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Train, attract and retain: increasing Birmingham's skilled workforce

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Executive Summary

The skills of a city's population are the strongest predictor of its economic performance: places with a more skilled workforce tend to have higher wages and be more productive. This is because high-knowledge businesses tend to invest and create jobs in places where they can recruit the workforce they need. As the UK economy continues to specialise in knowledge-intensive activities, the availability of high-skilled workers in a place will be crucial to its economic success. And in a period of stagnant wages and low productivity growth, improving the skills of the population is a priority.

This report looks at Birmingham's skills profile and the implications for its economy.

It finds that skills represent a challenge for the local economy: Birmingham has the highest share of people with no qualifications of any UK city, and a lower share of people with high-level qualifications than the national average. And this seems to particularly be an issue for those in the 50-64 age group, who are less likely to hold a degree and more likely to have no qualifications than the rest of the working age population. This makes the city relatively less attractive to businesses, particularly knowledge-intensive ones. And as a result of these skills patterns, the city has a lower employment rate and a higher share of low-skilled jobs than the national average.

Addressing this skills challenge should be a priority and West Midlands Mayor Andy Street is right in putting this issue at the top of his agenda. There are a number of different ways to improve the skills picture. The first is improving the skills profile of Birmingham's existing population. Schools play a crucial role in this, particularly when it comes to improving the skills level of young people. Currently when comparing the performance of schools in Birmingham with those in the rest of the country, the city is not doing so well: pupil achievement at GCSE is lower than in the rest of England. And while the share of pupils obtaining 5+A*-C GCSEs including English and Maths has increased over the last ten years, the gap with the rest of England has remained almost unchanged.

Another way to improve the skills picture is to make the most of the movements of people into and out of the city. Birmingham's migration patterns are not improving the skills profile of the city – it attracts university students from the Greater South East but it loses degree holders to the same region, with the largest share moving to the capital for work.

A third approach is new graduate retention. Birmingham is doing well on this front, retaining almost half of new graduates. The city seems to be an especially attractive place for those graduates who are originally from Birmingham: more than three quarters of those who lived in the city prior to university decided to stay to work. And half of the graduates who left Birmingham decided to return to the city after university.

Over time these graduate gains have helped increase the share of people with a university degree in Birmingham. But these improvements have not been enough to close the gap between the city and the national average, suggesting that retention on its own will not be enough to bridge this gap.

In order to improve the skills of its residents, Birmingham should focus on three areas:

- **Improving the life chances of young people by focusing on early years education uptake and literacy and numeracy across all age groups.**
- **Setting up the West Midlands Skills Fund** to provide more tailored and targeted employment and training programmes, and providing better career guidance to young people.
- **Making the city more attractive to high-knowledge businesses** to increase job opportunities for graduates from Birmingham but also from the rest of the country. This should be done by focusing on improving the city centre and the transport system.



Introduction

This report looks at Birmingham's skills profile and the implications for its economy. Firstly, it looks at the skills level of the city's resident population. Secondly, it looks at the role that attracting people from other parts of the country can play in improving Birmingham's skills base. Thirdly, it looks at the movement of students and new graduates. Finally, it looks at the new graduate labour market in the city.

Centre for Cities uses the Primary Urban Area (PUA) definition of cities. For Birmingham, this comprises Birmingham, Dudley, Sandwell, Solihull, Walsall, Wolverhampton local authorities. For more information visit: <http://www.centreforcities.org/puas/>.





Birmingham's skills profile

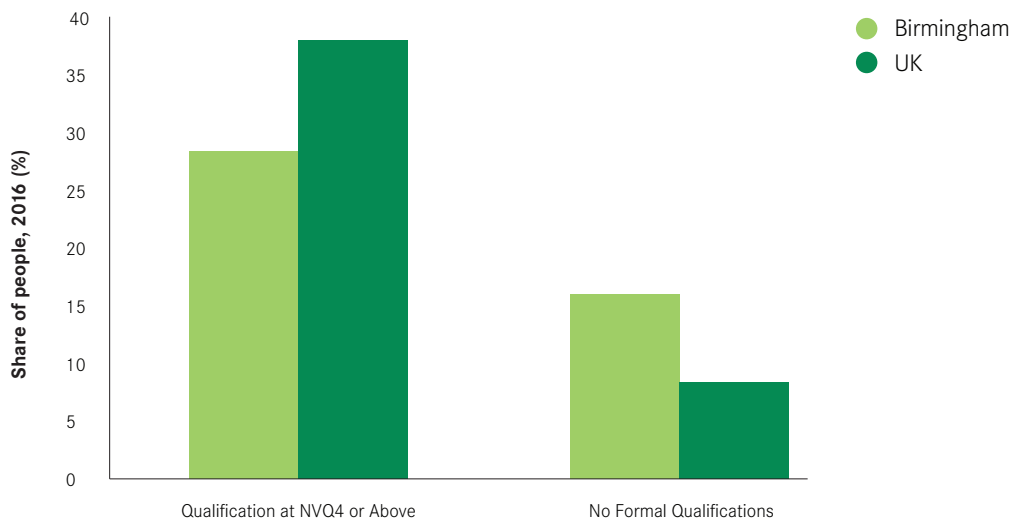
This section compares the educational attainment of Birmingham's population with the national average and other UK cities.

Birmingham has the highest share of people with no qualifications of any UK city

The skills profile of Birmingham's resident population has been a reason of concern for its economy. In 2016, the city had a lower share of people with high-level qualifications (NVQ4+) than the Great Britain average (28 per cent versus 38 per cent), as shown in Figure 1. This is the 15th lowest among UK cities. Keeping everything else constant, to close the gap with the rest of the country, Birmingham would need an extra 153,430 degree holders in its economy.

When we look at this indicator over time, the share of people with this type of qualifications has increased by 7.5 percentage points since 2006. While this is a positive development, this increase is lower than the UK average for the same period – 10.6 percentage points – suggesting that the gap has become wider in recent years.

Looking at the other side of the skills spectrum, its share of people with no qualifications – 16 per cent – is twice the GB average of 8 per cent, and this is the highest among UK cities. This has fallen over the past 10 years by 4.9 percentage points but again this decrease is lower than the national average (5.8 percentage points).

Figure 1: Share of residents by type of qualification, 2016

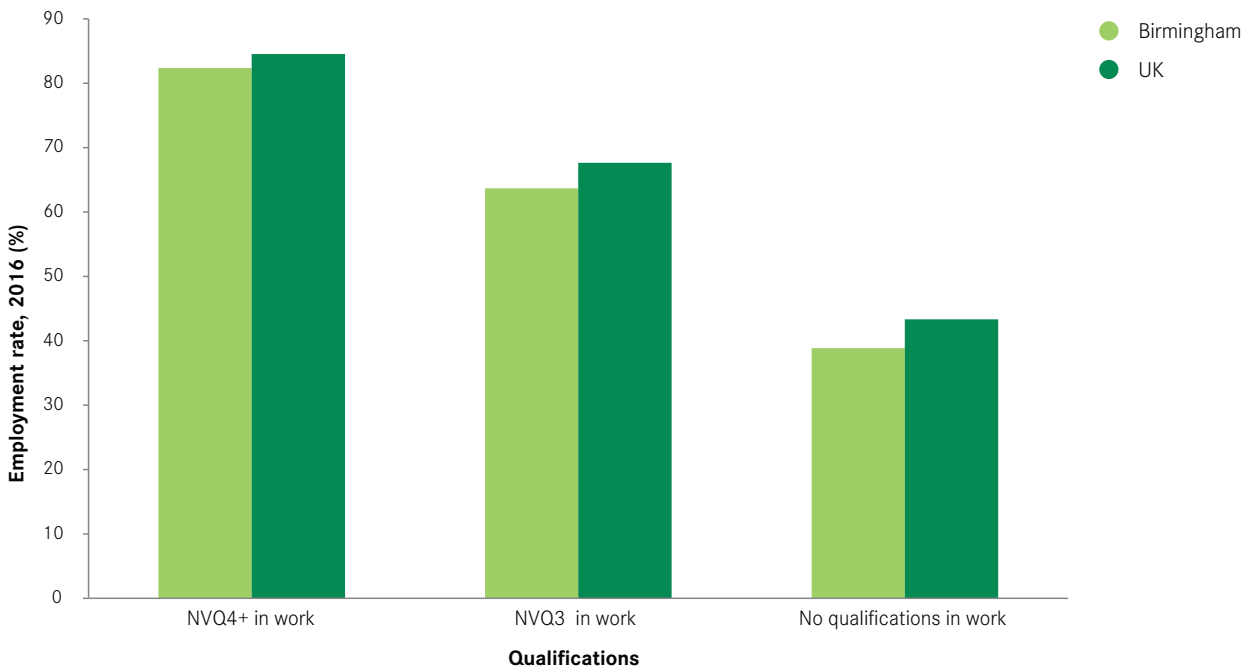
Source: ONS, Annual Population Survey

Degree holders in Birmingham are less likely to be in work than in the rest of the country

In 2016, the employment rate in Birmingham was 64.2 per cent. Employment rates in large cities tend to be lower than in other places but Birmingham's figure is significantly lower than the national average of 73.7 per cent and the third lowest among UK cities. Breaking this down by type of qualifications shows a strong link between skills levels and employment. The employment rate for highly skilled people in Birmingham – 82 per cent – is considerably higher than for people with no qualifications – 39 per cent (see Figure 2).

That employment rates differ according to the qualification level comes as no surprise. What is more interesting is that all skills groups in Birmingham are less likely to be in work than in the rest of Great Britain, including degree holders. This suggests that there might be issues with the way the local labour market operates. It could mean that skilled workers are not able to access jobs that match their skills because of information problems. But it might also mean that there is not enough demand for this level of skills in the local economy. This suggests that upskilling people is likely to be insufficient and highlights the need for the appropriate mix of supply and demand-side interventions.

Figure 2: Employment rate by type of qualification, 2016

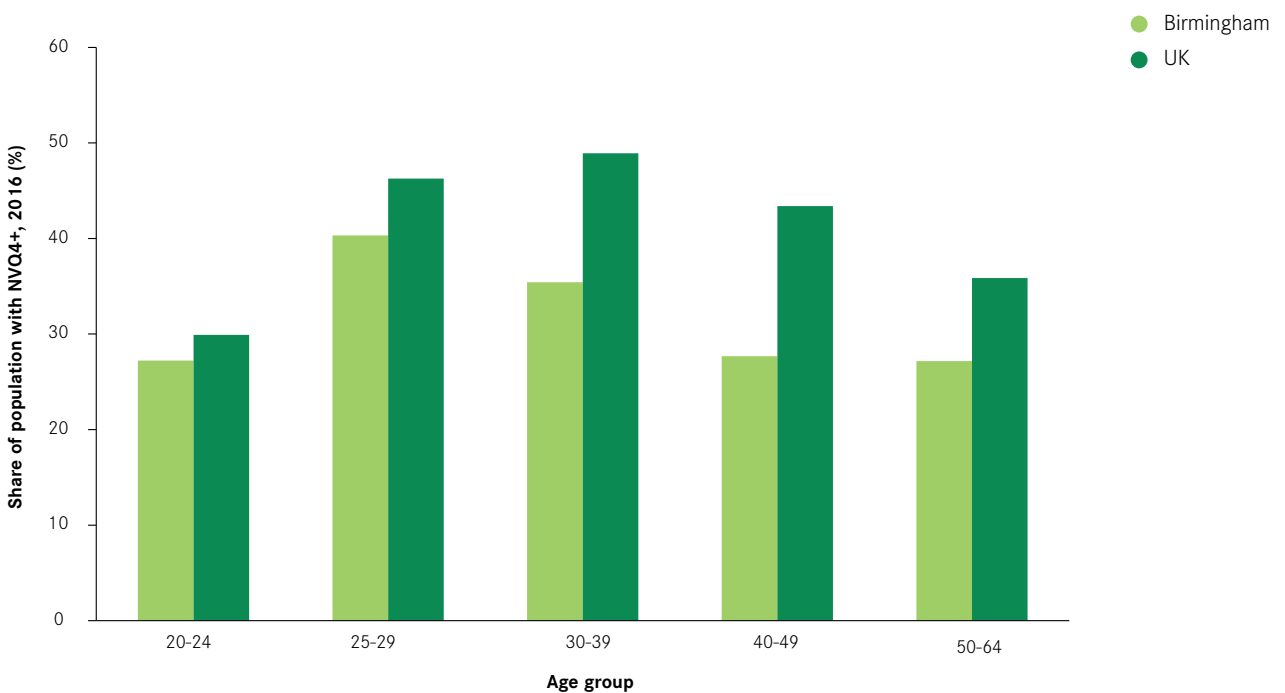


Source: ONS, Annual Population Survey

Those in the 50-64 age group are less likely to hold a degree and are more likely to have no qualifications

Looking at the share of people with a university qualification or equivalent by age groups reveals that all age groups underperform when compared with their counterparts in the rest of the country. But Figure 3 shows that the gap is smallest for the youngest age group with older people lagging further behind.

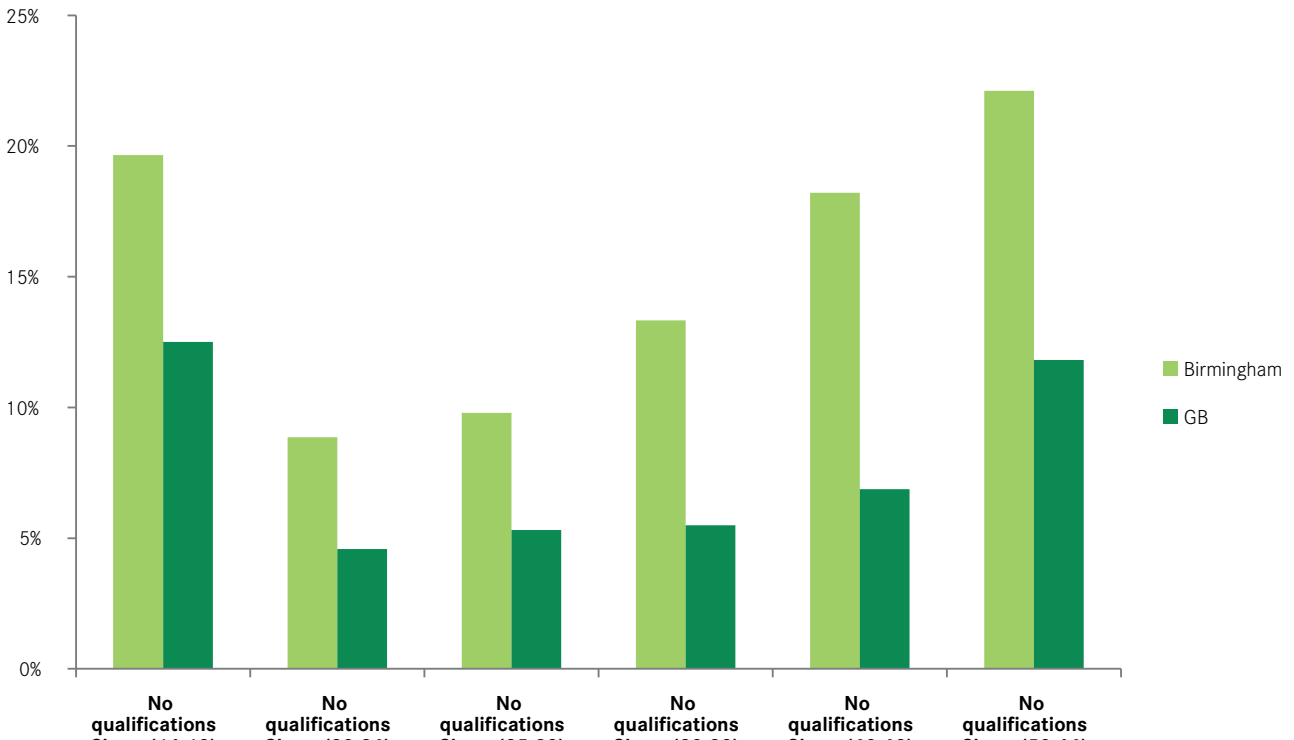
Figure 3: Share of residents with a university degree, by age group, 2016



Source: ONS, Annual Population Survey

Looking at the share of people with no qualifications by age group in the city shows that while all age groups have a higher share of people with no qualifications than the national average, the widest gaps are for those aged over 30 (see Figure 4). At the national level, it is those aged 16 to 19 that are most likely to have no qualifications. But in Birmingham it is the 50–64 age group, where more than one in five had no qualifications in 2016, the third highest of all British cities.

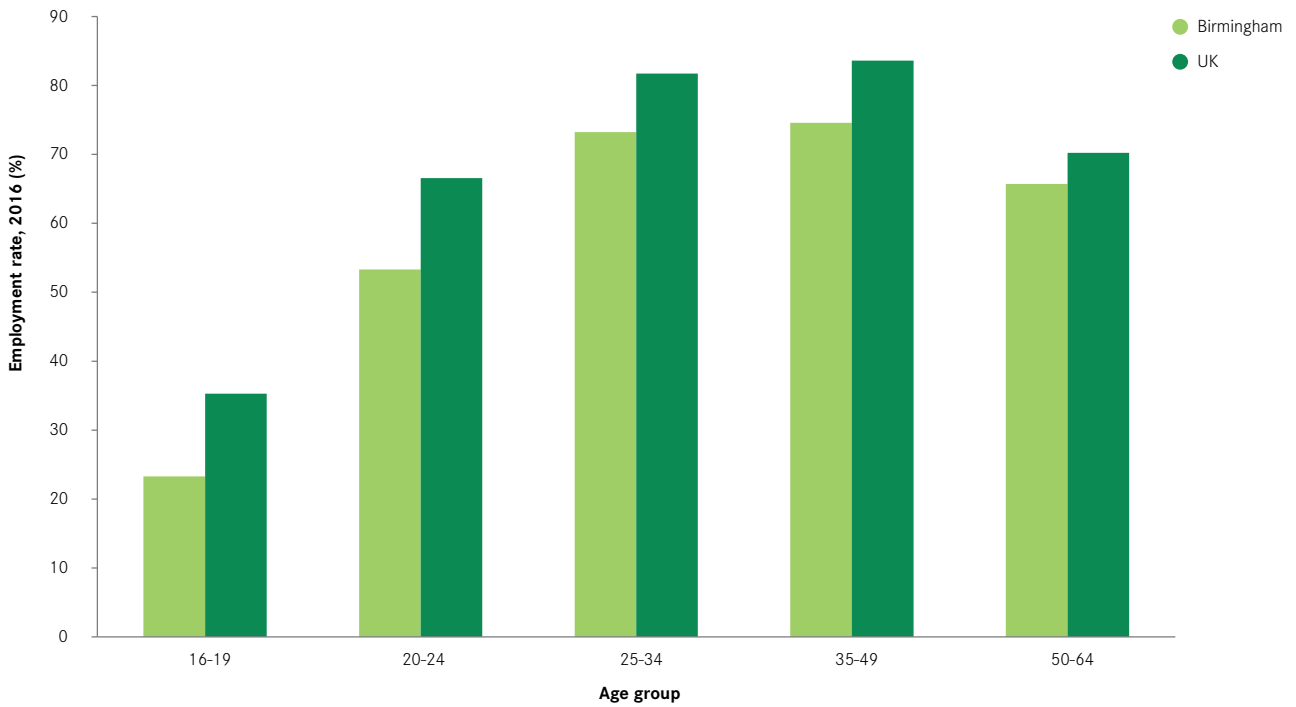
Figure 4: Share of residents with no qualifications, by age group, 2016



Source: ONS, Annual Population Survey

Despite the weaker qualifications levels of older age groups, it is younger people in Birmingham who appear to find it hardest to get on the job ladder. Figure 5 shows the employment rate by different age groups. People in the 35–49 age group are the most likely to be in work, although like all other age groups it trails the national average. The gap between Birmingham and the UK is most significant for those aged 20 to 24, followed by those in the 16–19 age group. When compared to other cities, the employment rates for these two age groups are the 8th and 5th lowest, respectively.

Figure 5: Employment rate, by age groups, 2016



Source: ONS, Annual Population Survey

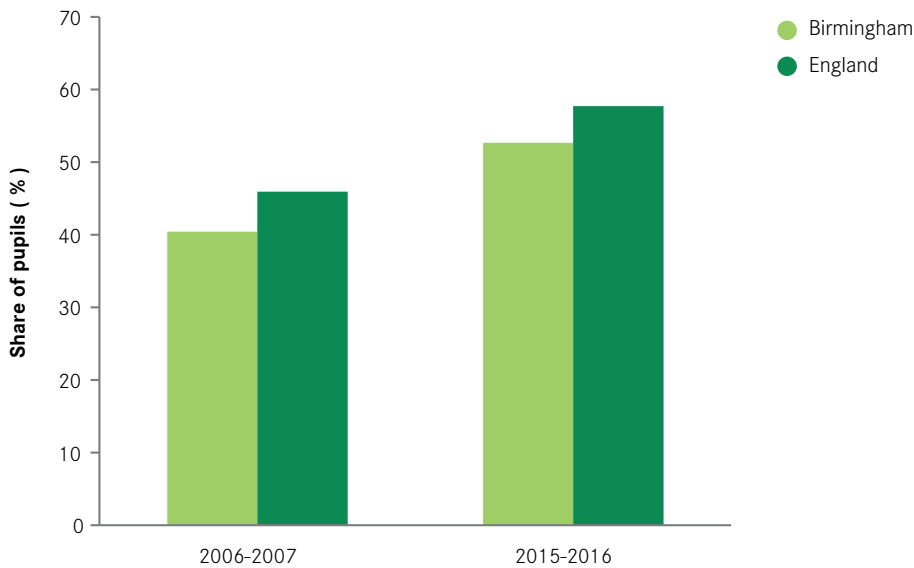
Pupil achievement at GCSE is lower than in the rest of the country

The skills issue does not only concern Birmingham’s working age population. A gap with the rest of the country is also seen during school years. Figure 6 shows that the share of pupils living in Birmingham obtaining 5+ A*-C GCSEs including English and Maths – 53 per cent – is lower than the average for England – 58 per cent. This too has improved over the past 10 years: in 2006-2007, just 40 per cent of Birmingham’s pupils achieved these grades. However the gap with the rest of England has remained the same.

Continuing to improve school performance is important for two reasons. At the individual level, research shows that there is a strong link between the performance at GCSEs in English and Maths and the job prospects of an individual. At the local economy level, educational attainment seems to affect the youth claimant rate of a place, with higher unemployment in places where school performance is weaker.¹ In this context, the performance of pupils in Birmingham helps explain the lower employment rate of younger people discussed above.

¹ Swinney, P and Clayton, N (2011) *Learning Curve: Schooling & Skills for future jobs* London: Centre for Cities

Figure 6: Share of pupils achieving 5+ A*-C GCSEs including English and Maths, 2006/07 and 2015/16



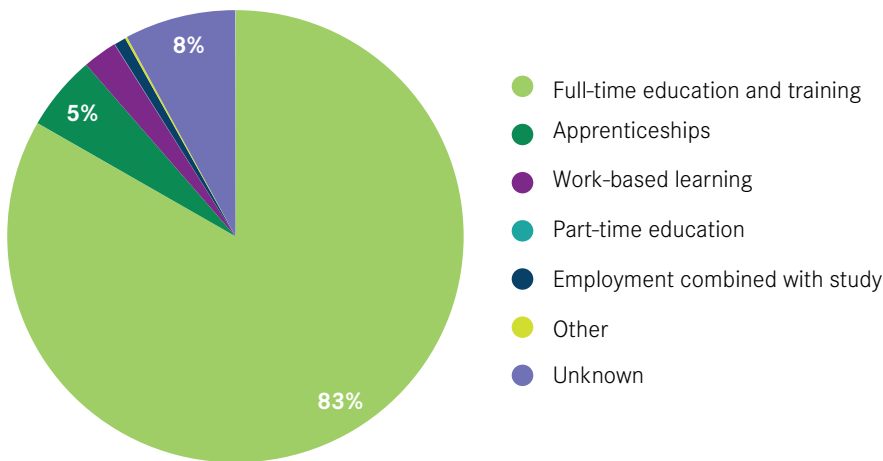
Source: Department for Education, GCSE and Equivalent Results in England; Welsh Government, Schools in Wales: Examination Performance; Department of Education Northern Ireland (DENI); Qualifications and Destinations.

Note: data for Wales is for Maths & English or Welsh. Data for Scotland is not comparable to data in the other nations, so is not included here.

Despite this, participation in further and higher education is high

However, underachievement at GCSE level does not appear to stop young people from entering Further and Higher Education. Figure 7 shows that 83 per cent of the 16 to 17-year-olds living in Birmingham are either in full-time education or training and this is the same as the figure for England. Meanwhile 7 per cent of the people in this age group are not in education, employment or training (NEET) and this is greater than the national average – 6 per cent. It is also comparable to Manchester's share of NEETs – 7 per cent – and is lower than the 10 per cent in Liverpool.

Figure 7: Share of 16-and-17-year olds in education or training in Birmingham, 2017



Source: DfE, Participation in education and training

Looking at how likely young people are to go to a higher education institution shows that in Birmingham, 34 per cent of those aged 18–19 between 2009 and 2015 went to university and this is below the national average – 38 per cent. Cambridge and London had the highest rates with 58 and 49 per cent respectively.

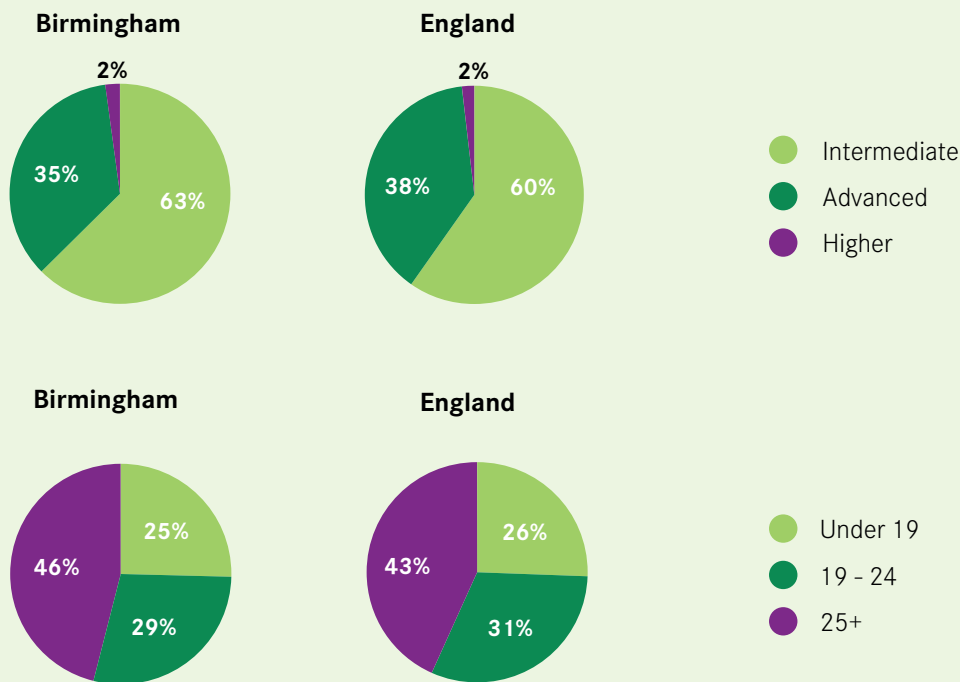
Box 1: Apprenticeships in Birmingham

The academic route is not the only way improve the skills of the workforce. There is evidence that apprenticeships can have a positive effect on employment and wages and on the skills of the workforce.² And this is an area of focus for the government which has recently embarked on expanding apprenticeship schemes across the country.

Controlling for population, the number of apprenticeship starts in Birmingham – 17 for every 1,000 people – is the 20th highest among UK cities. Sunderland and Mansfield were the cities with the highest number of apprenticeship starts per population.

Looking at apprenticeship starts by type and age groups shows that the picture in Birmingham is not so different from the national one. The majority of apprenticeships in the city – 63 per cent – is of intermediate level and this is slightly higher than the share for England (see Figure 8). When we look at age groups, the largest share of apprenticeships – 46 per cent – are for those over 25 and this is also higher than the figure for England. While this is a positive, as it improves the skills level of the population overall, apprenticeships do not currently appear to be providing a clear alternative to the academic route as they do not target the group for which they were designed, those looking for an alternative to university at 18. This isn't just a Birmingham issue, it is also the case at the national level.

Figure 8: Apprenticeship starts in Birmingham, by levels and age groups, 2015



Source: DfE, Apprenticeships Data

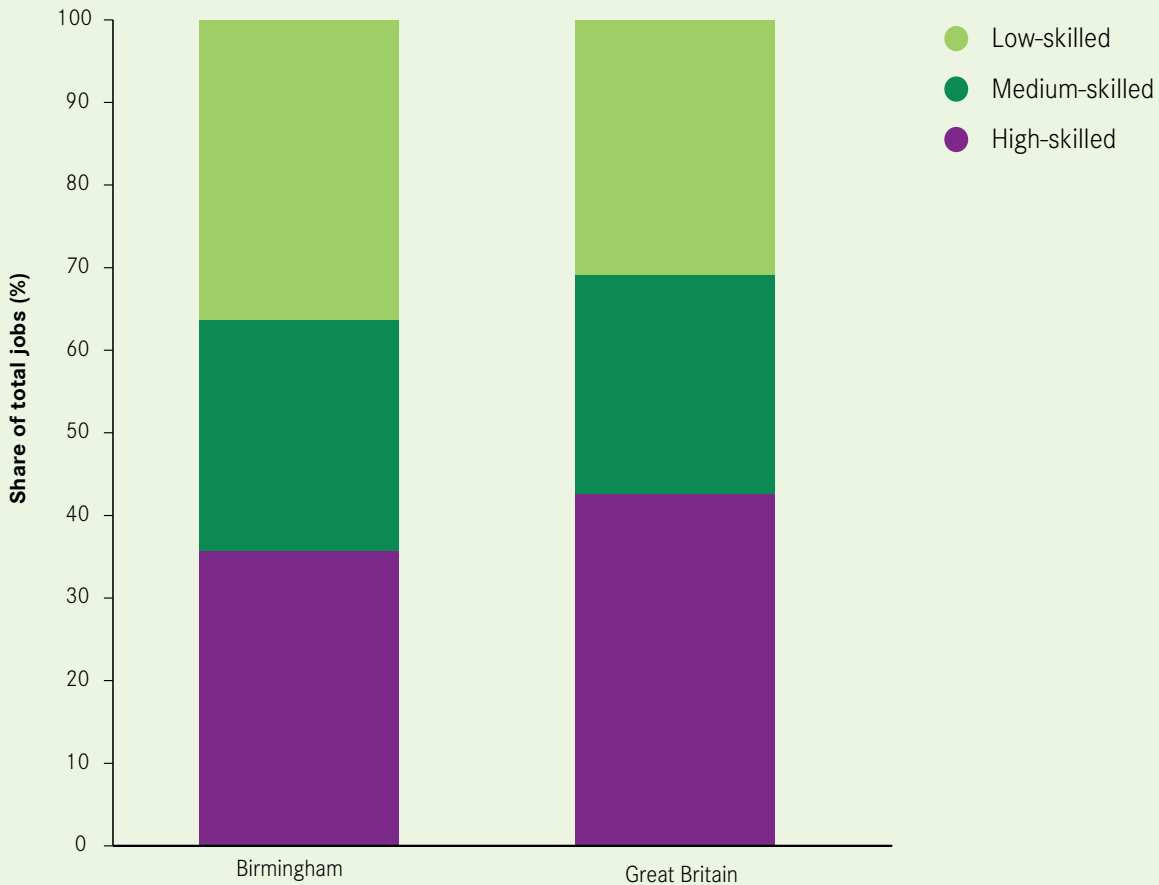
2 What Works Centre for Local Economic Growth (2015) *Evidence Review 8 : Apprenticeships* London: What Works Centre for Local Economic growth

Box 2: Demand for skills

Looking at the demand for labour shows that that the skills patterns are reflected in the city's labour market and industrial structure.

Figure 9 shows that Birmingham has a lower share of workers in high-skilled jobs and a higher share in low-skilled ones than the UK average.

Figure 9: Jobs by type of occupation, 2016



Source: ONS, Annual Population Survey

Looking at knowledge-intensive businesses services (KIBS), with 12 per cent, its share is lower than the national average – 14 per cent. Comparing Birmingham with other cities, its share of KIBS jobs is lower than Manchester – 15 per cent – but higher than Liverpool – 11 per cent. Publicly funded services, at 27 per cent, is one of the largest employers in the city.

Summary

With regards to skills, Birmingham underperforms when compared to the rest of the country. Looking at the skills profile of its population shows that:

- Birmingham has the highest share of people with no qualifications of any UK city and the 15th lowest share of people with high-level qualifications. This issue is particularly acute for older workers.
- The employment rate in the city is lower than the national average. The gap with the rest of the country is the largest for people with no qualifications and younger people.
- The share of Birmingham's pupils achieving 5+ A*-C GCSEs including English and Maths is lower than in the rest of England. But this low achievement does not stop young people from entering further and higher education institutions.

Improving the skills of its existing population will be crucial in closing Birmingham's skills gap with other cities. But attracting skilled workers from other parts of the country will also play an important role. This is what the next section looks at.



The impact of migration on Birmingham's skills base

The previous section gives us a static picture of skills levels in Birmingham. But the population of a place and its characteristics are always changing as a result of the migration flows that can alter the skills base of a city over time. This means that upskilling the current population is only one way to address the skills issue. Another is to improve the ability of the city to retain skilled workers and attract them from other parts of the country and this is what this section looks at.

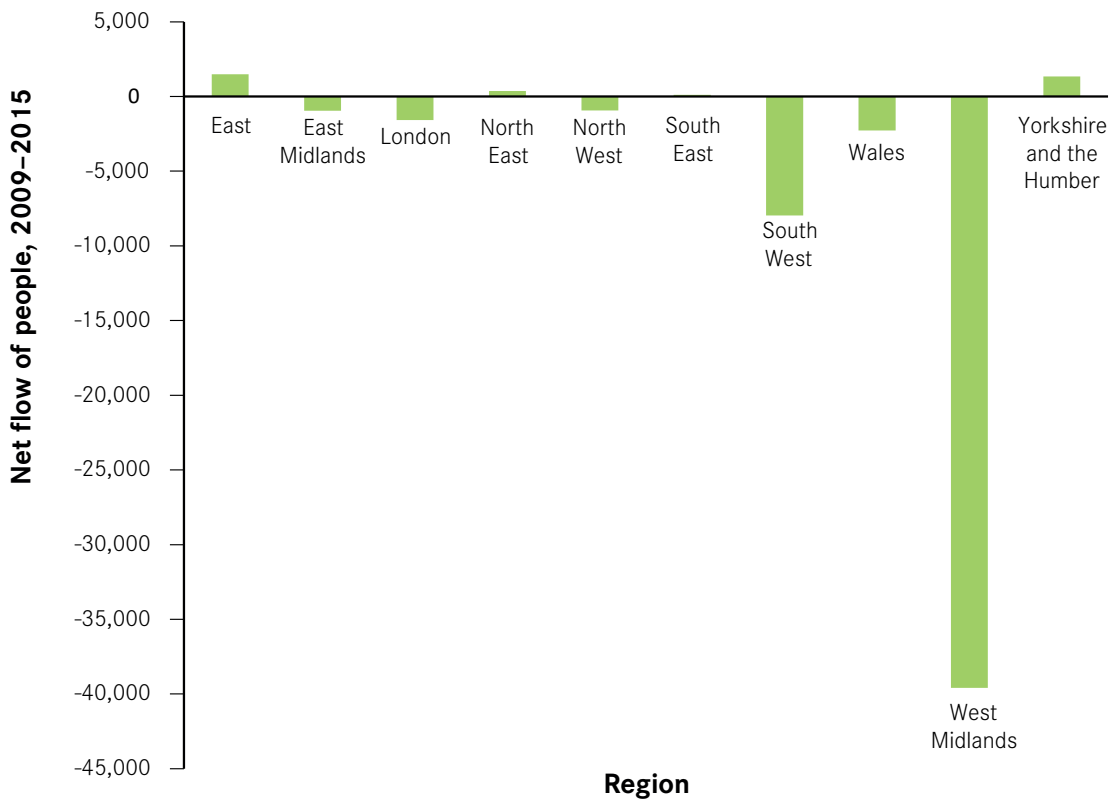
This section combines migration data from the ONS and the Census to look at migration to and from Birmingham to understand what impact it has on the skills profile of the city.

Birmingham experienced a net outflow of people in recent years

Between 2009 and 2015, around 361,100 people moved into Birmingham from the rest of England and Wales and approximately 411,100 people moved out. This resulted into a net outflow of around 50,000 people from the city. In comparison, Bournemouth experienced the net largest net inflow of 15,100 people and London the largest net outflow of 340,300 people.

Most of this migration flow was between Birmingham and the rest of the West Midlands: 28 per cent came from the West Midlands and 34 per cent of those of who moved out remained in the region. This resulted in a net outflow to the rest of the region as shown in Figure 10.

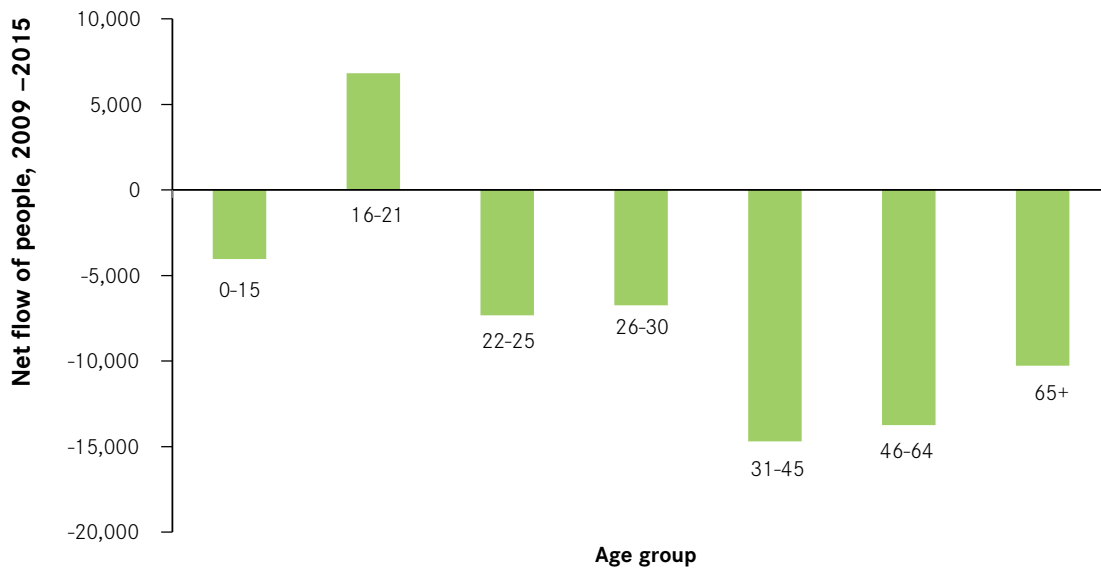
Figure 10: Net regional migration to Birmingham, 2009-2015



Source: Internal Migration, ONS

On a city basis, Birmingham saw its two largest net inflows from Coventry and Bradford while the largest net outflow was to Telford. This suggests that most of the movements were between Birmingham and its neighbouring cities. There was also a large net outflow to London.

Breaking this down by age shows that Birmingham experienced a large net inflow of 16 to 21 year- olds (see Figure 11). For this age group, the net inflow was 6,830 people. But it saw a net outflow for every other age group.

Figure 11: Net flow of people by age groups, 2009-2015

Source: Internal Migration Data, ONS

Birmingham lost degree holders

While ONS data on migration does not give information on the qualifications of migrants, the 2011 Census provides us with this information for movers between 2010 and 2011. Splitting the data into three age groups – 16 to 21, 22 to 30 and 31 to 45 – reveals three important trends, as shown in Figure 12.

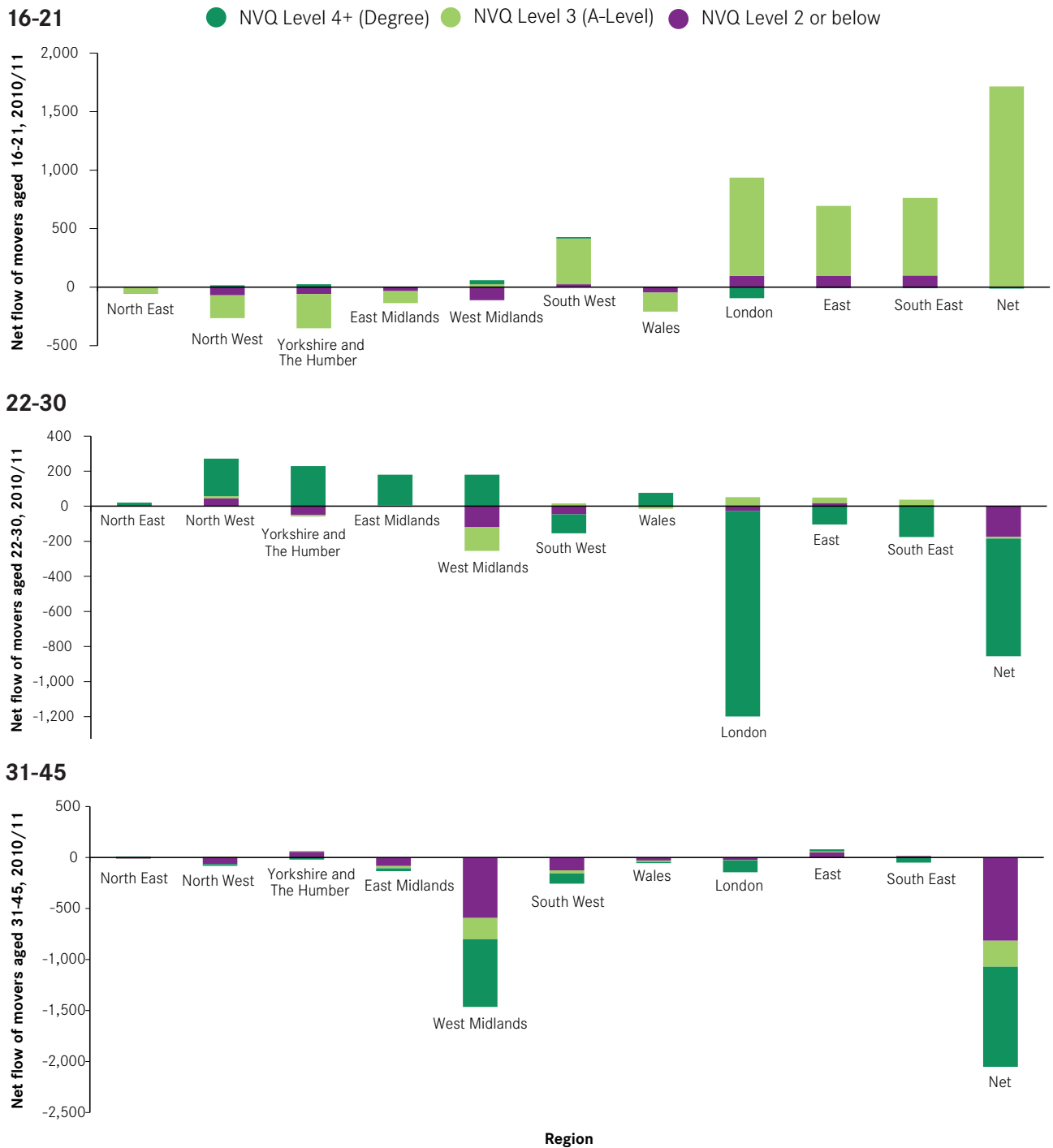
Firstly, **Birmingham gained people in the 16–21 age group with A-level qualifications.** This was mainly driven by a new inflow from the Greater South East with London being the main contributor to this gain. In contrast, there was an outflow of people with the same level of qualification to the Midlands and the other regions to the North of Birmingham.

Secondly, **the city saw a net outflow of degree holders aged 22 to 30.** The movement of the people in this age group perfectly mirrors the 16–21 group. The largest outflow of degree holders was to the Greater South East, with London being the biggest gainer. In contrast, Birmingham gained degree holders from all the other regions with the exception of the South West.

Thirdly, **there was an also an outflow of degree holders aged 31 to 45.** However, the geography of this net outflow was different from that of the younger degree holders, with the largest number of people leaving Birmingham but remaining within the West Midlands.

Using the wider migration data for 2009 and 2015, which allows us to look at the movement between local authorities, shows that the majority of these 31 to 45-year-olds did not go very far; on a net basis, Bromsgrove was the authority that Birmingham lost most people to, followed by South Staffordshire. This means that these movers remained very much within commutable distance to Birmingham, even if they no longer lived there. There was also a very small net inflow of older graduates from London back to the city.

Figure 12: Net flow by qualification, age groups and regions, 2010/11



Source: ONS, Census 2011

Box 3: Migrant population in Birmingham

International migration can also play an important role in improving the skills level of a place, particularly in large places like Birmingham where in 2016 18 per cent of the resident population was non-UK born.

Using data from the 2011 Census shows that the skills profile of foreign-born residents in Birmingham was more polarized than the UK-born one: in 2011 foreign-born residents were more likely to have no qualifications (34.8 per cent) but also more likely to be degree holders (22 per cent) than the UK-born population – this was 28.9 and 20.7 per cent respectively. But there were variations within the foreign-born population. When looking just at EU-born residents in Birmingham, they are less likely to have no qualifications (19.4 per cent) and more likely to have a degree (23.5 per cent) than the UK-born population. This suggests that Brexit and potential changes to migration policy might make the skills issue more acute.

Looking at the occupation of EU workers living in the city shows that almost half of EU migrants in 2011 were in low-skilled jobs. This suggests, reflecting the national picture, that there are barriers for to accessing jobs for this group of people.

Summary

As a result of these movements, Birmingham experienced a net outflow of people from the city between 2009 and 2015. Breaking these flows by age and qualifications shows:

- There was a large net inflow of 16 to 21-year-olds. Many of these are likely to have been A-level holders moving to the city to attend university.
- The city experienced a large net outflow of young people with a degree and this was driven by graduates moving to London.
- There was also a net outflow of older degree holders but the majority remained within commutable distance of the city.

The net inflow of university students and the net outflow of degree holders suggest that an important element in closing the skills gap will be to make the most of a new generation of graduates and this is what the next sections look at.



A more detailed look at the movement of university students and graduates

The large net inflow of young people with A-level qualifications and the outflow of degree holders indicate that universities play an important role in the movements of people to and from Birmingham and therefore the skills profile of the population. This section explores the migration patterns of students and graduates into and out of the city using two data sets from the Higher Education Statistics Authority (HESA). The first looks at admissions (for all students at a UK university in 2014/15), and the second is based on a survey of graduates six months after graduation (for leavers in 2013/14 and 2014/15). Unlike the ONS data used above, it covers the whole of the UK and includes students who came from abroad.

Box 4: University campuses in Birmingham

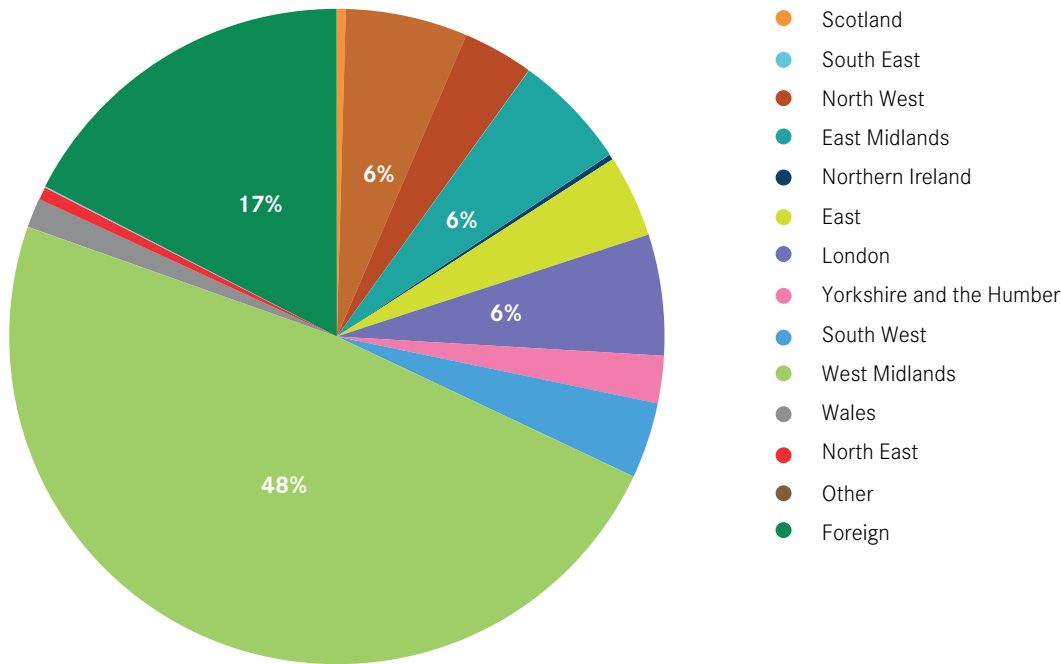
This analysis covers Birmingham's five university campuses: University of Birmingham, Birmingham City University, Aston University, University College Birmingham and Newman University. In the academic year 2014/2015, there were 60,900 students in Birmingham. The two largest universities, University of Birmingham and Birmingham City University, accounted for 42 and 34 per cent of the total students, respectively.

Where do students go?

Half of students in Birmingham came from the West Midlands

Birmingham attracts a large number of university students from other parts of the country every year, the fourth highest among UK cities. Looking at the origins of this group of young people as shown in Figure 13, the largest share came from the West Midlands: 36 per cent from Birmingham itself and 12 per cent from the rest of the region. At 17 per cent, foreign students represented the second largest group.

Figure 13: Origins of Birmingham's university students, 2014/15



Source: HESA, Admissions Survey

Most universities in the city have a regional pull, with the exception of the University of Birmingham. Looking at the two largest campuses, 59 per cent of students at Birmingham City University came from the West Midlands but only 24 per cent at the University of Birmingham were from the region. Similar patterns are seen in other cities, where Russell Group universities tend to have a wider pull, attracting university students from other parts of the country and abroad.

Half of Birmingham's students remained in the city for university

Universities in the city are a popular choice among students from Birmingham, with half of them deciding to remain in the city to study.

Looking at where university 'stayers' study, 44 per cent of this group attended Birmingham City University. But this was only 23 per cent for the University of Birmingham, in spite of it being the largest campus. This is common among Russell Group universities, which are better able to attract students from other parts of the country.

When we look at the origins of each university's student population, Newman University has the highest share of students from the city – 79 per cent – followed by the University College Birmingham – 57 per cent.

A third of Birmingham's students who move away for university stay in the region

Looking where students from Birmingham end up studying, almost a third of those who decide to attend university elsewhere remain in the region. Looking at the movements to other cities, Coventry is the most popular place for Birmingham's students who decided to move. This relationship is reciprocal: when looking at the movements of Coventry students, Birmingham was the most popular destination and this shows the strong population links between the two cities.

Where do graduates go?

While the pull of university students from other parts of the country tells us about the quality of Birmingham's higher education institutions and its attractiveness as a place to study, it is its ability to retain and attract graduates from other parts of the country that will determine the skills of its future workforce.

Birmingham has the sixth highest retention rate of graduates of any city

When looking at the number of graduates retained, Birmingham performs better than most cities, retaining 49 per cent of its total new graduates, the sixth highest retention rate among UK cities. But the retention rate varies across universities. For example, the city retains three quarters of Newman University graduates but only a quarter of Aston University ones (Figure 14).

When it comes to closing the gap, the size of the campus and consequently the number of graduates retained matters. Looking at the share of total graduates retained by university campus, Birmingham City University is the largest contributor, accounting for 45 per cent of the graduates retained in the city.

Figure 14: Retention rate by institution, 2013/14 – 2014/15

	Contribution to the total number of graduates retained (%)	Retention rate by University (%)
Newman University	11	74
Birmingham City University	45	52
Aston University	7	25
The University of Birmingham	29	30
University College Birmingham	9	60

Source: HESA, Destination of Leavers Survey

Almost three quarters of those retained were from Birmingham

Looking at the origins of those retained, almost three quarters (73 per cent) were originally from the city. But the origins of those retained vary across institutions: 88 per cent of the new graduates retained at Newman University were originally from Birmingham but this was only 52 per cent at the University of Birmingham. This is reflective of the origins of students, as explored in the previous section.

The retention rate of students who grew up in Birmingham was even higher – 83 per cent of those who had remained in the city for university ended up working there. This is the third highest share among UK cities with a university, and shows that the city has a strong record of 'growing its own' graduates.

Although the high overall retention rate should be seen as a positive, Birmingham should not just rely on this to close the gap. In fact, the number of new graduates retained over these two years represents around 10 per cent of the number of degree holders needed to close the gap with the rest of the country.³ But at 24 per cent, the retention rate for those university students not from the city is much lower. This suggests that Birmingham is an attractive place to study but less so when it comes to graduate job opportunities.

³ This number is based on a response rate for the Destination of Leavers Survey of 80 per cent.

The city experienced the third largest inflow of graduates with no prior links to the city

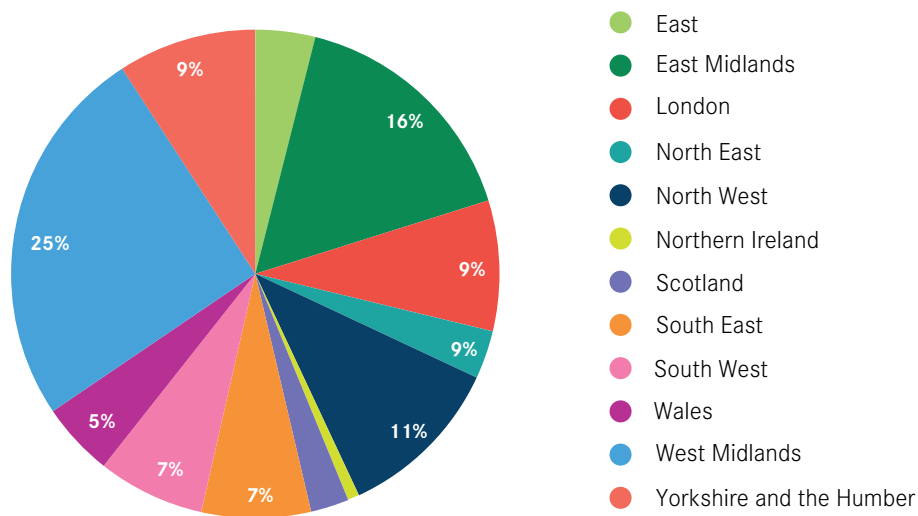
The other component of graduate migration includes those attracted to Birmingham after graduation to work. While graduate retention figures tend to get the most attention, the ability of a place to attract new graduates from elsewhere is an important part of increasing the number of degree holders in its economy.

There are two groups within this cohort: those that grew up in Birmingham and moved away to study and returned to the city for work, and those that moved in for work but had no prior connection to the city.

Looking at 'returners' first, the city pulls back the majority of those from the city that had left for university: 53 per cent of those who had left to study elsewhere returned to Birmingham for work and this is the 4th highest among UK cities. Only London – 74 per cent – Manchester – 58 per cent – and Belfast – 57 per cent – had a higher share.

Turning to those who moved to the city for work, Birmingham saw the 3rd largest inflow of new graduates with no prior connection to the city. Only London and Manchester experienced a larger inflow, and it was followed by Leeds and Bristol. This indicates that large cities are attractive places to work for graduates. Figure 15 shows that a quarter of new graduates in this group were from the rest of the West Midlands, followed by the East Midlands.

Figure 15: Origins of new graduates moving in for work, 2013/14 – 2014/15



Source: HESA, Destination of Leavers Survey

On a city basis, Coventry was the largest contributor to the graduates making up 13 per cent of those moving into the city. London was the second with 9 per cent.

London was the most popular employment destination for those graduates who moved away for work

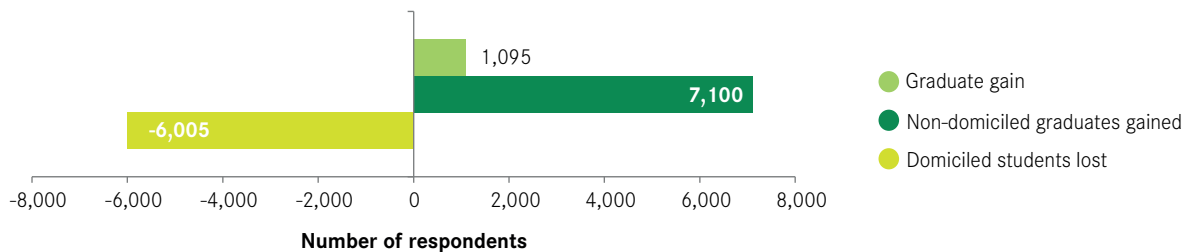
In terms of the 51 per cent of graduates who left Birmingham after university, London was the most common employment destination – 22 per cent of those who moved upon graduation decided to work in the capital. This is also seen in many other cities and reflects the strong pull of the capital which employed 24 per cent of the total new UK graduates in this period. Coventry at 4 per cent and Telford at 2.8 per cent were the next two most common cities for Birmingham graduates to relocate to for work.

Overall this means that Birmingham gains graduates

Putting these flows together – comparing Birmingham's retention of graduates who were not originally from the city and its ability to attract them from elsewhere to those Birmingham-raised students who subsequently went on to work elsewhere shows that the city gains graduates.

Between 2013 and 2015, 6,000 graduates who responded to the HESA survey had left Birmingham to go to university elsewhere, while 7,100 respondents who did not grow up in Birmingham were employed in the city after graduation. Figure 16 shows the size of this graduate gain. In absolute terms, this places Birmingham as the 17th largest gainer of graduates when compared to other UK cities. London gained 42,000 and Manchester 4,700.

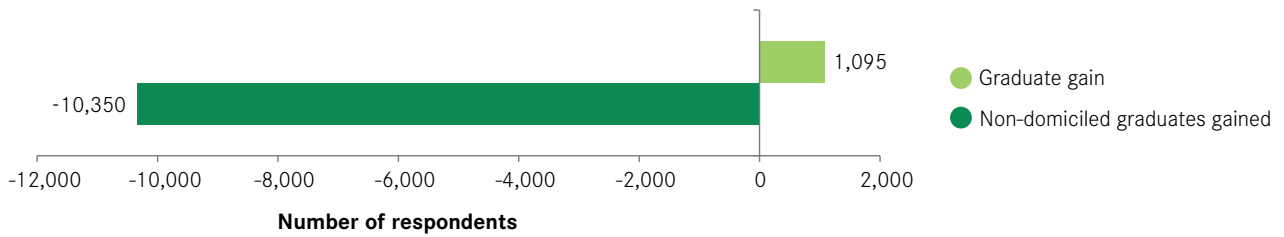
Figure 16 Comparing students lost and graduates gained by Birmingham, 2013/14 - 2014/15



Source: HESA, Destination of Leavers Survey

This finding on the graduate gain may not appear to square with the earlier finding about the majority of new graduates leaving the city to work elsewhere. This is because there is one final cohort of students: the 'bouncers'. These students move into Birmingham to study and leave straight after graduation.

Of all the students who moved to Birmingham to study, 76 per cent bounced. Relative to other cities this figure is low, the 24th lowest amongst cities that have a university. But in absolute terms, this is the third highest, only London and Nottingham had a higher number of bouncers. This cohort causes a lot of noise in the data. By excluding them and comparing the number of (would be) graduates in Birmingham before university with the number of graduates in the city after graduation, the graduate gain figure can be calculated. As Figure 17 shows, the graduate gain was just over a tenth of the number of bouncers, resulting in the outflow of young graduates shown earlier.

Figure 17: The bouncers and the graduates gained, 2013/14 to 2014/15

Source: HESA, Destination of Leavers Survey

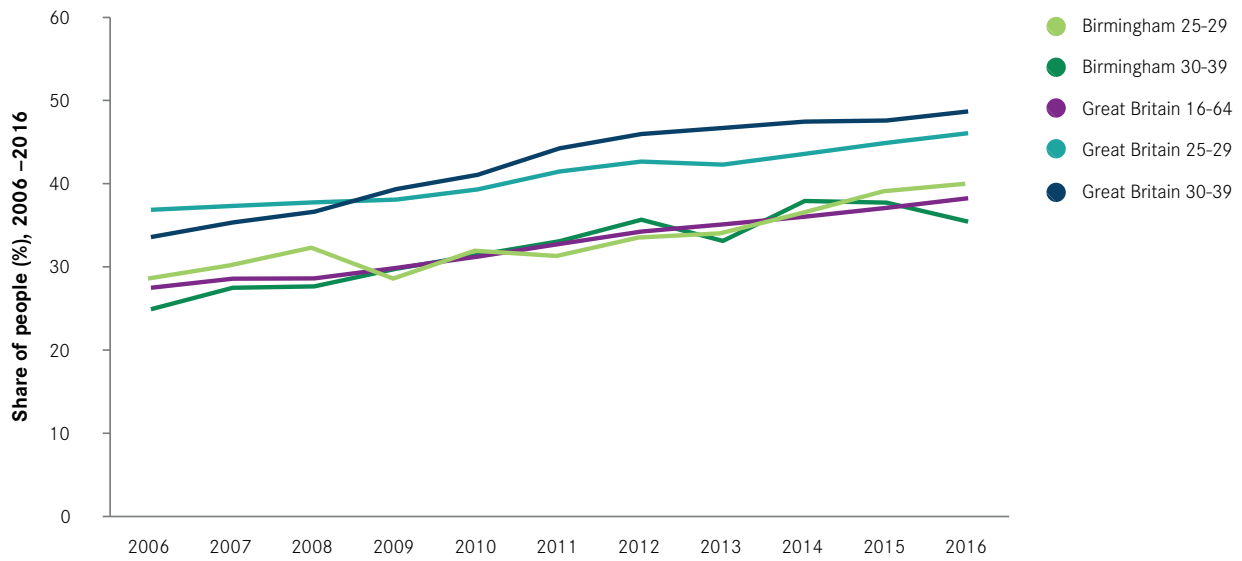
In addition to this, there are two other elements that contribute to the graduate workforce size in the city: the 'returners' (those that returned home after study) and the 'home-grown' – those that were from Birmingham and decided to study and work in the city. Between 2013 and 2015 the number of returners amounted to 4,690 respondents whereas the number of home-grown graduates for the same period was equal to 8,600.

What does this mean for the number of degree holders in Birmingham?

As a result of retaining and attracting new graduates the number of degree holders in Birmingham's economy has increased over time. Between 2006 and 2016, in absolute terms, the city experienced the third largest increase among cities in Great Britain – only London and Manchester had a larger increase in the size of their highly skilled workforce.

Figure 18 breaks down the share of working-age population with a degree over time by age groups. This shows two things. Firstly, despite the low overall share of people who have a degree in Birmingham, as shown in the first section, the share of people in the 25-29 and 30-39 age groups with a degree is close to the national average for the working age population and this has been the case for the past 10 years. Secondly, when we compare these two groups with their counterparts in the rest of the country, it shows that the gap between Birmingham and Great Britain is widening. This suggests that in spite of the graduate gain, more needs to be done to increase the number of degree holders in Birmingham's economy and close the gap with the rest of the country.

Figure 18: Share of working age population with a degree, by selected age groups, 2006-2016



Source: ONS, Annual Population Survey

Summary

Looking at the movements of university students and graduates to and from Birmingham reveals that:

- The majority of university student flows are between Birmingham and the rest of the West Midlands: the largest share of the university students in the city come from the rest of the region and a third of Birmingham students who leave, stay in the rest of the West Midlands to attend university.
- Birmingham is an attractive place for graduates. The city retains 49 per cent of its graduates and it attracts the third largest number of graduates with no prior links to the city.
- As a result of the movements of university students and graduates, Birmingham gained graduates. This has led to an increase in the share of people with a university degree in the city, but this has not gone up as fast as in the rest of the country.



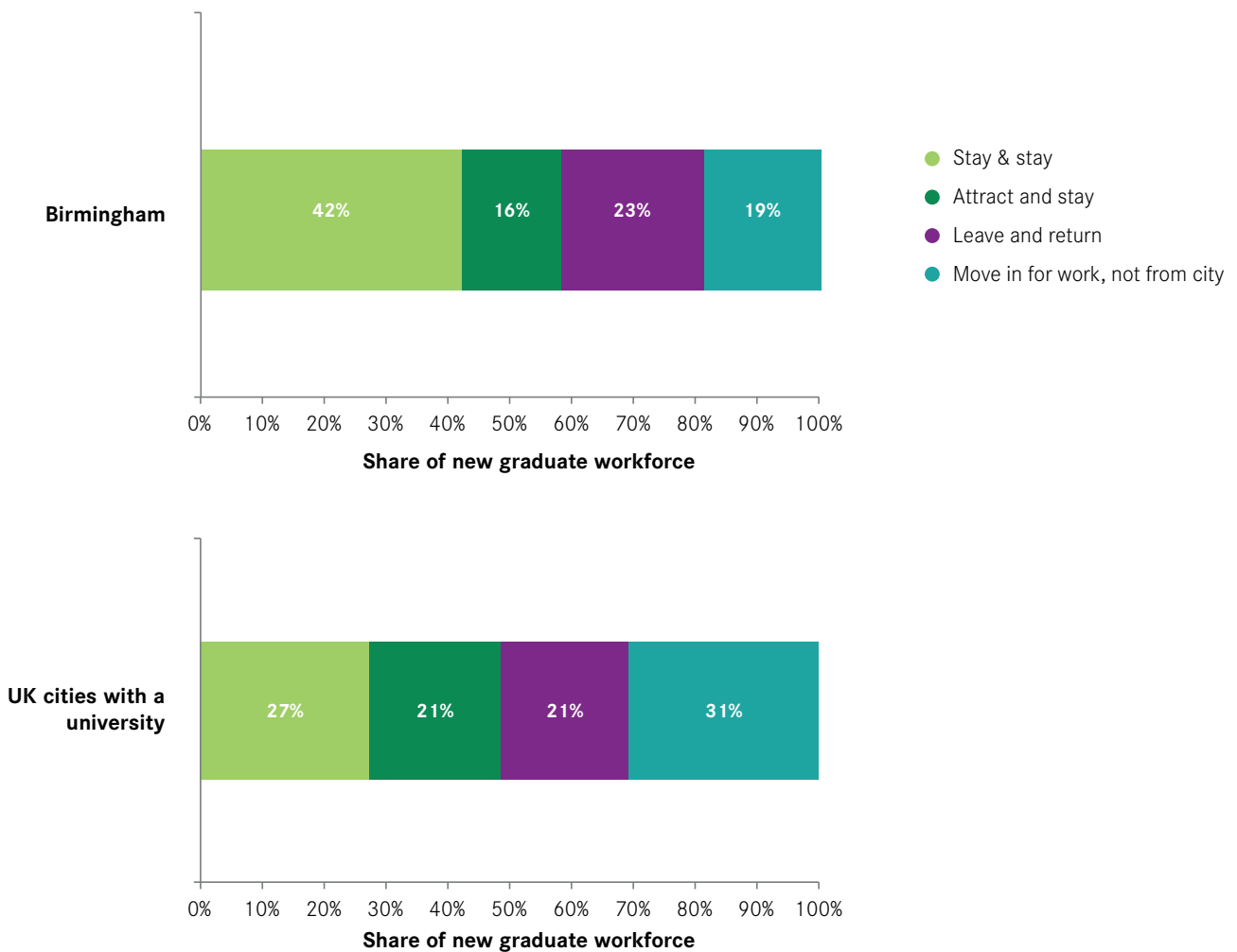
The nature of the new graduate workforce

The ability of a place to attract degree holders from other parts of the country depends on the economic opportunities that it provides for highly-skilled workers. This section looks at the characteristics of the new graduate labour market in Birmingham.

Birmingham's new graduate labour force is dominated by 'home-grown' graduates

Figure 19 brings together all the graduates who decided to work in Birmingham on graduation to provide an overview of the nature of the graduate workforce. The largest share is represented by 'home-grown' graduates. This is higher than the figure for the UK as a whole and the second highest share among UK cities, after Middlesbrough.

Figure 19: The components of the graduate workforce, 2013/14 – 2014/15

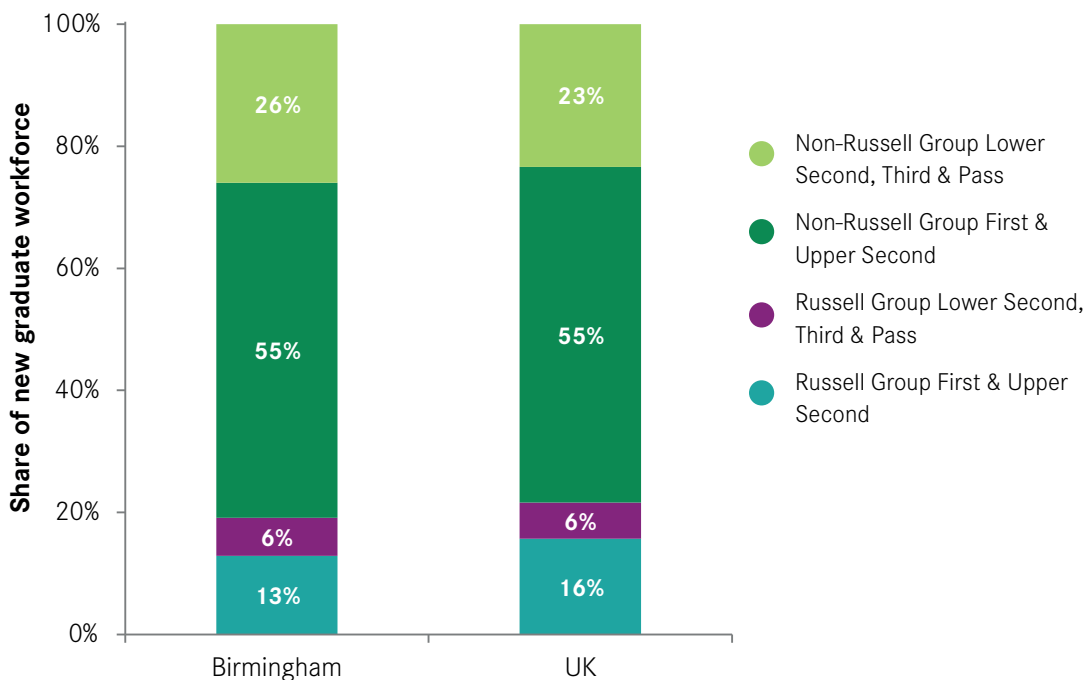


Source: HESA, Destination of Leavers Survey

It has a lower share of high-achievers

Figure 20 shows that in terms of the class of degree achieved, the composition of Birmingham's graduate workforce is different from that of the UK as a whole. The share of new graduates working in Birmingham with a First or Upper Second Class degree from a Russell Group University – 13 per cent – was lower than the national average – 16 per cent. Birmingham also had a higher share of working new graduates with a Lower Second, Third or Pass from a non-Russell University. This seems to be linked to the 'home-grown' element discussed before: when we look at the class of degree achieved for this group, more than two fifths had a lower second, third or pass from a non-Russell Group University.

Figure 20: Working new graduates by class of degree, 2013/14 – 2014/15



Source: HESA, Destination of Leavers Survey

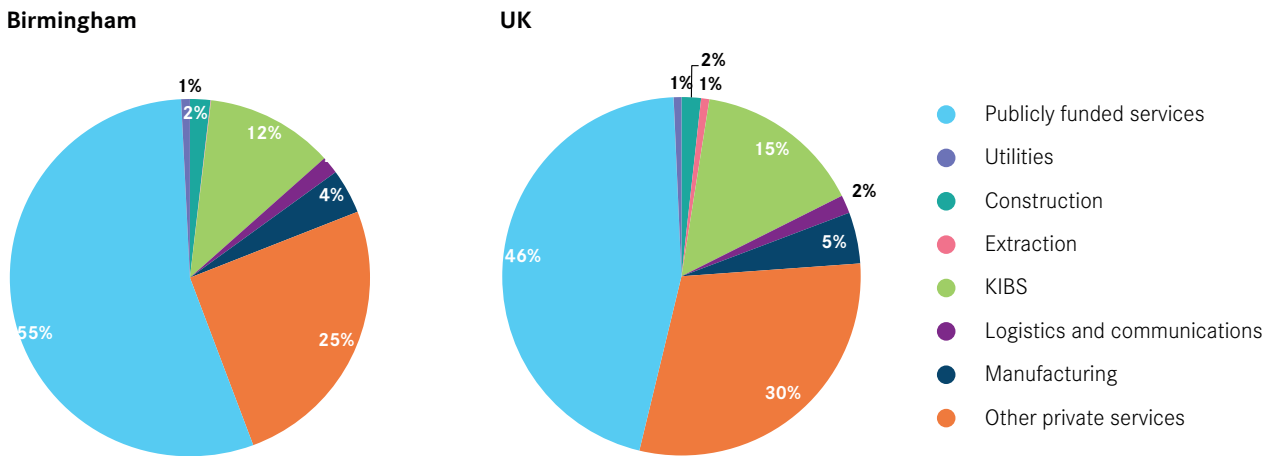
Graduate job opportunities are the main factor in attracting new graduates

Graduates working in Birmingham earn on average £21,750 and this is below the mean UK graduate wage of £23,100. But while wages can play a role in the graduates' decision of where to work, research shows that it is the job opportunities and career progression that matter the most: cities that gained the largest number of graduates were the ones with a high share of KIBS jobs.⁴ So this figure should not have much impact on the city's ability to attract graduate workers.

Where there may be more of an issue is in the types of jobs available. Looking at the industry breakdown shows that 55 per cent of all new graduates working in Birmingham were employed in publicly funded jobs and this is higher than for the UK – 46 per cent (see Figure 21). In contrast, the share of new graduates working in KIBS – 12 per cent – is lower than the national average of 15 per cent.

⁴ Swinney, P & Williams, M (2016) *The Great British Brain Drain* London: Centre for Cities

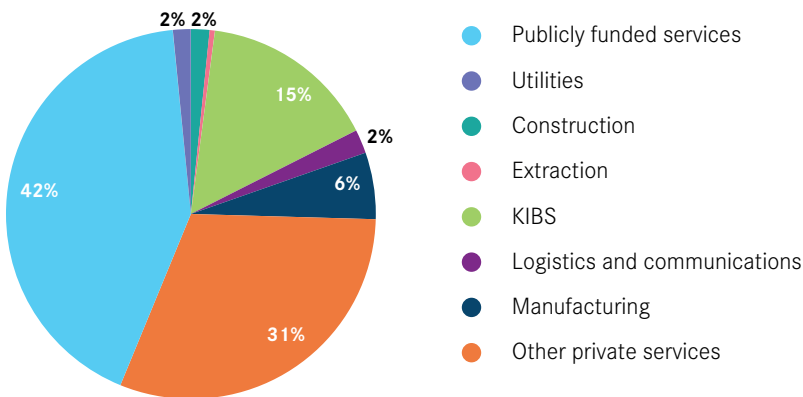
Figure 21: Graduate workforce by industry, 2013/14 – 2014/15



Source: HESA, Destination of Leavers Survey

And better job opportunities seems to be the reason why many graduates leave Birmingham after graduation. When we look at the sector breakdown of Birmingham’s graduates who left after university the share of new graduates working elsewhere in KIBS is higher than that of those who work in Birmingham, as shown in Figure 22.

Figure 22: Birmingham graduates who moved away for work, by industry, 2013/14 – 2014/15



Source: HESA, Destination of Leavers Survey

If the number of new graduate opportunities in KIBS is to increase in Birmingham, it's likely that the city centre will play a central role. In terms of all new graduate jobs, the B15 postcode (which is home to the University of Birmingham and the Queen Elizabeth hospital), was home to the highest share of all new graduate jobs. But the B1 and B3 postcodes were home to more than a third of all KIBS jobs. This reflects the trend seen in recent years of an increasing concentration of KIBS jobs both in Birmingham city centre and other successful city centres in Britain in recent years.⁵

This has occurred because of the particular benefits that city centres offer – namely access to large numbers of skilled workers and other higher-skilled businesses, be they clients, collaborators or competitors. As the UK continues to specialise in these types of activity, city centres are likely to play an ever larger role in the national economy.

Summary

Looking at the new graduates working in Birmingham reveals that:

- The largest share of the new graduate workforce in the city is home-grown: people who were originally from the city, decided to stay for university and then for work.
- The city has a lower share of high-achievers (those with a First or Upper Class degree) than the rest of the UK and this is related to the underperformance of its home-grown graduates.
- The majority of the new graduates in Birmingham are employed in publicly funded services and the share of this is considerably higher than in rest of the country.

⁵ Swinney P & Clarke E (2013) *Beyond the High Street: Birmingham Analysis*, London: Centre for Cities



Policy recommendations

Birmingham's future economic success will depend on the skills of its workforce and the analysis in the previous sections highlights the challenges that the city faces on this front. There are three elements to tackling these. The first is increasing the educational attainment of young people. The second is improving the skills of the existing workforce. The third is about improving the job opportunities available in the city to retain degree holders but also to attract them from other parts of the country.

1. Young people

The most recent Social Mobility Commission⁶ report provides excellent guidance on how to improve the skills level and life prospects of young people. This focuses on three areas:

- **Increase the uptake of early education**

Evidence suggests that early years intervention can have a lasting impact on a child's life. Currently all two-year-olds from disadvantaged backgrounds are entitled to free early education. But uptake of this is patchy. Policy should drive uptake in Birmingham by identifying those children that are not currently benefiting through using data held by local authorities and making direct contact.

Of course, the content of the teaching is also important. For these programmes to be effective, early education and childcare providers in Birmingham should be guided by the Education Endowment Foundation's Early Years Education toolkit which sets out evidence on which practices are most effective.

- **Improve literacy and numeracy across all ages**

Previous research has shown that there is a link between employment outcomes and levels of numeracy and literacy, and more specifically between the former and the attainment of 5 A*-C including Maths and English at GCSE.⁷ Although GCSE attainment has improved in the city, there is still a gap with the rest of the country. This suggests that schools and colleges in Birmingham should keep the focus on improving the levels of numeracy and literacy across all ages.

When it comes to concrete measures to address this, the lesson from London's recent success in improving the performance of its schools is that there is no silver bullet in achieving this goal.⁸ But things like learning from best practice and improving the quality of teaching can have a positive impact. With regards to the first point, the Education Endowment Foundation has put together some evidence on the practices that work in teaching Maths to Key Stage 2 and 3 pupils. When it comes to the second element, attracting and retaining talented teachers will drive up the quality of teaching.

⁶ Social Mobility Commission (2017) *State of the Nation 2017: Social Mobility in Great Britain* London: Social Mobility Commission

⁷ Swinney P & Clayton N (2011) *Learning curve: Schooling & skills for future jobs* London: Centre for Cities

⁸ Blanden J et al. (2015) *Understanding the improved performance of disadvantaged pupils in London* London: Centre for Analysis and Social Exclusion.

To achieve this, the West Midlands Combined Authority should work with the regional school Commissioner, universities and Teach First to develop a city-region framework that provides career progression opportunities and professional development to teachers in the area.

- **Better access to high-quality career guidance**

Career guidance helps young people make the best decisions about their academic and professional lives. This is even more important for those from a disadvantaged background who may not have access to an informal network of people that could provide this type of guidance. All young people in Birmingham should have access to high quality career support. To achieve this, all schools and colleges should work with local businesses to meet the Gatsby benchmarks – key careers advice requirements based on international standards⁹ – with the aim of helping them transition from schools and colleges to work, particularly those who did not perform well academically.

2. Adult training

Improving skills levels of those already in the workforce will also be required to improve skills in the city. These are three things that Birmingham could be doing to address this challenge.

- **Create the West Midlands Skills Fund**

In his manifesto, metro mayor Andy Street proposed the creation of a West Midlands Skills Fund to support skills programmes across the city region, and this should be created to address Birmingham's adult skills challenges.

In order for it to be successful, solutions will be needed for both funding and delivery. There are two potential sources of funding from the public sector. The first is the devolution of the Apprenticeship Levy, which Mayor Street called for in his manifesto. And the second is the Adult Education Budget, which will soon be devolved to the mayor. An option to expand funding would be to use public money to part fund particular programmes, and ask for businesses sending employees on courses to match this funding.

A challenge with delivery is identifying those individuals that would benefit the most from an intervention. Social housing providers offer a potential solution. Not only are social housing tenants more likely to have no or few formal qualifications, but the housing associations have a pre-existing relationship with them. Many already have employment and skills programmes in place – Wolverhampton Homes' Learning, Employment and Achievement Programme focuses on providing skills training and jobs placements for its residents. Using some of the fund to expand such programmes could be an effective way to improve skills levels in the city.

- **Build the evidence and lobby for better data**

One of the main challenges with adult and employment trainings is that we still know very little about the effectiveness of different programmes. When designing the new employment pilot schemes recently announced, the West Midlands Combined Authority should allocate resources to collect evidence which would allow a more thorough evaluation of the success of such interventions.

More generally, cities should lobby for better data. For example, having access to HMRC tax data could allow local officers to follow the earnings over time of people who have participated in skills and

⁹ See <http://www.gatsby.org.uk/education/focus-areas/good-career-guidance>

employment programmes.

3. Improving job opportunities

In the past, cities have focused on increasing the number of students retained and Birmingham is no exception with programmes such as the Graduate Advantage (see Box 5).

Box 5: Graduate Advantage

Established in 2003 and conceived by Aston University, Graduate Advantage is a partnership between 13 higher education institutions across the West Midlands. The project was a reaction to reports of graduates leaving the region to work in London.

Graduate Advantage works with small businesses in the West Midlands to increase the number of graduates in the economy by providing graduate-level internships as well as long-term opportunities. It reports having engaged with over 29,000 graduates and 18,000 businesses and helped the careers of 3,500 graduates in the West Midlands to date. It has also provided £600,000 worth of grants and subsidy to small businesses in addition to free recruitment consultancy services.

But for places with a high retention rate already, like Birmingham, attracting graduates from other parts of the country is crucial to close the skills gap. A significant factor will be the availability of graduate-level jobs. This requires policies that help make the city more attractive to businesses, particularly the high-knowledge ones. Two areas that Birmingham should focus on within this are:

- **Building on the success of its city centre**

Birmingham city centre has undergone a renaissance in recent years, attracting businesses like HSBC and Deutsche Bank, and is now home to many thousands of high-paid, high-skilled jobs.¹⁰ Given the likely growing attractiveness of city centres to knowledge-based businesses in the future, this makes the continued growth of Birmingham city centre important to the city's future success.

To support this, planning policy will have to continue to allow the creation of new office space as the size of the city centre economy expands. Expected further increases in the demand to live in Birmingham city centre will create competition for space between office and residential, and planning authorities will need to find a balance that allows demand for office space to be met.

Policy will need to mitigate the costs of success that arise from the concentration of jobs in one place. Namely this will require congestion and air pollution problems to be tackled through public transport improvements (see below) and the potential creation of a clean air zone in the city centre.

¹⁰ Swinney P & Clarke E (2013) Beyond the High Street: Birmingham Analysis, London: Centre for Cities

- **Improving the transport system**

Good transport links allow for efficient movement of goods and people around, into, and out of a place. Reducing commuting time for those with the degree-level skills living outside the city can increase the size of the pool of skilled workers that businesses can recruit from and make Birmingham more attractive to high-knowledge businesses.

The Mayor has powers available to him to reregulate the bus network in the West Midlands, which would allow him to franchise bus services akin to how buses are run in London. In conjunction with this, the Mayor should push for Transport for the West Midlands to be given the same powers as Transport for London so as to improve the management of the public transport network in the city region.



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