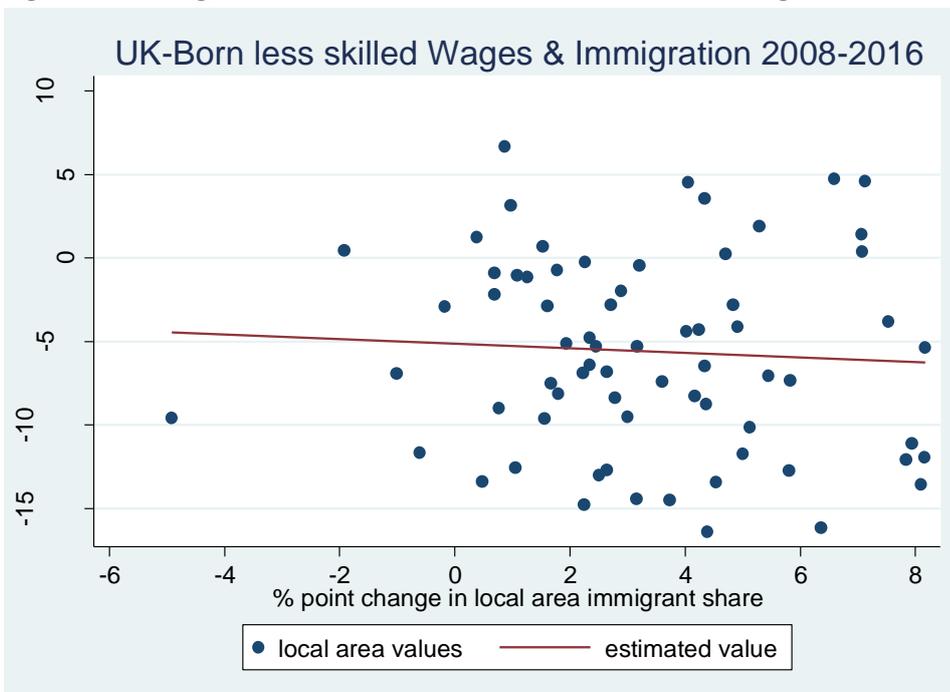
Figure 13: NEET ('not in education, employment or training') rates for less skilled UK-born and EU immigration, 2008-2016



Source: CEP analysis of Labour Force Survey.

Notes: Each dot represents a UK local authority. The solid line is the predicted 'best fit' from a regression of local authority change in NEET rates for the less skilled on the local authority change in share of EU immigrants. These are weighted by the sample population in each area. Slope of this line is -0.14 with standard error of 0.17, statistically insignificantly different from zero. Less skilled is defined by those who left school at 16 or earlier.

Figure 14: Wage rates for less skilled UK-born and immigration



Source: CEP analysis of Labour Force Survey.

Notes: Each dot represents a UK local authority. The solid line is the predicted 'best fit' from a regression of local authority percentage changes in the wages of the less skilled on the change in share of EU immigrants. These are weighted by the sample population in each area. Slope of this line is 0.02 with standard error of 0.21, statistically insignificantly different from zero. Less skilled is defined by those who left school at 16 or earlier.

One group that *does* seem to lose out from new immigration is the stock of other recent arrivals (Manacorda et al, 2011). So although there is no negative effect on UK-born workers, there might be some depressing effects on other immigrants who settled in the UK a few years back.

What of the studies that do find (small) negative wage effects of immigration? Dustmann et al (2013) find small wage losses for those in the bottom 10% of the pay distribution and larger wage gains for those in the middle of the pay ladder as a result of immigration. Their estimates imply that the wave of EU immigration between 2004 and 2015 reduced wages in the bottom decile by 1.03% and raised wages for the median worker by 1.24%. But the areas where the bottom 10% had relatively slow wage growth were places like London. London had big increases in immigration but also had the weakest bite of the rapidly rising minimum wage. Consequently, it is likely that even these small negative effects are overstated by not controlling for the minimum wage effects.

Nickell and Saleheen (2015) find small wage losses for occupations with fast increases in immigration. Their results imply that all EU immigration since 2004 has reduced semi/unskilled service sector wages by only about 0.7% (compared with a 4% increase in the minimum wage over the same period, Centre for European Reform, 2016). But they do not separate wages of the UK-born from immigrant wages as we do, so even their small effects of EU immigration on wages may be coming from its effects on other immigrants. Furthermore, the occupations that lose may be counterbalanced by the occupations that gain in a local area, meaning that the overall effect on the area's wages is zero, just as we find.

The impact of EU immigration on public finances and public services

What is the likely fiscal impact of immigration on public finances and public services?

Public expenditure will be lower on one point since UK taxpayers have not had to finance the childhood schooling and healthcare costs of an immigrant who arrives as an adult as they would do for a UK-born adult. Second, we have documented above that EU immigrants are younger, more likely to work and less likely to be on benefits. While immigrants, like UK nationals, would not be eligible for contributory-related benefits until they have worked full-time for two years, they could be eligible for means-tested benefits should they apply. HMRC estimates that around 6% of tax credit claims are from households that include an EU national in line with the share of EU nationals in the UK (House of Commons, 2014).

After trying to account for the many possible ways in which individuals pay taxes or draw welfare, Dustmann and Frattini (2014) find that EU immigrants made a positive fiscal contribution: they paid more in taxes than they received in welfare payments. For example, A8 immigrants paid in about £15 billion more than they took out in public spending in the decade up to 2011. While this effect may seem small, the longer-run impact could be substantial. The central estimate of the Office for Budget Responsibility (2013) is that the UK's national debt will be 40 percentage points higher in 2062 if net immigration is reduced to zero from 140,000 per year. By contrast, UK nationals, as a whole, received more in benefits than they paid in taxes, much the same as non-EU immigrants. A recent study by HMRC (2016) finds that new arrivals from the EEA are also net fiscal contributors.

Given that EU immigrants are making net contributions, there is no reason to think that they should crowd out any public services. In fact, their extra fiscal contributions could be used to increase spending on local health and education for the UK-born. In other words, reducing EU immigration could generate the need for greater austerity. This would magnify the need for cutbacks caused by the slower growth of the economy due to reduced trade and investment identified by Dhingra et al (2016a, 2016b).

Although the fact that the government has been cutting back on public services cannot therefore be blamed on immigrants, it is still interesting to see whether immigration has led to worse local services.

If immigrants cause social disruption, we would expect this to be reflected in crime rates. Bell et al (2013) find no effect of the big 2004 increase in immigration from East European countries on crime.

Geay et al (2013) find no effect of immigration on aspects of educational attainment and actually some positive effect from Polish children on UK-born pupils. The disadvantage in having English as a second language seems to be outweighed by a stronger immigrant push to work hard at school.

For the NHS, Wadsworth (2013) finds no greater usage of doctors and hospitals by immigrants relative to the UK-born; and Giuntella et al (2015) find little effect on NHS waiting times. These studies do not distinguish between EU and non-EU immigrants, but since EU immigrants are younger than non-EU immigrants, they are less likely to use health services, so the results are likely to be stronger.

There is a general perception that immigrants are given better treatment when applying for social housing. Battiston et al (2013) show that controlling for demographic, economic and regional circumstances, immigrant households are *less* likely to be in social housing than their UK-born counterparts. Lack of access to social housing has more to do with the falling supply of social housing.

One area where we may be concerned is the effect of immigration on house prices. The UK's terrible track record of building insufficient houses does mean that the population increase generated by immigrants adds to housing pressure. But the failure to create enough housing supply would be a problem even in the absence of EU immigration. It is rooted in the failure of the UK planning system to make appropriate infrastructure decisions more generally (LSE Growth Commission, 2013; Hilber, 2015). Having said this, the empirical evidence does not find positive effects of immigration on local house prices (Sa, 2015).

Another argument made in favour for Brexit was that the big increases in the minimum wage (the National Living Wage) planned over the next four years will draw in many more EU immigrants.⁹ It is unclear how big a draw this will be since it depends, in part, on what other countries do to their own wages and on the relative cost of living in each country. Office for Budget Responsibility, (2015), predicts an increase in unemployment of 60,000 which will also be concentrated among the less skilled.

Productivity and immigration

A disadvantage of focusing on outcomes in local areas is that they may miss out on the economy-wide effects of immigration. By enabling specialisation and raising productivity, immigration could also raise national wages.

Migration acts much like trade, as people tend to move to countries where they can be more productive and earn higher incomes. Migrants move from countries with lower productivity (and hence lower wages) to countries with higher productivity: this increases welfare through greater efficiency in labour allocation across the world. Immigrants also fill the gaps in the skill composition of the national workforce. This fosters specialisation, increases productivity, and raises the wages of national workers with complementary skills.

There is a consensus that there are positive effects of trade and foreign direct investment on UK productivity. But there is somewhat less of a consensus on the effect of immigration on productivity. There is strong evidence of positive effects for more educated immigrants (for example, Ottaviano et

⁹ See <http://www.dailymail.co.uk/wires/pa/article-3554751/Brexit-camp-backlash-Obama-queue-warning.html>.

al, 2016, for UK services productivity; Ortega and Peri, 2014). Indeed, most studies show insignificant or positive effects of overall immigration.¹⁰ For example, Felbermayr et al (2010) concludes that a 10% increase in the immigrant stock leads to a per capita income gain of 2.2%.

Recent work by Boubtane et al (2015, Table 3) finds that a 50% decrease in the net immigration rate would reduce UK productivity growth by 0.32% per annum. Since EU immigration is half of the current UK total (see Figure 1), cutting EU immigrants to 80,000 per year is likely to shave 0.16% off productivity growth. So about a decade after Brexit, UK GDP per capita will be about 1.6% lower than it would have otherwise been.

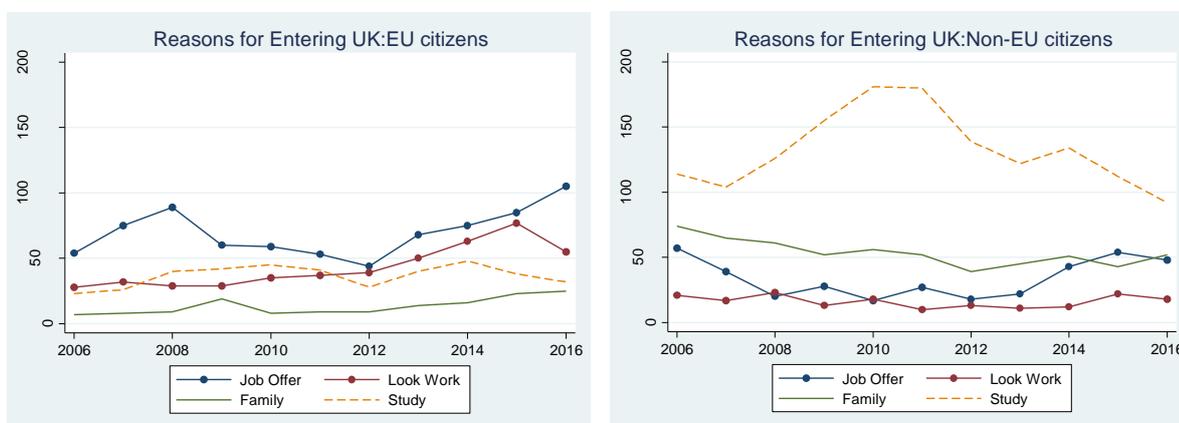
Supporters of Brexit argue that economic benefits would flow from bringing EU immigration under the same rules as non-EU immigrants. Boubtane et al (2015) also look at how improving the average skill level of immigrants could increase productivity. To offset the productivity loss from halving EU net immigration, the UK immigration system would have to improve the relative education levels of EU immigrants by about a quarter. Since EU immigrants are already significantly better educated than the UK-born, this may be hard to engineer.

3. The election and immigration: will EU immigration really be restricted after Brexit?

The parties have made few specific manifesto pledges with regard to immigration this time around. Labour and the Liberal Democrats are promising a new ‘fair’ managed migration system and both aim to take students out of the official immigration counts. Only the Conservatives have pledged to keep annual net immigration numbers below 100,000, including students. In addition, if elected they will raise the forthcoming immigration levy on firms hiring immigrants to £2,000 a year for each migrant hire (for up to five years at the firm), raise the income threshold at which dependents are allowed to join a UK resident and tighten visa regulations and post-study work options for students.

Net immigration targets (the difference between who comes in and who goes out) are by definition very difficult to control, since government can, at best, only control who comes in and not who leaves. And a survey of migrant flows – on which the net migration target is based – is also not best way to monitor migration flows. These issues notwithstanding, what type of immigration inflows might be targeted – if an incoming government were so inclined to try to reduce immigration significantly?

Figure 15. Inflows to UK by reason: EU and non-EU citizens



Source LTIMS (2017)

¹⁰ For example, <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/home-affairs-committee/immigration-skill-shortages/written/23066.pdf>

At present, only work visas issued to non-EU nationals are restricted. If the UK leaves the EU and also the European Free Trade Area (EFTA) and the European Economic Area (EEA), as seems likely, then it could restrict EU immigration in much the same way as non-EU immigration is restricted.¹¹

If EU immigration were cut following Brexit, then something like the current visa scheme that applies to non-EU immigrants would have to be adopted to accommodate immigration from the EU. Current rules effectively exclude non-EU immigration from all but graduate jobs and limit numbers arriving on work visas each year to around 55,000, (5,000 in ‘Tier 1’ and 50,000 in ‘Tier 2’) plus any dependents.¹² This would mean decisions would have to be taken on whether or not to expand the current work-related quotas to accommodate some additional flows from the EU and which skill groups to allow.

Restrictions on family migration are less likely to be effective in reducing immigration much, since many dependents now accompany individuals on skilled work visas and therefore would likely be above any income thresholds on the main income earner. Any immigration levy would raise the cost of employing migrant workers and so may reduce demand for migrants if employers are unable to pass on higher labour costs in the form of higher prices, (MAC 2016). It should also encourage firms, or the government if it channels the revenues from the levy, to invest more in training the domestic workforce.

As Figure 15 shows, work-related flows dominate EU inflows from the EU. It is likely then that after Brexit, both skilled and particularly less skilled EU immigration would be cut and there is little realistic prospect of non-EU skilled immigration being expanded. The likely cost of this would include the higher costs (tariffs) of a looser trading agreement with the EU and the effects on sectors particularly reliant on (EU) migrant labour, notably food processing and hotels and restaurants (see Tables 4 and 5 above).

Would work-related quotas on EU migrants get immigration flows below the ‘tens of thousands’? Almost certainly not. Net inflows from outside the EU are themselves well above this notional 100,000 target. So in the unlikely event that EU immigration fell to zero the 100,000 target would be breached without further restrictions on non-EU migrants. Figure 7 shows that most non-EU inflows are students. So large restrictions would have to apply to students and/or EU citizens with a job offer to get anywhere near a 100,000 target.

Conclusion

It is very difficult to find much evidence that immigration has had negative effects on many sectors of the economy. Any adverse experiences of UK-born workers with regard to jobs and wages are much more closely associated with the biggest economic crash for more than 80 years. But, it should be said, neither is there much evidence of large positive effects of immigration. So on the evidence on its economic costs (or benefits) it is hard to make a case that immigration should be a big feature of this election. But it almost certainly is.

It should be impossible to discuss immigration in the forthcoming election without thinking about what will happen as Brexit looms. Yet none of the parties has outlined a clear view of how to deal with the consequences of ending free movement of labour from the EU.

¹¹ Membership of EFTA and/or the EEA obliges member countries to accept freedom of movement, as in Norway or Switzerland.

¹² See <https://www.gov.uk/government/publications/immigration-statistics-october-to-december-2015/work>. In addition to the 55,000 work visas, there were an additional 38,000 dependents. The total for Tier 2 includes a quota of 20,700 work visas with the rest made up of short-term Inter Company Transfer visas.

Net immigration seems to have fallen over the past year, but for reasons the government has very little control over, increased emigration and a fall in numbers of Britons returning to the UK. This underlines how difficult it is to target a net immigration count.

At the national level, any falls in EU immigration are likely to lead to lower living standards for the UK-born. This is partly because immigrants help to reduce the deficit: they are more likely to work and pay tax and less likely to use public services as they are younger and better educated than the UK-born. It is also partly due to the positive effects of EU immigrants on productivity. There is a wide consensus that trade and foreign investment will also fall after Brexit, both of which would reduce UK incomes. Lower immigration is a third channel that will push UK living standards lower. How large any fall would be depends on by how much immigration will fall. This, of course, is unknown.

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Annex: Data sources and definitions

Labour Force Survey (LFS)

Most of this report is based on CEP analysis of the latest individual-level data from Labour Force Survey (LFS). The LFS is the best data source to use covering a representative sample of individuals living in the UK. For example, in 2016, it includes about 90,000 people. The analysis in Figures 8-14 uses the Annual Population Survey (APS) which is based on pooling the LFS quarterly panel over about a year. It has about 350,000 observations a year for the working age population. In the regression lines we weight by the sample population to correct the standard errors for small areas.

With the LFS, it is possible to separate out who is a UK-born individual from those who are EU nationals. This enables us to examine not just the reported trends in the labour market but also to break this down into the UK-born and immigrants.

National Insurance numbers

There is some discrepancy between the number of National Insurance (NI) numbers issued to EU nationals and survey estimates of the EU immigrant population and inflows based on the LFS and International Passenger Survey (IPS) respectively. Anyone should claim a NI number if they are in work, looking to work or wish to be eligible for tax credits or benefits. The NI count is based on these inflows. It has the advantage over the LFS that it is administrative data on the population of NI numbers and therefore not a sample. But compared with the LFS, it will underestimate the flows for EU immigrants who are working but do not have NI numbers or those who are not seeking to work.

A big disadvantage of NI numbers is that individuals keep their NI number when they leave the country. Consequently, we do not know the immigrant *outflows* using NI numbers. Thus, it is not possible to make a reliable calculation of the net immigration numbers using NI counts. According to the IPS, about 90,000 EU nationals leave the UK each year, taking their NI numbers with them. Another disadvantage of the NI numbers is that an immigrant may have one even if they are only in the UK for a short space of time. It is not simply the immigrants who are in the UK for at least a year.

Consequently, the LFS is a sample of *all* individuals living in the UK at any one time, so it is a better snapshot of the current immigration position in our view.

Definitions of immigrant status

The LFS asks people whether they were born in the UK and (except where noted otherwise) this forms the basis of our outcomes for the UK-born. For EU immigrants, we use the information on whether someone responded in the LFS that that they were a (non-UK) citizen of the EU. We use EU 'nationals' rather than EU-born because any post-Brexit policy would be to restrict people from entering the UK based on their citizenship rather than where they were born. But the results are similar using whether individuals were born in the EU as an immigrant measure rather than an 'EU national', so nothing much hinges on this.

Technical appendix

This section presents graphical analysis of variations on the link between changes in immigration and unemployment and wage changes of UK-Born workers, using different time periods and/or local area definitions. The common finding is of little association between changes in immigration and changes in labour market prospects for UK-born workers.

Figure 16: Changes in unemployment rates of UK-born and EU immigration

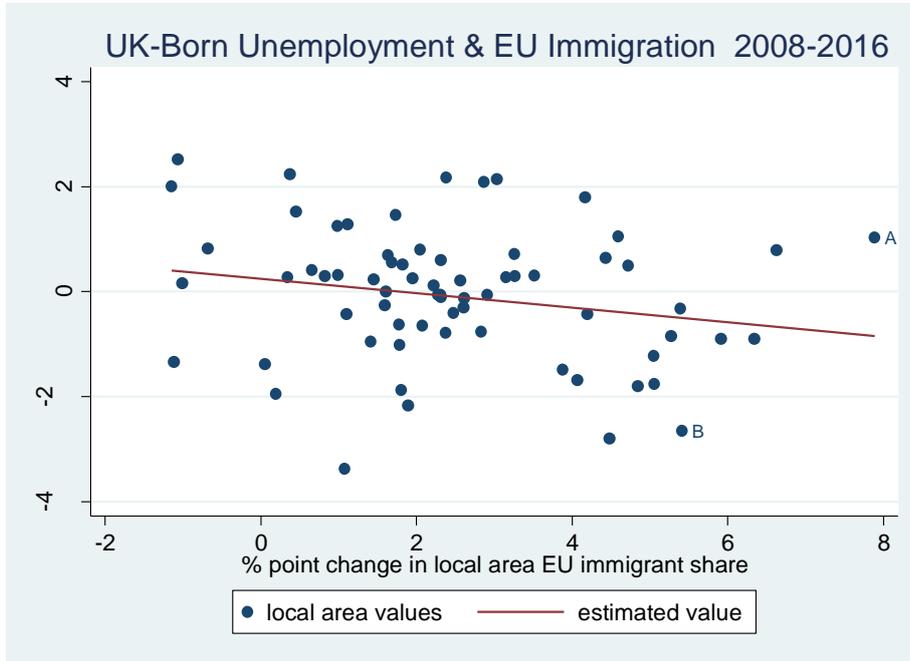


Figure 17: Wages of UK-born and EU immigration

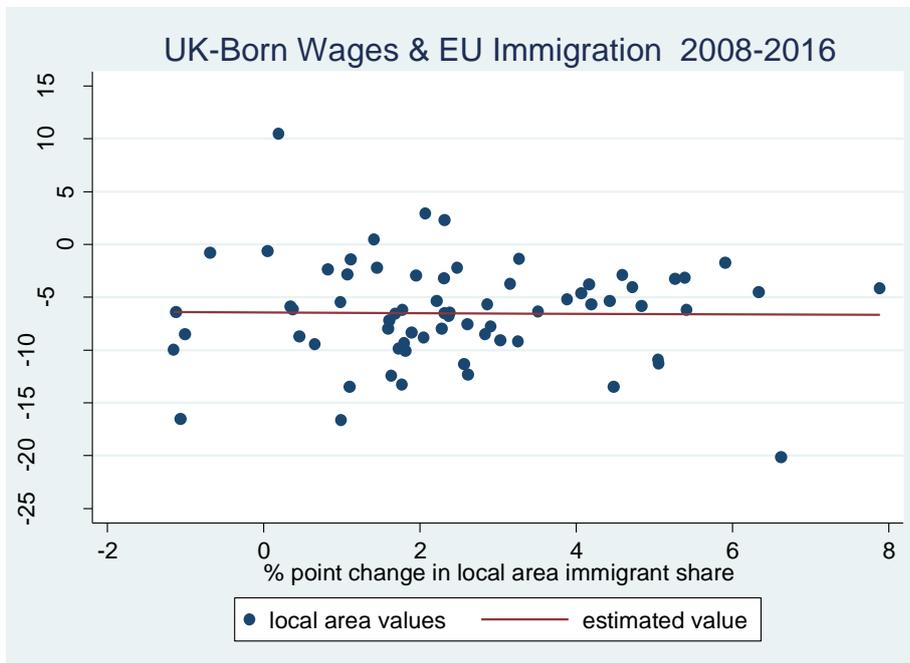


Figure 18: NEET rates for less skilled UK-born & EU immigration, 2008-2016

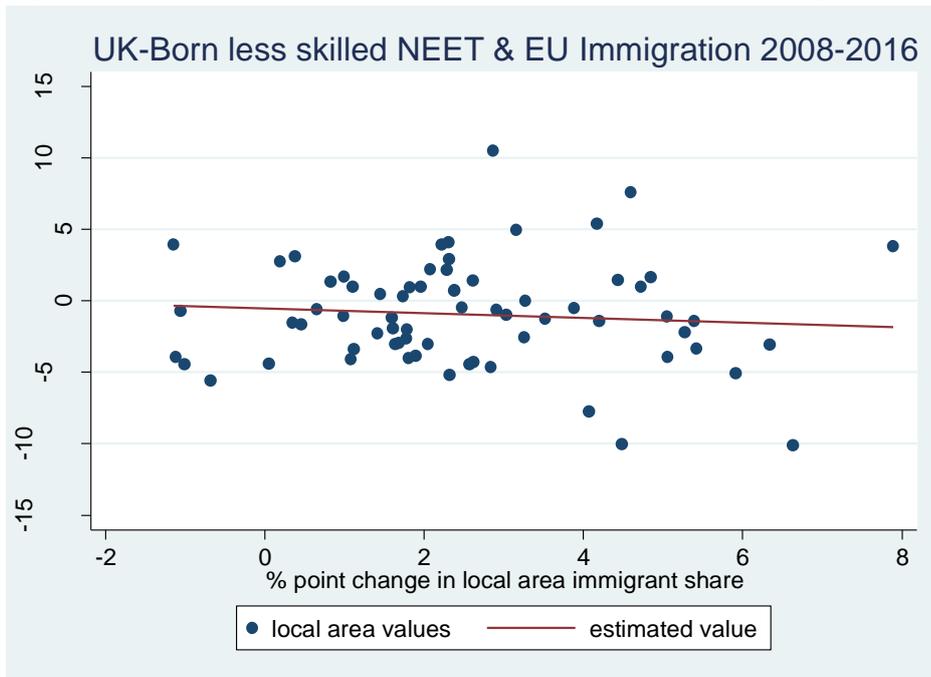
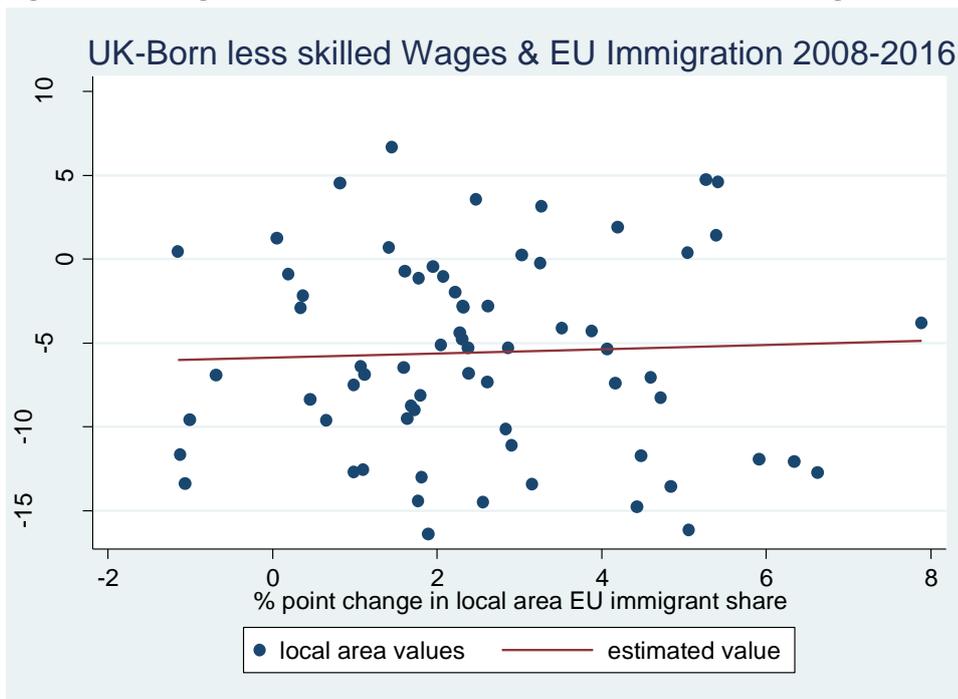


Figure 19: Wage rates for less skilled UK-born and EU immigration



Source: CEP analysis of Labour Force Survey.

Figure 20: Changes in UK-born unemployment rates

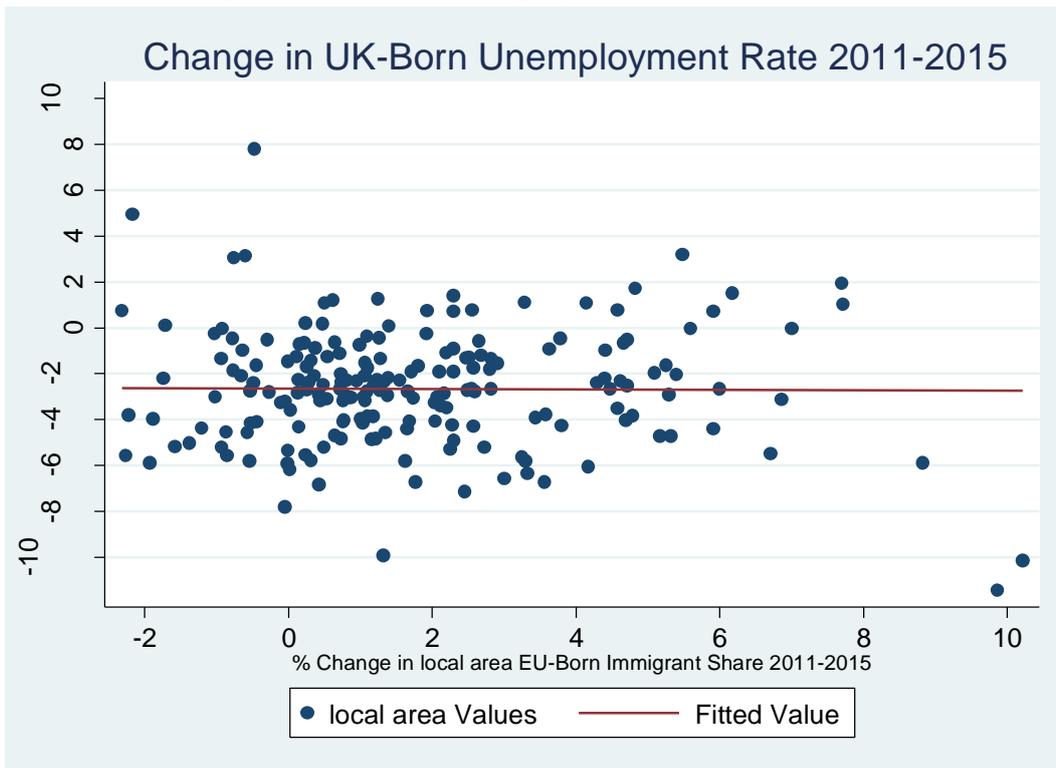


Figure 21: Changes in UK-born real wages

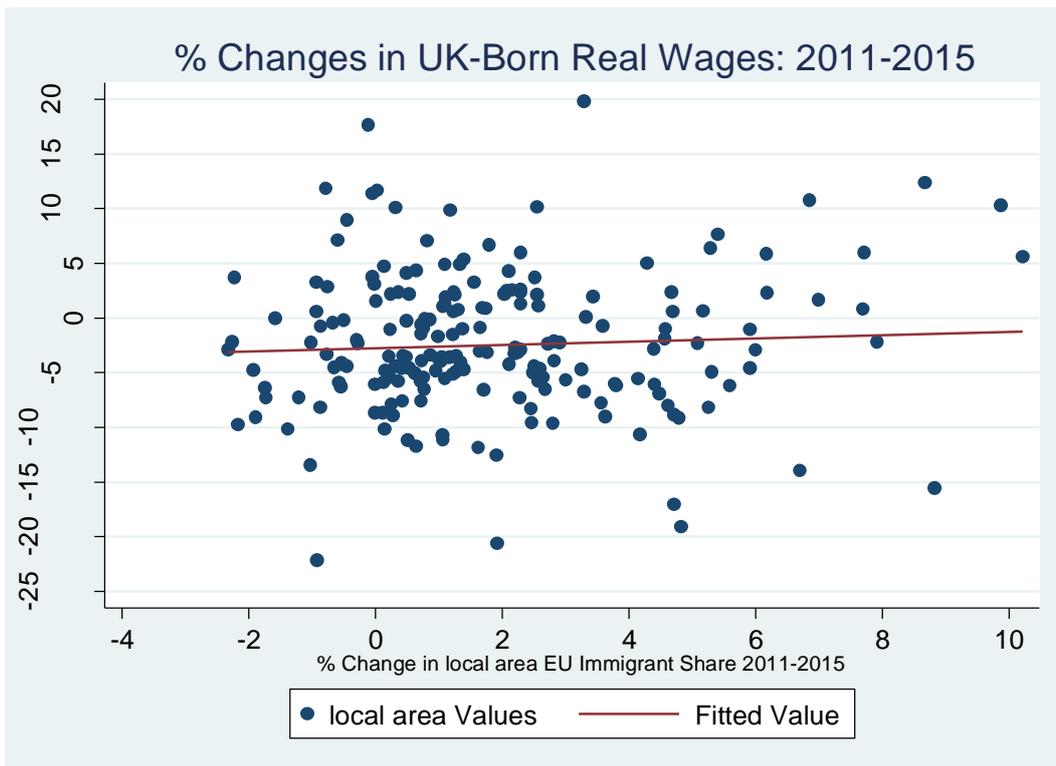


Figure 22: Changes in UK-born NEET rate for less skilled

