



# Why don't we see growth up and down the country?

April 2017

Key finding: The economy isn't flat, but is concentrated in cities. And this is likely to become more important as the UK specialises in more knowledge-based activities.

# Introduction

You don't have to be an expert in economic geography to see that London and its surrounding cities act like magnets to a great number of businesses, despite them being much more expensive than other locations across the country. But why these businesses don't up sticks and go further north requires a bit of explanation. And only by understanding the causes of this will the industrial strategy be able to fulfil the Government's intention to "drive growth up and down the country".

This briefing is the second in a series looking at what a place-based industrial strategy looks like. It shows that:

- Different parts of the economy city centres, suburbs, hinterlands and rural areas offer different things to business. And this influences the type of businesses they attract and grow.
- Cities inherently offer businesses a greater number of benefits because of a process known as agglomeration. But some cities do this much more successfully than others, meaning a very different approach is required in different places.
- This means that a successful industrial policy needs to do two things if it is to improve standards of living across the country help improve the benefits that a city should offer in struggling cities, and deal with the costs of growth (e.g. congestion, expensive housing) in successful cities.

# Different parts of the country offer very different attributes to businesses

The national economy is not evenly spread across the UK - it is clustered in specific places. And this clustering persists - and for some industries is increasing - despite the ever greater advances in communications technologies. This suggests that place has an important role to play in the performance of the national economy.

That there is a huge concentration of businesses in central London for example, but very few in the Highlands suggests that **different parts of the UK inherently offer different things to business.** Cities offer three key advantages, driven by a process known as agglomeration (see Figure 1):

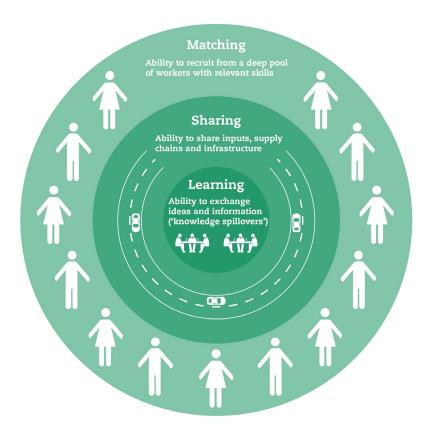
<sup>2</sup> See for example, Swinney P and Sivaev D (3013) Beyond the High Street: Why our City Centres Really Matter, London: Centre for Cities



<sup>1</sup> Prime Minister's Office Press Release 'New Cabinet committee to tackle top government economic priority', 2 August 2016 https://www.gov.uk/government/news/new-cabinet-committee-to-tackle-top-government-economic-priority

- *Learning:* Access to knowledge, through either the creation or sharing of it through face-to-face interactions (known as 'knowledge spillovers')
- Sharing: Sharing of infrastructure, inputs and supply chains
- Matching: Access to a lot of potential workers

Figure 1: The benefits of agglomeration



#### Box 1: Just what are knowledge spillovers exactly?

Knowledge spillovers is the term given to the increase in productivity that businesses receive by being located close to other businesses. This occurs mainly through the benefits of face-to-face interaction, which allows easier sharing of ideas and information. The benefit of this, however, is much greater for knowledge-based businesses, such as those in marketing and finance, than ones that undertake more routine activities, such as call centres or basic manufacturing.<sup>3</sup>

Although knowledge spillovers are invisible, we do observe the outcome of them. This is why there are around 1.8 million jobs in central London, despite it being one of the most expensive places to be based in the world.4 And jobs have been clustering in our most successful city centres in recent years.

As the UK continues to specialise in more knowledge-based activities **knowledge spillovers are becoming** increasingly important, in spite of continual improvements in communications technology.

Graham, D (2007) Agglomeration Economies and Transport Investment, Journal of Transport Economics and Policy 41 (3) Cushman & Wakefield (2014) Office Costs Across the World, London: Cushman & Wakefield



There are of course costs to a city location too, which non-urban areas offer as advantages:

- More expensive land in shorter supply
- Congestion
- Pollution

The importance of these factors in determining location varies for different types of business. To see how this varies it is helpful to split businesses into three broad groups – high-skilled exporters (in the sense that they export to regional, national and international markets), low-skilled exporters and local services businesses.

**High-skilled exporters** (such as investment banking or precision engineering) are in theory footloose. Because they don't serve one particular market, they are not tied to a specific location. But **their clustering in specific parts of the UK suggests that location is important to them.** In deciding where to invest these businesses tend to look for two main things: access to knowledge, and access to high-skilled workers.

**Low-skilled exporters** (such as call centres), for the same reasons, are also footloose. But the more-routinised nature of their work means that they tend to be looking for different things to their high-skilled counterparts – **they still want access to lots of workers, but they're looking for lower-skilled workers to fill their vacancies.** They also have a lower requirement to access knowledge (and so won't pay a premium for it), meaning cheaper land becomes an important factor too.

Unlike the first two types of businesses, **local services businesses** (such as newsagents and hairdressers) are by definition tied to a specific market. And their success is tied to how large the market is, which is determined by the success of the exporting businesses in an area putting money in people's pockets. The **location decisions of these businesses are therefore governed less by the particular aspects of a place itself, and more by the performance of the exporting businesses in that place.**<sup>5</sup>

That exporting businesses generate jobs in local services through a 'multiplier effect' makes their location decisions important for the wider success of a local economy. These exporters are important for two further reasons.

- **1. They bring money into a local economy,** and generate this money independent of its performance, by selling their goods and services elsewhere.
- 2. They also tend to drive productivity growth. Since 1990, productivity has more than doubled in the manufacture of computer and electrical equipment and information and communications, and has almost tripled in chemicals and pharmaceuticals. By way of comparison, it has increased by just 0.7 per cent in food and accommodation, and has declined in real estate and arts, entertainment and recreation (all local services).<sup>7</sup>

The ability of areas to attract and grow exporting businesses will determine their future economic performance.

<sup>7</sup> ONS, Blue Book



<sup>5</sup> Noting of course that the number of people living in an area determines the size of a market, as well as the amount of disposable income they have.

<sup>6</sup> Moretti, E. (2013) The New Geography of Jobs. Houghton Mifflin Harcourt, New York

Where exporting businesses locate in Britain depends on the **trade-off that they make between the access to the things that they want** – knowledge (for high-skilled businesses) and workers – against the cost of locating in those places. Figure 2 shows how this trade off plays out across city centres, suburbs, hinterlands surrounding cities and rural areas. At one end of the scale, city centres offer access to knowledge and workers, but at a price, whereas rural areas, at the other end, offer cheaper premises but both lower access to knowledge and to workers.

Spare of degree-holders

City Centre Suburbs Hinterland Rural

City Centre Suburbs Hinterland Rural

Better access to knowledge and workers

Figure 2: Trade-offs firms consider when deciding where to locate

Source: Neighbourhood Statistics; NOMIS (2016), Census 2011. Note: Rateable values are used as a proxy for land costs. Medium Super Output Areas were used to define the different geographies as this is the lowest geography that rateable values are available. Data is for England and Wales only.

This trade-off resulted in the following patterns in 2015, as shown in Figure 3:

- Businesses and the jobs they create were concentrated in cities. This is most acute for city centres, which accounted for just 0.1 per cent of all land, but 14 per cent of all jobs.
- This is even more acute for exporting jobs in services. Around one quarter of these jobs were located in city centres, and just under 70 per cent of the national total were in cities as a whole. Manufacturing exporters showed different patterns, with 80 per cent being in the suburbs of cities or their hinterlands.

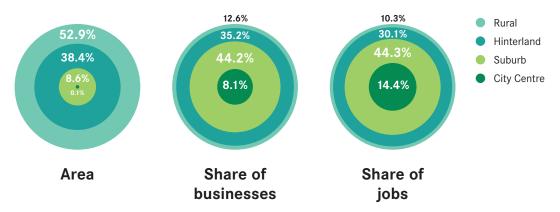
<sup>8</sup> Hinterlands around cities are defined according to the average distance a commuter travels into a city, and varies from city to city. For Bristol, for example, its hinterland is 45 km, while for Ipswich it is 22 km



- Exporters tended to be much more highly-skilled in city centres than elsewhere, reflecting the greater access to knowledge that city centres offer.
- The average size of a business in terms of its number of employees was lower for more rural areas. This suggests that because access to a large pool of workers is less important to these businesses, lower costs have had a greater weighting in their decision making and they opted for a more rural location as a result.

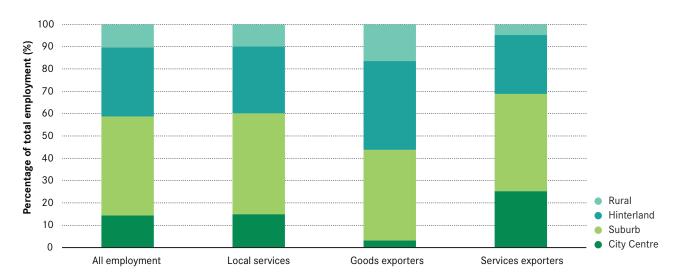
Figure 3: Characteristics of the economies of city centres, suburbs, hinterlands and rural areas

How jobs and businesses are spread across the country



Source: ONS (2016), Business Structure Database 2015; ONS (2016), Census 2011, origin-destination data (WU02UK); Centre for Cities' own calculations.

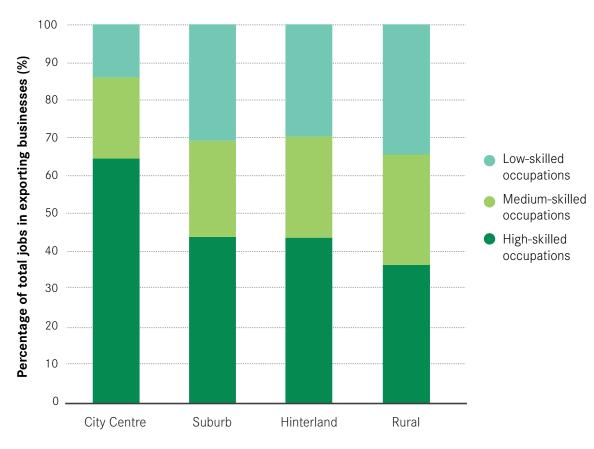
# The role of exporters and local services across the country



Source: ONS (2016), Business Structure Database

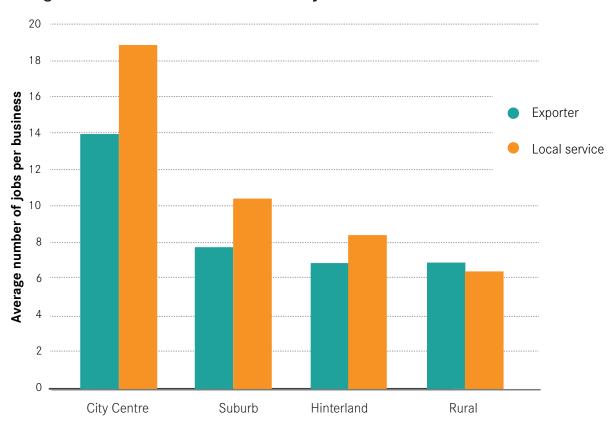


# Where low and high-skilled exporting jobs are located



Source: ONS (2016), Business Structure Database

# Average size of businesses across the country



Source: ONS (2016), Business Structure Database



### Box 2: Exceptions to the rule

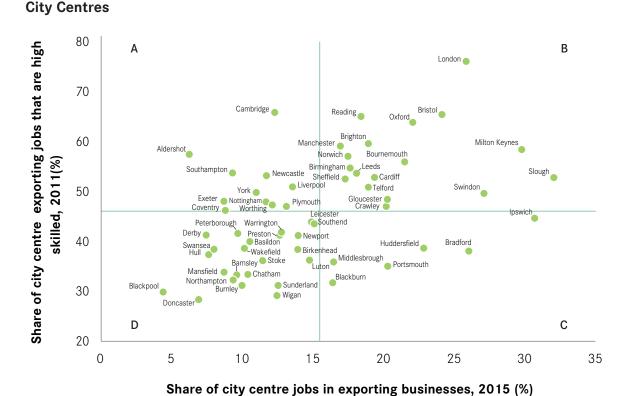
There are, of course, some businesses that weigh up different factors when assessing where to locate. Sellafield is a very large employer in a remote location, but the inherent characteristics of a remote location obviously suits the requirement to undertake nuclear activities away from large settlements. So-called 'lifestyle' businesses are another that are unlikely to make a cost/access to knowledge trade-off in their location, instead choosing a location that suits their leisure rather than their business. But the aggregate picture shows that on the whole surviving businesses are broadly making a trade-off between costs and access.

# Cities don't all function in the same way, which affects their ability to attract investment

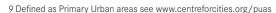
Of course, the ability of cities and their city centres to attract and grow businesses varies across the country. This varies because of their varying ability of offer access to knowledge and access to workers – agglomeration plays out differently across cities. And this can be seen by looking at the number and type of exporters that cities have in their economies.

Figure 4 plots the share of exporters (showing how successful an area has been at attracting exporting businesses) against the proportion of these exporters that are high skilled (showing how successful it has been at attracting high-skilled investment) for all city centres and suburbs – which together make up the whole urban area – in England and Wales.<sup>9</sup> And it splits cities into quadrants depending on whether they are above or below the national average.

Figure 4: The size and make-up of the exporting base in city centres and suburbs



Source: ONS (2017), Business Structure Database, Census 2011





#### **Suburbs** 70 Share of suburbs exporting jobs that are high Ε F Cambridge 65 Reading 60 55 London skilled, 2011 (%) Brighton Slough 50 Worthing Cardiff Derby 45 Leeds Bournemouth Warrington Basildon Norwich Northampton Coventry Gloucester Preston 40 Birkenhead Peterborough Ipswich Manchester Luton Newcastle Middlesbrough Plymouth Nottingham Chatham • Bradford Telford 35 Newport Southend \_ Sheffield Birmingham Huddersfield Leicester Crawley Liverpool Mansfield Wakefield Barnsley 30 Stoke • Burnley Doncaster \_ Sunderland 25 Н G 20 15 25 45 10 20 30 35 40 Share of suburban jobs in exporting businesses, 2015 (%)

Source: ONS (2017), Business Structure Database, Census 2011

#### City centres

Let's first look at city centres. Those city centres in Quadrant B – such as Reading, Manchester and London – have been successful at attracting in or creating exporting jobs, and these tend to be high-skilled. Meanwhile Quadrant D city centres such as Sunderland and Preston have few exporting jobs, and those they do have tend to be low skilled.

Looking at Figure 5 suggests why this is likely to be the case. Quadrant A and B city centres (those with above average shares of high-knowledge exporters) tend to have a more highly-skilled workforce within commutable distance and have a higher density of businesses, with the downside being that they are more expensive than those in Quadrants C and D.<sup>10</sup>

This suggests that city centres in Quadrants A and B offer the benefits of knowledge spillovers and access to high skilled workers, and the businesses locating in these city centres are willing to pay a premium to get access to these benefits. And it also tells us that city centres in Quadrants C and D do not offer these benefits to the same extent.

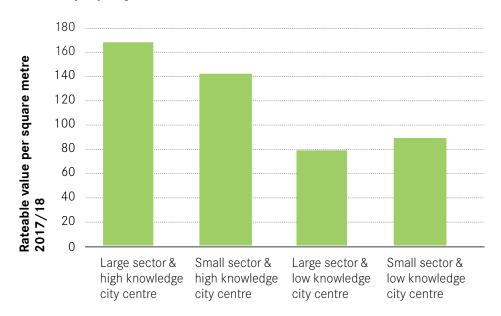
It's also interesting to note that just five centres are in Quadrant C, having a large exporting base which is low skilled. This shows that a central city location – even if it is relatively cheap – tends to have little to offer low-skilled exporters.



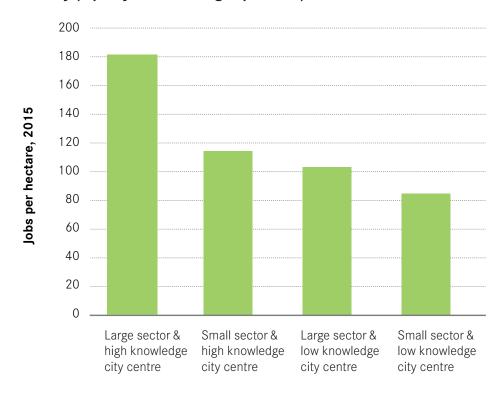
<sup>10</sup> Because they are invisible knowledge spillovers are difficult to measure. But they are likely to more likely to occur in dense urban environments because of the increased likelihood of face-to-face interaction, and so density of jobs is used as a proxy. See, for example, Venables, AJ (2006) Shifts in Economic Geography and their causes, Economic Review, 91(4): 61-85

Figure 5: Characteristics of city centres

# **Costs of property**

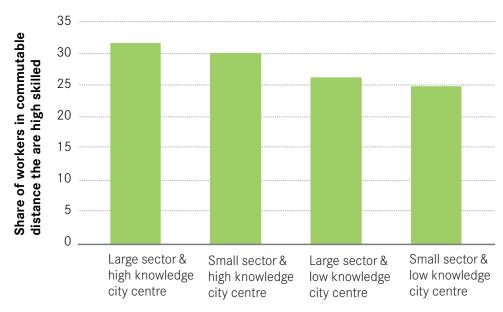


# Density (a proxy for knowledge spillovers)





#### Access to workers



Source: Census 2011, VOA

#### Suburbs

Now let's look at suburbs. The first thing to note (looking again at Figure 4) is that when comparing the composition of the export base in terms of high and low skilled, suburbs look very different to city centres – large export bases in the suburbs tend to be made up of predominantly lower-skilled exporters.

Again looking at the characteristics of different suburbs points to why these patterns are seen (see Figure 6). As with city centres, those with access to higher-skilled workforces (Quadrants E and F) are more successful at attracting in higher-skilled exporters, while commercial property also tends to be more expensive. These suburbs tend to be in the Greater South East. Box 3 discusses the nature of higher-skilled jobs found in the suburbs compared to city centres.

But the fact that lower-skilled cities have still attracted in many exporters suggests that these cities must still hold appeal relative to a hinterland or rural location. This is because despite not offering access to knowledge, agglomeration is still occurring – as well as offering access to shared infrastructure, these cities still offer access to deep pools of workers. It's just that these pools tend to be lower skilled.

Given that commercial space also tends to be cheaper, this means that those **suburbs in Quadrant G**, **such as Sunderland and Barnsley, offer a number of advantages to low-skilled exporters.** And the data shows that they have been successful at attracting these businesses (be they 'home grown' or from elsewhere) as a result.

It is these advantages that also help explain why Hull (Quadrant G), for example, has been more successful at attracting lower-skilled businesses than Southend (Quadrant H). **Both suburbs offer access to large pools of lower-skilled workers. But commercial space in the former is cheaper,** and this gives Hull an edge over Southend when it comes to attracting this type of firm.



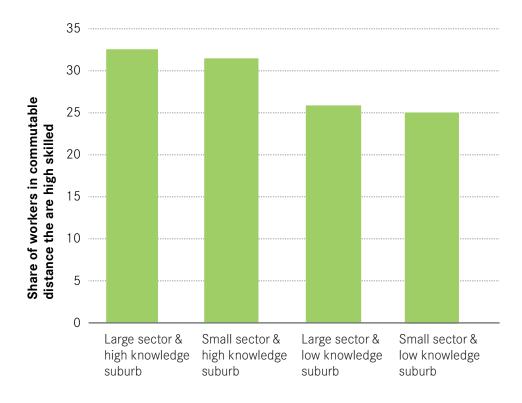
#### Box 3: The differences between high-skilled exporters in city centres and suburbs

Not all high-skilled exporters benefit from a city centre location. This is most obvious for advanced manufacturing businesses that require greater amounts of space. But it is also true for some high-skilled services, such as research and development activities. For example, a pharmaceutical company developing a new drug stands to lose a great deal of money if a competitor discovers the drug before it has been patented. In this instance, while knowledge sharing within a company is likely to be a good thing, knowledge sharing between companies is not. Cities like Aldershot, Reading and Swindon have been successful at creating many thousands of R&D jobs. But across these three cities, just 1 per cent are city centre based.

The impact that high-skilled city centre and suburban businesses have on demand for local services is likely to differ. Out of town business parks, because of their low densities, do not tend to encourage social interaction. Any walk around a suburban business or industrial park shows that this stifles any potential market for local services such as shops, cafés and restaurants. Research looking at the centres and science parks of Montreal, Toronto and Vancouver shows how cafés, bars and restaurants are much more prevalent on the centres of these cities than in their 'science' neighbourhoods.<sup>11</sup>

Figure 6: Characteristics of suburbs

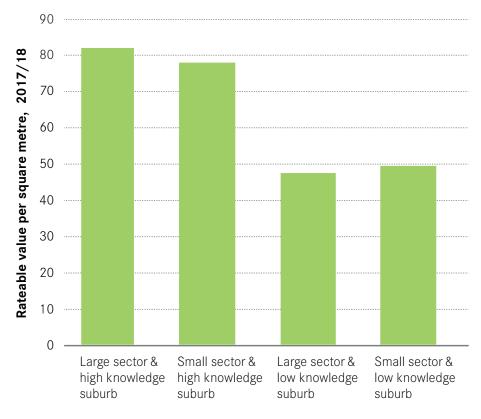
#### Access to workers



<sup>11</sup> Spencer GM (2015) Knowledge Neighbourhoods: Urban Form and Evolutionary Geography, Regional Studies 49:5, 883-898



# **Cost of property**



Source: Census 2011, VOA

# Putting this together suggests that there are two broad types of city - high skill and low skill.

The characteristics of the two types of agglomeration that plays out in them are shown in Figure 7. Given their ability to attract in higher-skilled investment, those cities that benefit from high-skilled agglomeration tend to do better than those displaying low-skilled agglomeration.

Figure 7: Characteristics of high and low-skill agglomeration

High skill	Low skill
Benefits	
Access to knowledge	-
Access to shared infrastructure	Access to shared infrastructure
Access to high-skilled workers	Access to low-skilled workers
Costs	
High cost	Low cost

# What this means for industrial strategy

The UK economy is likely to continue to specialise in ever more knowledge-based activities because of the competitive advantage it has over other countries in these types of activities. This means that if industrial policy is to improve productivity and encourage growth outside of the Greater South East, then it will need to remove the barriers that high-skill exporters face across the country.

Given the role that agglomeration plays in determining the location of these businesses (and so governing the UK economy's ability to attract and grow these businesses), an industrial strategy necessarily needs to be place-based. And it needs to do two main things:

- For cities that have struggled to attract in high-skilled exporters, it needs to work on improving the ability of cities to facilitate the benefits of agglomeration, focussing on making them places of knowledge production.
- For cities that have been successful at attracting in high-skilled exporters, the onus will need to be on reducing the costs of agglomeration managing the cost increase of homes and commercial space, managing congestion and managing pollution.

A suite of policies will be required to achieve both of these objectives. In the briefings that follow we will look in more detail at specific policies to achieve both of these things.

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