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Executive summary

Cities are places of opportunity. They are the engines of the UK economy, driving growth and creating jobs in different businesses – from engineering and financial services to manufacturing, logistics, hospitality and retail. They offer something for every skill level.

But 'success' does not always simply mean economic growth, and policymakers are increasingly concerned with ‘inclusive’ growth too. In recent years, politicians from both ends of the spectrum have been determined to tackle issues around poverty and inequality and cities up and down the country are developing strategies to ensure people at both ends of the labour market can access the many economic opportunities they generate.

Yet, while there is widespread consensus on the challenges to be addressed, too often the mechanisms proposed to deliver inclusive growth overlook that prosperity requires productivity. Little is known about the ways in which places provide more positive economic outcomes for those at the bottom end of the labour market and the role cities play in understanding the causes of – and solutions to – poverty and inequality.

To support national and local policy-makers in the creation of a more inclusive economy, this report looks at the geography of low-skilled jobs and people, analysing how and why economic outcomes vary between places and unpacking the mechanisms through which low-skilled jobs are created.

It finds that:

1. Policies that support the growth of cities do not just benefit high-skilled people, they support low-skilled people too. Low-skilled people and low-skilled jobs tend to cluster in cities, but within cities, it is mainly in the Greater South East, where the economy is stronger, that low-skilled people tend to benefit from better economic opportunities than elsewhere. Low-skilled people living in the Greater South East are less likely to be unemployed than elsewhere and have access to many more job opportunities, both in low-skilled and higher-skilled occupations.

2. There cannot be inclusive growth without economic growth. The ability of cities to attract high-skilled exporting jobs has an impact on the overall level of economic growth in these places. But growth in these
jobs and businesses has indirectly benefited low-skilled people too. Growth in high-skilled exporting jobs brings money into the local economy creating demand for jobs in local services occupations such as leisure and retail, generating opportunities for low-skilled people. The variety of jobs stronger economies can offer means that low-skilled people not only have access to more job opportunities but better opportunities too. This is because they are more likely to go on to access higher-skilled, better-paid occupations.

3. Creating growth is a necessary, but not sufficient, condition for inclusive growth. One of the challenges associated with strong city economies is that success comes with increased pressures on the housing market. As a result, low-skilled people risk being priced out of strong economies, making it more difficult for them to access the many job opportunities these cities generate.

Different places are at different stages when it comes to inclusive growth. This is something both national and local policy-makers need to be mindful of when designing successful inclusive growth strategies.

This report recommends that:

- **Cities with weaker economies need to focus on creating economic growth by attracting high-skilled exporting businesses.** Short-term solutions to improving the economic outcomes of low-skilled people, such as attracting in low-skilled businesses, will not in the long-term, support the levels of economic growth required to sustain inclusive growth. Rather, weaker economies should focus on attracting investment from high-skilled exporting businesses. This means cities need to increase the benefits they offer to such businesses by focusing on attracting and retaining talent, improving within-city transport, such as buses, and offering high-quality office space to businesses.

- **Cities with strong economies need to make sure their economic growth is accessible to everyone in their labour market.** To support their ongoing success, these cities need to focus on measures that make their job opportunities accessible, such as building more homes, ensuring better public transport connections between suburbs and city centres and continuing to improve the skills of all their residents.

- **Central Government should follow similar principles in the design of the UK Shared Prosperity Fund.** That means ensuring that in places with weak economies funding is not only directed at helping people to participate in the labour market but is also aimed at supporting places in the creation of high-skilled economic growth in the longer term.

- **More widely, there should be a much greater focus on adult education both at the national and local level, to ensure those with few or no qualifications can train and upskill.** Much of today’s low-skilled workforce is the legacy of an education system that failed to prepare everyone to be successful in the labour market. While much has been done in recent years to tackle this issue, a lot still remains to be done for those that have already left compulsory education. For this reason, national and local policy-makers should work together to improve access and take-up of adult education.
Cities are places of opportunity. Thanks to their ability to attract high-skilled jobs and firms, they are the main drivers of economic growth and living standards across the country. In recent years the most successful cities have been the ones that have been particularly good at attracting these high-skilled exporting businesses.¹

But 'success' does not always simply mean economic growth, and policymakers are increasingly concerned with 'inclusive' growth too. Leaders from both ends of the political spectrum have put inclusive growth at the heart of their political campaigns, and city leaders up and down the country named inclusive growth as one of their top priorities.²

Yet, while there is widespread consensus on the challenges to be addressed, little is known about the ways in which places can provide economic outcomes for those at the bottom end of the labour market, and the central role cities can play in understanding the causes of and providing solutions to, poverty and inequality.

To support national and local policy-makers to create a more inclusive economy, this report looks at the role cities play in creating job opportunities for low-skilled people. It firstly provides a picture of the distribution of low-skilled people and jobs across the country. Secondly, it looks at how the economic outcomes for the low-skilled vary in different cities and the reasons behind these differences. Thirdly, it analyses a number of policy options for national and local policymakers to consider when developing inclusive growth strategies.

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Box 1: What does this report mean by ‘low skilled’?

In this report, low skilled is defined as:

- Low-skilled people: any individuals with no or level 1 qualifications – equivalent to 1-4 GCSE grades 3, 2, 1 or grades D, E, F, G.

- Low-skilled jobs: any occupations falling in the Standard Occupational Classifications (SOCs) 7, 8, 9, i.e. any sales and customer services occupations, process, plant and machine operatives and any elementary occupations. These three occupational groups are identified to be those with the least qualifications required. This is not a definition based on pay, rather it is based on the jobs most easily accessible by those with few or no qualifications.

https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels
The majority of low-skilled people and low-skilled jobs are in cities

Cities are not just home to the majority of high-skilled jobs and people; they are home to the majority of low-skilled jobs and people too. In 2017, they were home to over four million low-skilled jobs – approximately 56 per cent of all low-skilled jobs in Great Britain – and over four million (56 per cent) working age people with low-skill qualifications (see Figure 1).

Those with no qualifications at all are, in particular, concentrated in cities. In 2017, almost 2 million working-age individuals with no qualifications lived in cities, or approximately 61 per cent of the entire working-age population with no qualifications in Great Britain.
Low-skilled people and low-skilled jobs play a much bigger role in cities in the North and Midlands

Within cities, low-skilled people and jobs cluster in the North and Midlands. Overall, these cities account for 62 per cent of all the low-skilled jobs and 66 per cent of all the low-skilled people in urban Britain.

In these cities, low-skilled jobs and people play a much bigger role too. In many cities outside the Greater South East, such as Mansfield, Sunderland and Hull, a third or more of all jobs available are in low-skilled occupations, such as process and plant operatives, customer services and elementary occupations (see Figure 2). This is higher than the national average of 24 per cent and is in sharp contrast to cities like Brighton, Reading and London where low-skilled jobs account for less than 20 per cent of all jobs, a much smaller portion of the labour market.
This pattern is also visible when looking at people’s skills (see Figure 3). On average, 18 per cent of the working age population in Great Britain is low-skilled, but in many cities in the North and Midlands – such as Mansfield, Bradford and Birmingham – almost one in three people are low-skilled. This is almost three times the share of low-skilled individuals in some city economies in the Greater South East such as Oxford, Cambridge and Reading where there is only one low-skilled person for every 10.
Figure 3: Share of working age population with few or no qualifications, 2017 (%)

Source: ONS, Annual Population Survey 2017
It is in cities in the Greater South East, where the economy is stronger, that low-skilled people have better economic outcomes

Cities in the Greater South East have a higher share of high-skilled jobs. In recent years, these cities have grown their stock of high-skilled exporting businesses making their economies stronger (see Box 2).

**Box 2: How does a city create a strong economy?**

The economic success of a city is determined by its ability to attract exporting businesses.

These businesses sell to many markets – regional, national and international – meaning that places that are able to attract them can benefit from the money these businesses inject into the local economy.

Among the exporting businesses, it is high-skilled exporters, such as engineers and financial services businesses which bring the most wealth to a local economy.

Given their ability to sell to many markets, these businesses are in theory able to locate anywhere. As such, this means that their location decisions are based on the advantages that different places offer to them.

In particular, in deciding where to invest, high-skilled exporters tend to look for two main things: access to knowledge and high-skilled workers. In recent years, cities in the Greater South East have tended to be better at offering businesses these benefits, and this is reflected in the strong economic performance of these places.

Yet, this job creation has not just benefited high-skilled people, but low-skilled people too.

By using Census data it emerges that in these cities low-skilled people have better economic outcomes than those living in cities in the North and Midlands.

Stronger economies can support low-skilled people in three ways:

1. **Low-skilled people are less likely to be unemployed in stronger economies**

Unemployment rates among low-skilled people are higher in cities in the North and Midlands than in the Greater South East. In Hull and Liverpool for example, around one in five individuals with few or no qualifications is unemployed, compared to less than one in 10 in Aldershot and Bournemouth.

These differences mirror the more general patterns of economic outcomes for individuals in different parts of the country. Hull not only has the highest low-skilled unemployment rate (20 per cent), it also has the highest overall

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4 Swinney P. (2017) ‘Why don’t we see growth up and down the country?’ London: Centre for Cities
unemployment rate (14 per cent). This contrasts with cities in the Greater South East, where both low-skilled unemployment rates and overall unemployment rates are much lower.

The economic performance of places – rather than the presence of low-skilled jobs – appears to be a key determinant of unemployment rates (see Figure 4). And where high-skilled exporters play a much bigger role in the economy, unemployment rates tend to be lower.

**Figure 4: The relationship between the strength of an economy, unemployment, rate and low-skilled unemployment rate, 2011 (%)**

2. In stronger economies, there is a more equal balance between low-skilled people and jobs

Similarly, while it is true weaker economies are home to a lot of low-skilled jobs, the number of low-skilled people living in these places is much higher than the low-skilled jobs available (see Figure 5).

Indeed, for every low-skilled job in weaker economies, there are on average 1.66 working-age people with few or no qualifications. The ratio is even higher for places such as Southend, Barnsley and Birkenhead where there are two or more low-skilled people for each low-skilled job.

There are more low-skilled people than low-skilled jobs in most of the strongest economies too, but the ratio is lower, with 1.43 low-skilled people for every low-skilled job. And the more successful cities are, the closer the ratio is to one low-skilled person per low-skilled job. In Cambridge, Oxford and Exeter meanwhile, there are more low-skilled jobs than low-skilled people.

This means that there is greater competition for low-skilled jobs among low-skilled people in weaker economies than there is in stronger ones.

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5 Cities are defined as ‘weaker economies’ if they have a lower share of exporting jobs that are high-skilled than the national average. See Appendix 1 for a full list of cities.
Figure 5: Low-skilled people to low-skilled jobs ratio, 2011

Source: ONS, Census 2011
3. In stronger economies, the low-skilled are more likely to access higher-skilled occupations too

In cities with strong economies, low-skilled people are much more likely to be in higher-skilled occupations than their counterparts in weaker economies. The link between qualifications and occupations is weaker in stronger economies and while a higher share of low-skilled jobs in stronger cities is taken up by individuals with medium-or-high-skilled qualifications, a higher share of low-skilled people fill higher-skilled occupations too.

In Aldershot, London and Reading, approximately 60 per cent of workers with few or no qualifications work in medium-or-high-skilled occupations (see Figure 6). This is higher than in weaker economies, such as those of Wakefield, Sunderland and Doncaster, where the share of low-skilled workers in higher-skilled occupations is around 40 per cent.

As a result, these indicators suggest that the job outcomes for low-skilled people are better in stronger economies than in weaker ones.
Figure 6: Share of low-skilled workers in medium-or-high-skilled occupations, 2011 (%)

Source: ONS, Census 2011
However, pressures on housing make the many opportunities strong economies offer less accessible

While it is true strong economies create more job opportunities for the low-skilled, these might not always be accessible.

One of the challenges associated with strong city economies is that success comes with increased pressures on the housing market. Looking at how many low-skilled people moved house, and where to, can give an indication of the effects of high house prices on low-skilled people.

As Figure 7 shows, cities with stronger economies tend to be less affordable. As a result, these cities see a much bigger share of low-skilled individuals who move house choosing to leave the city.

In 2011, on average, the annual house prices in Britain were nine times the annual salary of residents but among the most successful cities, the ratio was much higher. Oxford and Cambridge were the least affordable cities, with house prices at 14 and 11 times higher than annual earnings. These cities also saw the biggest share of low-skilled people moving house and leaving the city. Of all the low-skilled people who lived in Cambridge in 2010 and moved house, 47 per cent left the city. In Oxford, the share was 36 per cent.

**Figure 7:** The relationship between the strength of an economy, housing affordability and share of low-skilled people moving out of the city

Source: ONS 2018, Census 2011, Annual Survey of Hours and Earnings (ASHE), average gross weekly residence based earnings. Own calculations for PUA-level weighted by number of jobs, CPI inflation adjusted (2012=100).
Box 3: Low-skilled people in London

In contrast to other highly successful and unaffordable cities, London does not seem to push low-skilled people out as much. 6

The large majority (83 per cent) of all low-skilled people who lived in the capital and moved house in 2011 remained in London, while only 17 per cent left the city altogether.

While the data does not allow the tracking of people’s movements within the city, it is plausible to believe low-skilled people who moved house in London have moved further away from the city centre, reflecting the high house price growth inner London has experienced in recent years.

Of those low-skilled people who moved, most did not move far. Some 37 per cent of those who moved house and left Cambridge, for example, moved to non-urban areas within the same region. In Oxford, the figure was 27 per cent. Other strong city economies experienced similar patterns, suggesting that the low-skilled people moving out of these cities still value the proximity to these places’ labour markets, but cannot afford to live in them.

Private renters in areas of limited housing supply particularly feel this increase in costs of living. Recent research from the USA suggests that the impact of growth in high-skilled businesses on individuals depends on whether they own their own home. Those that do, are able to capitalise on the increased productivity high-skilled exporters bring into a city through an increase in the value of their home. Those who do not, bear the costs of this increased productivity in the form of higher rents. 7 Low-skilled people, who tend to be in low-paid jobs, are more likely to fall into the second category.

This suggests that creating job opportunities is a necessary, but not sufficient, condition when it comes to providing better economic outcomes for low-skilled people. The favourable indicators of economic performance for low-skilled people in stronger economies may, in fact, be the result of other low-skilled people being priced out of these cities. Policymakers in successful cities need to think carefully about the ability of low-skilled people to live in these economies when designing their inclusive growth strategies.

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6 As with all the cities in this report, London here refers to the London Primary Urban Area, which is larger than the Greater London Authority boundaries. See www.centreforcities.org/puas for more information.

Cities that have been able to attract high-skilled exporting businesses are both the strongest economic performers and have been able to provide better economic outcomes for low-skilled people. But, strong economic growth can come at the cost of increased house prices, which risks pricing out low-skilled people from these cities.

As this chapter will explain, the varying economic outcomes for low-skilled people are closely related to the mechanisms through which different low-skilled jobs are created.

**Different cities offer different types of low-skilled jobs**

There are two types of low-skilled private sector jobs that cities can create: those in local services, such as retail and leisure, and those in the exporting sector, such as manufacturing and logistics.

The map in Figure 8 shows how the composition of low-skilled jobs varies across the country. Most of the low-skilled jobs created in cities in the Greater South East, which generally have stronger economies, are in local services occupations. In these cities, almost eight out of 10 low-skilled jobs are in local services, with London and Cambridge having the most.

On the other hand, the composition of low-skilled jobs in cities in the North and Midlands is more skewed towards low-skilled exporting jobs. In these places, just over six out of 10 low-skilled jobs are in local services, while four in 10 are in the exporting sector.
Figure 8: The composition of low-skilled jobs in cities

Share of all low-skilled jobs that are local services, 2011 (%)
- 58 – 63
- 64 – 67
- 68 – 71
- 72 – 76
- 77 – 85

Source: ONS, Census 2011

These differences are the result of the types of exporting businesses that cities attract.
By attracting high-skilled exporters, cities with strong economies indirectly create low-skilled jobs too

Low-skilled jobs in local services – such as retail and leisure – naturally emerge in close proximity to any population centre. When a new neighbourhood is built, together with new houses and perhaps some offices, local services such as supermarkets, cafés and hairdressers are likely to open nearby.

But the extent to which each place will go beyond a basic provision of local services depends on the wealth available in a local economy – which, as seen in Box 2, depends on their ability to attract exporting businesses. This process is called the multiplier effect.⁸

**Figure 9: The multiplier effect**

Some businesses trade with other businesses. We call them **exporting businesses**. Here’s why they are important to the local economy.

1. Exporting businesses drive productivity growth...  
   ![1950 vs. 2019 productivity growth](image)
   ...while the productivity of local services remains static

2. Exporting businesses bring money into the local area...  
   ![1950 vs. 2019 money flow](image)
   ...which is then spent by workers and residents on local services

3. For every 10 new jobs in exporting businesses...  
   ![11 new jobs created](image)
   ...11 new jobs are created in local services

4. But high-skilled exporting businesses bring even more money into the local economy  
   ![17 new jobs created](image)
   This is why for every 10 new jobs in high-skilled exporting businesses...
   ...17 new jobs are created in local services

Source: Business Structure Database, Centre for Cities calculations

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All types of exporting jobs – both high-skilled and low-skilled – have a multiplier effect; however, the size of this effect varies depending on the type of job.

For example, between 1998 and 2015, where 10 new exporting jobs in urban Britain were created – other things being equal – 11 new jobs in low-skilled local services were also created (see Box 4 for methodology). But high-skilled exporting jobs had a much bigger multiplier effect. For every 10 new high-skilled exporting jobs created in the same period, 17 new jobs were generated in low-skilled local services.

Public sector jobs also had a positive multiplier effect, but this has been much smaller, with three new low-skilled local services jobs created for every 10 new public sector jobs.

The implication is that in recent years, cities that have been successful at attracting high-skilled exporting businesses have also been the cities best able to create growth in low-skilled local services jobs too. On the other hand, cities in which growth has been mostly led by the public sector or by lower-skilled export businesses have not experienced the same growth in local services.

**Box 4: Methodology – the multiplier effect**

The multiplier effect theory has been widely studied by economists all around the world, particularly in the USA by Enrico Moretti.  

By following a similar methodology as the one used by Moretti, this report looks at the relationship between growth in exporting jobs and local services jobs in urban Britain in between 1998 and 2015 using data from the Business Structure Database.

As the goal was to identify the impact of export growth on local services growth, we used growth in local services jobs between 1998 and 2015 first, and in low-skilled local services jobs second, as the dependent variables. As independent variables, different breakdowns of exporting jobs were used, firstly looking at the broader impact of export jobs on growth in local services and then breaking down export jobs into low-skilled and high-skilled. An instrumental variable was also introduced to deal with the fact that national economic shocks can affect both growth in exporting jobs and growth in local services jobs, influencing the results.

More details on the methodology can be found in Van Dijk (2017). A full list of industries that fall into the exporting and local services categories can be found in appendix 2, and the results of the regressions can be found in appendix 3.

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In contrast, cities with weaker economies mostly create low-skilled jobs by attracting low-skilled exporting businesses

Like high-skilled exporting businesses, low-skilled exporters are too, in theory, able to locate anywhere and decide where to locate based on the benefits different places offer.

However, the more routinised nature of these jobs means the benefits these firms are looking for are different from their higher-skilled counterparts. They still want access to a lot of workers, but they are predominantly looking for lower-skilled workers to fill their vacancies. Their requirements for knowledge are also lower, meaning they do not need to pay a premium for this. This means these firms tend to prefer locations where land is cheaper.  

Given their large pools of low-skilled workers and access to cheap land, it is not surprising to see that low-skilled exporting businesses tend to cluster in cities in the North and Midlands. However, these low-skilled exporting jobs are less able to generate wealth for their local economy or deliver additional local services jobs.

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11 Swinney P. (2017) ‘Why don’t we see growth up and down the country?’ London: Centre for Cities
Different cities face different challenges when it comes to offering economic outcomes to low-skilled people. The policy solutions should, therefore, reflect these differences.

Not only this, short-term pressures and long-term policy goals rarely go hand in hand, which makes it more difficult for policymakers to design policies that are inclusive in the longer-term.

**In the short-term, cities should consider the following three policy solutions to improve the economic outcomes of low-skilled people**

1. **Attract more low-skilled jobs in exporting sectors**

To attract low-skilled exporting businesses, cities need to offer access to a large pool of workers and relatively cheap land.

Cities with stronger economies may not be in a position to attract these types of jobs, as the price of land is too high to be attractive to low-skilled exporting businesses.

On the other hand, cities with weaker economies are already in a better position to attract lower-skilled exporting businesses because they already offer the benefits these firms seek. Thanks to the high number of low-skilled jobs these cities are able to attract, continuing to pursue this policy could, at least in the short-term, reduce the unemployment rates of low-skilled people in these cities.

However, while attracting these jobs is – in the short term – better than attracting no jobs at all, these cities have been using this mechanism for decades and have struggled to see the levels of economic growth they need to successfully support low-skilled people in the longer term. At the same time, these policies do not help to deliver a diverse businesses environment, and limits the choices of low-skilled people to low-skilled jobs only.
Furthermore, with increased automation and globalisation, many of the low-skilled exporting jobs we have today, are at risk of disappearing by 2030. Hence, the cities seeking out these types of businesses to alleviate pressures at the bottom end of the labour market may be facing bigger challenges 10 years down the line.

2. Improving access to jobs by improving transport links

In cities with strong economies, addressing challenges around job accessibility is what it takes to improve the economic outcomes of those at the bottom end of the labour market. In practice, this means interventions on transport and housing.

In these cities, the economy is often highly concentrated in the city centre. This does not just apply to high-skilled jobs, but to low-skilled jobs too. In successful cities, 34 per cent of all low-skilled jobs locate in the city centre or within a mile from it.

In contrast, in weaker economies, low-skilled jobs are less likely to locate centrally and are more likely to be dispersed around the city.

These differences do not come as a surprise, as the low-skilled local services jobs strong economies generate tend to cluster close to where demand for them is greater, which is often in city centres.

The implication from this is that for cities with strong economies, improving the links between suburbs and the city centre will allow more people to access the many opportunities available.

3. Improving access to jobs by building more homes

While improving transport is a first step to ensure more low-skilled people can access the labour markets of strong economies, cities with stronger economies ultimately need to build more homes.

In these places, measures aimed at improving housing affordability, such as providing more social housing or increasing overall housing supply, can make a positive difference when it comes to creating economic opportunities for those at the bottom end of the labour market. Increasing housing affordability would bring the direct benefit of making those job opportunities that are already available more accessible for low-skilled people, and would also have the indirect benefit of creating further jobs in local services as the result of an increase in population in the area.

However, not all cities will benefit from this. In cities with weaker economies, housing is already affordable and as such, building more homes will not bring the same positive benefits to the economy.
In the longer term, if cities are serious about inclusive growth, they need to encourage a shift towards high-skilled economies

While the measures presented above can help relieve low-skilled people from short-term pressures that prevent them from accessing better economic outcomes, in the longer-term, a more radical shift is required: there cannot be inclusive growth without overall economic growth.

This means creating enough economic growth for everyone to benefit from, up and down the country. This would not only reduce inequalities within places but between places too.

To do so, cities need to address this issue both from a supply and a demand side.

1. **Attracting more high-skilled exporting jobs**

While increasing the number of low-skilled exporting jobs does alleviate some short-term pressures around low-skilled unemployment, ultimately, it is high-skilled exporting jobs that support long-term, sustainable economic growth, which – if the costs of this growth are mitigated for – can benefit people across the job market.

As seen in previous chapters, policies that support the growth of cities do not just create high-skilled jobs, they support the creation of low-skilled jobs too. This is not only because they create more low-skilled job opportunities via the bigger multiplier effect that high-skilled exporting jobs have, but also because they increase the chances of progression to higher-skilled, better paid, jobs. This offers low-skilled people a chance to move up the labour market ladder.

As such, cities with strong economies should continue to build their high-skilled export base and cities with weaker economies should follow their example. To do so, weaker economies should, in the longer-term, focus on increasing their skills base, improving their city centres offering high-quality office space and improving transport infrastructure. This will in turn benefit low-skilled people too.

2. **Making sure people of all ages can access the education they need to succeed in the labour market**

Ultimately, the best way to improve the economic outcomes for low-skilled people is to ensure they can access opportunities to train and upskill. This applies everywhere across the country and requires interventions both to prepare younger generations to enter the labour market and, even more importantly, to support those who have already left compulsory education with few or no qualifications.

Much has been done in recent years to improve education, but there is still large variation across places. Historically, cities with weaker economies have been less successful at providing people with the skills they need to succeed in the labour market (see Figure 10). Twenty years ago, only 28 per cent of pupils in cities with weaker economies achieved five or more A*-C GCSEs including Maths and English, compared to 32 per cent in stronger economies. And looking at individual
cities, these differences are even wider. Just 21 per cent of pupils achieved strong GCSEs in cities such as Barnsley and Bradford, compared to more than 40 per cent of pupils in cities such as Aldershot and Bournemouth.

**Figure 10: Education achievements over time**

![Graph showing education achievements over time](image)

Source: Department of Education, Achievement at GCSE and equivalent for pupils by Local Authority District of School Location, 1996/97, 2006/07, 2015/16

These differences – which remain today despite improvements to overall grades – matter because of the central role education plays in shaping individual futures and offering a chance for social mobility. Indeed, employment rates are much higher among individuals with at least some qualifications, and skilled people tend to be more mobile. This means the chances of finding and accessing jobs are greater.

For these reasons, measures around improving access to and take-up of education, from early years through to school-age and higher education are of crucial importance to delivering a more inclusive society.

However, national and local policymakers must not forget about those who have already left compulsory education. The low-skilled workforce cities have today is a legacy of an education system that failed to prepare everyone for the labour market.

As Figure 11 shows, older people are more likely to be low-skilled than younger generations. Those aged 50 to 64 accounted for 25 per cent of the working-age urban population in 2011, but for 34 per cent of all the low-skilled in urban Britain. In contrast, 43 per cent of the urban working-age population was under 34 years old but only accounted for 33 per cent of low-skilled people in urban Britain.

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While much has been done already and should continue to be done to improve compulsory education, any successful strategy to reduce the number of people with few or no qualifications must involve opportunities to upskill and train those already in the labour market.
Inclusive growth is a topic of growing concern among national and local policymakers. Cities, thanks to their ability to create economic growth, have a central role in understanding the causes of, and providing solutions to poverty and inequality.

However, as this report shows, different places are at different stages when it comes to creating economic opportunities for those at the bottom end of the labour market. This is something both national and local policymakers need to be mindful of when designing successful inclusive growth strategies.

In particular:

- **There cannot be inclusive growth without economic growth, as such cities with weaker economies need to focus on creating economic growth by attracting high-skilled exporting businesses.** Short-term solutions to improve the economic outcomes of low-skilled people, such as attracting in low-skilled businesses will not, in the long term, support the economic growth required to support inclusive growth. Rather, weaker economies should focus on attracting investment from high-skilled exporters. This means cities need to increase the benefits they offer to such businesses by focusing on attracting and retaining talent, improving within-city transport, such as bus, and offering high-quality office space to businesses.

- **Cities with strong economies need to make sure their economic growth is accessible to everyone in their labour market.** To support their ongoing success, these cities need to focus on measures that make their job opportunities accessible, such as building more homes, ensuring better public transport connections between suburbs and city centres and continuing to work towards improving the skills of their residents.

- **Central Government should follow similar principles in the design of the UK Shared Prosperity Fund.** That means ensuring that in places with weak economies funding is not only directed to helping people
participate in the labour market, but is also aimed at supporting places in the creation of high-skilled economic growth.

- **More widely, there should be a much greater focus on adult education both at the national and local level, to ensure those with few or no qualifications can train and upskill.** Much of today’s low-skilled workforce is the legacy of an education system that failed to prepare everyone to be successful in the labour market. While much has been done in recent years to tackle this issue, a lot still remains to be done for those that have already left compulsory education. For this reason, national and local policymakers should work together to improve access to, and take-up of, adult education.
Appendix 1 – Defining weaker and stronger city economies

Cities were classified as either strong economies or weaker economies based on occupational data from the Census 2011.

Cities, where the share of all exports made by high-skilled exporters was higher than the national average (53 per cent), are classified as strong economies, the others as weaker economies.


Appendix 2 – Detailed methodology for the multiplier effect

This research has defined exporters and local services firms using Standard Industrial Classification (SIC) 2007 codes. This means it is not identifying actual exporters, but looking at businesses in sectors that have potential to sell to a market beyond their local area. Below is a full list of how each sector has been allocated.

**High-skilled exporters:**

This report classified high-skilled exporters as those industries NESTA identified as highly creative and high technology sectors in its report ‘The Geography of the UK’s creative and high-tech economies’ and all other industries that require degree-level qualifications. These are:

- Extraction of crude petroleum oil and natural gas
- Support activities for petroleum and natural gas extraction
- Reproduction of recorded media
- Manufacture of refined petroleum products
- Manufacture of other inorganic basic chemicals
- Manufacture of other organic basic chemicals
- Manufacture of other chemical products n.e.c.
- Manufacture of basic pharmaceutical products and pharmaceutical preparations
- Casting of steel
- Manufacture of electronic components
- Manufacture of computers and peripheral equipment
- Manufacture of communication equipment
- Manufacture of consumer electronics
- Manufacture of instruments and appliances for measuring, testing and navigation
- Manufacture of irradiation, electromedical and electrotherapeutic equipment
- Manufacture of optical instruments and photographic equipment
- Manufacture of wiring and wiring devices
- Manufacture of non-electric domestic appliances
- Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
- Manufacture of machinery for textile, apparel and leather production
- Manufacture of air and spacecraft and related machinery
- Production of electricity
- Motion picture, video and television programme production, sound recording and music publishing activities
- Programming and broadcasting activities
- Wired telecommunications activities
- Wireless telecommunications activities
- Other telecommunications activities
- Computer programming, consultancy and related activities
- Information service activities
- Financial service activities, except insurance and pension funding
- Insurance, reinsurance and pension funding, except compulsory social security
Activities auxiliary to financial services and insurance activities

Activities of head offices; management consultancy activities

Scientific research and development

Advertising and market research

Specialised design activities

Translation and interpretation activities

Other professional, scientific and technical activities n.e.c.

Low-skilled exporters:

Low-skilled exporters are all those businesses in industries that did not fall into the high-skilled exporters category. There are:

1. Crop and animal production, hunting and related service activities
2. Forestry and logging
3. Fishing and aquaculture
4. Mining of coal and lignite
5. Mining of metal ores
6. Other mining and quarrying
7. Support activities for other mining and quarrying
8. Manufacture of food products
9. Manufacture of beverages
10. Manufacture of tobacco products
11. Manufacture of textiles
12. Manufacture of wearing apparel
13. Manufacture of leather and related products
14. Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
15. Manufacture of paper and paper products
16. Printing and service activities related to printing
17. Manufacture of coke oven products
18. Manufacture of industrial gases
19. Manufacture of dyes and pigments
20. Manufacture of fertilisers and nitrogen compounds
21. Manufacture of plastics in primary forms
22. Manufacture of synthetic rubber in primary forms
23. Manufacture of pesticides and other agrochemical products
24. Manufacture of paints, varnishes and similar coatings, printing ink and mastics
25. Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
26. Manufacture of explosives
27. Manufacture of glues
28. Manufacture of essential oils
29. Manufacture of man-made fibres
30. Manufacture of rubber and plastic products
31. Manufacture of other non-metallic mineral products
32. Manufacture of basic iron and steel and of ferro-alloys
| 24.2  | Manufacture of tubes, pipes, hollow profiles and related fittings, of steel |
| 24.3  | Manufacture of other products of first processing of steel |
| 24.4  | Manufacture of basic precious and other non-ferrous metals |
| 24.51 | Casting of iron |
| 24.53 | Casting of light metals |
| 24.54 | Casting of other non-ferrous metals |
| 25    | Manufacture of fabricated metal products, except machinery and equipment |
| 26.12 | Manufacture of loaded electronic boards |
| 26.52 | Manufacture of watches and clocks |
| 26.8  | Manufacture of magnetic and optical media |
| 27.1  | Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus |
| 27.2  | Manufacture of batteries and accumulators |
| 27.4  | Manufacture of electric lighting equipment |
| 27.51 | Manufacture of electric domestic appliances |
| 27.9  | Manufacture of other electrical equipment |
| 28.12 | Manufacture of fluid power equipment |
| 28.13 | Manufacture of other pumps and compressors |
| 28.14 | Manufacture of other taps and valves |
| 28.15 | Manufacture of bearings, gears, gearing and driving elements |
| 28.2  | Manufacture of other general-purpose machinery |
| 28.3  | Manufacture of agricultural and forestry machinery |
| 28.4  | Manufacture of metal forming machinery and machine tools |
| 28.91 | Manufacture of machinery for metallurgy |
| 28.92 | Manufacture of machinery for mining, quarrying and construction |
| 28.93 | Manufacture of machinery for food, beverage and tobacco processing |
| 28.95 | Manufacture of machinery for paper and paperboard production |
| 28.96 | Manufacture of plastics and rubber machinery |
| 28.99 | Manufacture of other special-purpose machinery n.e.c. |
| 29    | Manufacture of motor vehicles |
| 30.1  | Building of ships and boats |
| 30.2  | Manufacture of railway locomotives and rolling stock |
| 30.4  | Manufacture of military fighting vehicles |
| 30.9  | Manufacture of transport equipment n.e.c. |
| 31    | Manufacture of furniture |
| 32    | Other manufacturing |
| 35.12 | Transmission of electricity |
| 35.13 | Distribution of electricity |
| 35.14 | Trade of electricity |
| 35.2  | Manufacture of gas; distribution of gaseous fuels through mains |
| 35.3  | Steam and air conditioning supply |
| 51    | Air transport |
| 52    | Warehousing and support activities for transportation |
| 61.3  | Satellite telecommunications activities |
| 74.2  | Photographic activities |
Low-skilled local services:

33.11 Repair of fabricated metal products
33.12 Manufacture of jewellery and related articles
33.13 Repair of electronic and optical equipment
33.14 Repair of electrical equipment
33.15 Repair and maintenance of ships and boats
33.17 Repair and maintenance of other transport equipment
33.19 Repair of other equipment
33.2 Installation of industrial machinery and equipment
36 Electricity, gas, steam and air conditioning supply
37 Water collection, treatment and supply
38 Waste collection, treatment and disposal activities; materials recovery
39 Remediation activities and other waste management services.
41 Construction of buildings
42.1 Construction of roads and railways
42.91 Construction of water projects
43 Specialised construction activities
45 Wholesale and retail trade and repair of motor vehicles and motorcycles
46 Wholesale trade, except of motor vehicles and motorcycles
47 Retail trade, except of motor vehicles and motorcycles
49.1 Passenger rail transport, interurban
49.3 Other passenger land transport
49.4 Freight transport by road and removal services
50 Water transport
53 Postal and courier activities
55 Accommodation
56 Food and beverage service activities
58.12 Publishing of directories and mailing lists
58.13 Publishing of newspapers
58.14 Motion picture projection activities
58.19 Other publishing activities
68 Real estate activities
77 Rental and leasing activities
79 Travel agency, tour operator and other reservation service and related activities
80.1 Private security activities
80.2 Security systems service activities
81 Services to buildings and landscape activities
82 Office administrative, office support and other business support activities
84.25 Fire and fire services activities
85.51 Sports and recreation education
85.53 Driving school activities
85.59 Other education n.e.c.
87.2 Residential care activities for learning disabilities, mental health and substance abuse
87.3 Residential care activities for the elderly and disabled
87.9 Other residential care activities
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
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<td>Social work activities without accommodation</td>
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<td>Library and archive activities</td>
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<tr>
<td>91.02</td>
<td>Museum activities</td>
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<tr>
<td>92</td>
<td>Gambling and betting activities</td>
</tr>
<tr>
<td>93</td>
<td>Sports activities and amusement and recreation activities</td>
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<tr>
<td>95.2</td>
<td>Repair of personal and household goods</td>
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<tr>
<td>96</td>
<td>Other personal service activities</td>
</tr>
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<td>97</td>
<td>Activities of households as employers of domestic personnel</td>
</tr>
<tr>
<td>98</td>
<td>Undifferentiated goods- and services-producing activities of private households for own use</td>
</tr>
<tr>
<td>99</td>
<td>Activities of extraterritorial organisations and bodies</td>
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Appendix 3 – Regression results

To look at the overall impact of exporting jobs on low-skilled local services jobs, the following regression was used:

Low-skilled local services growth = exports growth + public sector growth + \( \mu \)

The export variable was then broken down into high-skilled and low-skilled to understand the impact of the two different types of jobs:

Low-skilled local services growth = high-skilled exports growth + low-skilled export growth + public sector growth + \( \mu \)

The results were the following:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Robust standard error</th>
<th>t-value</th>
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<tr>
<td>Export jobs growth</td>
<td>0.58</td>
<td>0.14</td>
<td>4.09**</td>
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<tr>
<td>Publicly-funded jobs growth</td>
<td>0.04</td>
<td>0.12</td>
<td>1.21</td>
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<tr>
<td>Constant</td>
<td>0.25</td>
<td>0.05</td>
<td>5.15**</td>
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</table>

Dependent variable: low-skilled local services growth. All variables are logged. Regression run with robust standard errors.

* significant at the 10 per cent level ** significant at the 5 per cent level

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Robust standard error</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-skill export jobs growth</td>
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<td>0.14</td>
<td>2.46**</td>
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<tr>
<td>Low-skill export jobs growth</td>
<td>0.04</td>
<td>0.26</td>
<td>0.15</td>
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<tr>
<td>Publicly-funded jobs growth</td>
<td>0.18</td>
<td>0.11</td>
<td>1.59</td>
</tr>
<tr>
<td>Constant</td>
<td>0.12</td>
<td>0.13</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Dependent variable: low-skilled local services growth. All variables are logged. Regression run with robust standard errors.

* significant at the 10 per cent level ** significant at the 5 per cent level

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