

Enterprise and innovation in the context of place:

An exploratory comparative
statistical analysis

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Published by

Policy&Practice
St Chad's College
Durham University
18 North Bailey
Durham DH1 3RH

July 2021

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Acknowledgements

We would like to thank Neil Heckels, Senior Policy Engagement Manager, in the Department of Research and Innovation Services, Durham University for supporting the development of this project and enabling the project to proceed drawing upon funding from UKRI's Strategic Priorities Fund.

We are indebted to Alan Welby, Dinah Jackson, Emma Ward and Richard Baker, our colleagues at North East Local Enterprise Partnership, for their support, practical assistance and insights throughout this project.

Staff at the Office for National Statistics have been greatly supportive in providing assistance to locate and access data from the National Archive. We would also like to thank Martin Wood at North of Tyne Combined Authority for assisting with methodologies for mapping case study areas.

Introduction

Enterprise and innovation in the context of place

The aim of this report is undertake analysis of existing evidence to reach a better understanding of the relationship between ‘places’, ‘economic vitality’ and ‘business innovation’ in the North East LEP area of North East England.

As a place, North East England has many social, cultural and economic characteristics that differentiate it from other English regions – in other respects it is remarkably similar. But surprisingly, how these regional similarities and differences actually affect economic vitality and business innovation is under-researched. We need to know *how* ‘different’ the region is and think again about how this might shape prospects for the future.

Within North East England there is variation too. The region has densely populated urban areas and wide expanses of sparsely populated rural areas, it has affluent areas and poor ones too. But how do factors such as local affluence or proximity to urban centres shape the prospects of specific areas? Assessments of the situation of discrete areas is commonplace, but perhaps less often are interactions between them contemplated as seriously as they should be?

This research report presents a statistical profile of the region to determine ‘how different’ North East England is from other regions and to speculate about what the impact of these differences might be for the region’s economy and society.

Additionally, the study has undertaken a detailed statistical appraisal of the situation within the region in eight case-study areas to help frame questions about the endemic advantages or disadvantages areas may have, and to think carefully about how interactions between areas shape expectations about economic vitality at a local level.¹

While this report has broad interests in many aspects of regional social and economic wellbeing, the primary focus is the role of private-sector business in helping to create a sense of economic vitality by exercising creativity in its practices. We are interested in all types of business, rather than focusing on high-profile companies that are known to be at the leading edge of their sectors.²

Most businesses are quite small, serve their local market place and as such are vital foundation stones for local communities. If this part of the regional economy is *supported to be* and is *valued for being* vibrant and energetic then business confidence and regional self-belief will be stronger.

¹ The report was written with qualitative follow up research in mind. Such work would entail the collection of qualitative data from across the region in the eight case-study areas selected to grasp a better understanding of what area assets and capabilities are, see how well they are understood and valued, look at how they interact and assess the strength of vigour that exists now, or could be developed in future, to secure the region’s social and economic interests.

² Research has already been published on sectors with high-growth potential in North East England. See: North East Local Enterprise Partnership (2019) *Business growth and innovation ecosystem for the North East*, Newcastle: North East LEP; Brown, D., Jeffrey, P., Wain, M. and Dijkstal, F. (2019) *Review of sectors, competencies and assets to inform development of the North East Local Industrial Strategy: evidence report to the North East LEP*, Brighton: Technopolis Group; and, Fernandez, K. *et al.* (2018) *Developing an innovation ecosystem: policy, skills and operations*, Newcastle: North East Innovation Observatory.

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The report has four sections. The first section provides more detail on the aims of the project and why it needs to be done, together with an outline of its methodology and the conceptual ideas that underpin it.

The second section presents statistical analysis of North East England in comparison with other regions to assess patterns of economic vitality in the private sector.

Following this, five case-studies will be introduced which have been selected to get a better understanding of how this region compares in the context of the social and economic assets each area has to hand.

Section three will present statistical portraits of eight case-study areas in North East England. Its purpose is to find out how local economic vitality is affected by the social characteristics of areas. While the analysis has areas at its focus, it is as interested in interaction between areas and how this can shape local wellbeing and economic strengths.

The final section reviews the key findings from the statistical analysis. Following this the current situation of North East England is critically reviewed in the context of the comparative research. This report concludes with an outline of themes which could be developed further in qualitative research.

Section One

Assets, innovation and economic vitality

1.1 North East England – one region, two stories?

In reputational terms, North East England seems to live a double life. On one hand, the region's distinctive political and industrial history, landscape and coast, culture, society and cityscapes are lauded and nationally valued. In economic terms, the North East of England has many industrial sectoral strengths and potential, as reported in the North East Local Enterprise Partnership's recent report *Our Economy 2020*:³ the region has:

- Key assets in the energy sector, including offshore energy and subsea technologies, regional energy, and demonstration and innovation
- World leading clinical research that supports a growing health and life sciences sector
- A vibrant digital community with a combination of start-up, high growth and established businesses across a wide range of specialisms

The region has been successful in attracting foreign direct investment (FDI) and significantly outperforms many other regions in this respect. Furthermore, the region has worked hard to cement and further strengthen its business-support infrastructure to ensure that key sectors can flourish.

On the other hand, North East England has a reputation for 'underperforming' economically in comparative terms. In bald statistical terms, the region does not always fare as well as some other regions. Business density is more sparse, there are fewer business start-ups and productivity is lower than in many other regions. Furthermore, there are fewer jobs available per head of working population and the quality of those jobs tends to be lower than in other areas (using measures such as pay, security, skill and options for advancement).⁴

Understanding the region's economic strengths and weaknesses is a priority so that strategic investment can be made to underpin future successes and tackle existing challenges.⁵ This only be achieved if the measures adopted to assess performance in comparative terms are equitable and fair by taking into account the social, economic and cultural assets that are at hand to achieve economic progress.

In this research project, exploratory conceptual and comparative empirical was undertaken to assess the relative importance of regional assets in securing economic vitality. A critical stance is adopted when considering the value of widely used metrics to measure regional performance. The reason for this is simple. If the performance of the most successful regions is projected in policy terms as the 'gold standard' to

³ North East LEP (2020) *Our Economy 2020: with insights into how our economy varies across geographies*, Newcastle: North East LEP <https://www.northeastdatahub.co.uk/report/our-economy-2020/>

⁴ North East Local Enterprise Partnership (2019) *Business growth and innovation ecosystem for the North East*, Newcastle: North East LEP.

⁵ A useful recent appraisal of the situation of the North of England critically assesses aspects of current government policy on levelling up, see Fothergill, S. and Gove, T. (2021) *Plan for the North: how to deliver the levelling up that's really needed*, Sheffield: Centre for Regional Economic and Social Research, <https://sheffieldcityregion.org.uk/plan-for-the-north/>

which other regions should aspire – then there is a risk that some regions will be at risk of being castigated for failing to hit the mark or, worse for being ‘left behind’.

This project draws a clear distinction between **measures of performance** (such as metrics on the number of business start-ups, licences and patents, contribution to GDP, area GVA and so on) and **assessments of achievement** which consider success in the context of local assets.

Measures of performance use standardized metrics irrespective of local circumstance.⁶ This can advantage some areas if they have a strong asset base where there is sufficient resource to secure better results. Places with fewer local resources may struggle to meet the same levels of performance but this does not mean that they have not been successful relative to their assets.

Assessments of successful achievement are more accurate if they take into account local conditions. It is commonplace, for example in the assessment of added value in educational performance to take into account the ‘distance travelled’ by students with different starting points rather than using crude performance measures such as GCSE passes.

In economic assessments of area vitality it may be useful to do the same – and recognise that entrepreneurial achievement in some areas may be regarded as unremarkable or perhaps even routine, while in other areas the same achievement may represent a real triumph or perhaps even transformational change.

Conventional measures of performance are also used to compare performance across industrial sectors. Such approaches have come under criticism in recent decades because the boundaries between sectors have become more fluid.⁷ It is now sometimes quite difficult to define within which sector a company should be located if a company is engaged in, for example, software engineering, scientific and technical services, process engineering and manufacturing.

Changes in the range of activities companies engage in has led to interest in place-based analysis of industrial clusters (including businesses from the same and/or closely related sectors).⁸ Studies of the benefits of clusters, especially in digital, bio-tech, advanced manufacturing and financial services have tended to centre on areas which have been particularly successful.

Many areas aspire to emulate the success of pioneering regions, but remain culturally associated and emotionally committed to aspects of their industrial heritage. The benefits of agglomeration in some areas have been widely reported,

⁶ See: for example, Department of Business, Innovation and Skills (2015) *Mapping local comparative advantages in innovation*, London: OCS; Goodridge, P., Haskel, J. and Wallis, G. (2014) *UK Innovation index 2014*, London: Working Papers, Nesta. When metrics are unavailable this is sometimes known as ‘hidden innovation’, see: Nesta (2007) *Hidden innovation: how innovation happens in six ‘low innovation’ sectors*, London: Nesta https://media.nesta.org.uk/documents/hidden_innovation.pdf.

⁷ See Brown, D., Jeffrey, P., Wain, M. and Dijkstal, F. (2019) *Review of sectors, competencies and assets to inform development of the North East Local Industrial Strategy: evidence report to the North East LEP*, Brighton: Technopolis Group; O’Donoghue, D. & Townshend, I. (2005) ‘Diversification, specialisation, convergence and divergence of sectoral employment structures in the British urban system, 1991-2001’, *Regional Studies*, 39 (5) 585-601.

⁸ There is a large academic literature on the advantages of clusters and agglomeration, see for example: Braun, P., McRae-Williams, P. and Lowe, J. (2005) ‘Small business clustering: accessing knowledge through local networks’, *Journal of New Business Ideas & Trends*, 3, 57-63; Kloosterman, R.C. & Lambregts, B. (2001) ‘Clustering of economic activities in polycentric urban regions: the case of the Randstad’, *Urban Studies*, 38 (4) 717-732; Audretsch, D.B. (1988) ‘Agglomeration and the location of innovative activity’, *Oxford Review of Economic Policy*, 14 (2) 18-29. One of the benefits claimed about clusters is the chances of knowledge spillovers, see: Ramadani, V., Abazi-Alili, H., Dana, L., Rexhepi, G. and Ibraimi, S. (2017) ‘The impact of knowledge spillovers and innovation on firm-performance: findings from the Balkans countries’, *International Enterprise Management*, 13, 299-325. Those who champion the idea of clusters also have their detractors: Beaudry, C. and Breschi, S. (2002) ‘Are firms in clusters really more innovative?’, *Economics of Innovation and New Technology*, 12 (4) 325-342; Duranton, G. (2011) ‘California dreamin’: the feeble case for cluster policies’, *Review of Economic Analysis*, 3, 3-45.

but agglomeration can also disadvantage areas if they are 'locked in' to declining sectors.⁹

Difficulties encountered with sector analysis has led to a renewed interest in local economies as discrete and to some extent 'autonomous' entities. For many years it has been common for local public bodies, for example, to develop local procurement frameworks on the presumption that this may lead to a local multiplier effect economically.¹⁰

More recently, ideas surrounding the 'foundation economy' and 'community wealth building' have caught political imagination in some circles by recognising the value of business activity which is necessarily focused at local level.¹¹ Examples from both the private and public sector include retail, leisure and recreation, personal services, education, local transport, utilities and health care. Many of these sectors rely on national or global supply chains and as such do not work independently from wider economic forces. In this sense, it can be conceived that there is a complementary interaction between local and global business.

If foundation economy business activity is recognised, crudely put, as the activity where there is a local point of sale and site for consumption,¹² there is clearly room for local innovation – to provide, for example, goods and services to meet demand in local niche markets.

Caution should be taken before 'over-claiming' potential social and economic benefits. If people and businesses in poorer areas only buy from and sell to each other, the prospects for the area to become more affluent are somewhat limited. Arguably, only in richer areas, where there is more local spending power can niche markets have scope to flourish. And of course, in richer areas, economic fortune is rarely gleaned from foundation economy activity alone.

1.2 Defining area assets

While approaches to the analysis of local economic strengths and weaknesses are open to challenge, as discussed above, this report proceeds from the point of view that local assets should be at the heart of the exploration of economic vitality.

Four types of assets are defined as follows:

- **Ideas:** businesses are tangible manifestations of enterprising people's ideas or dreams. Original and creative ideas about new products, markets, processes, service and so on can be put into action to produce businesses (see next sub-section on innovation). Ideas do not always have to be original or creative. Many businesses represent journeys along 'well-trodden-paths' in, for example, family businesses or in established trades or professions (where apprenticeships must be served, such as plumbing or accountancy). Similarly, 'copy-cat' or 'bandwagon' ideas also produce businesses – though competition means many entrants to the market are short lived (in retailing,

⁹ See: Grabher, G. (1993) 'The weakness of strong ties: the lock-in of regional development in the Ruhr area', in G. Grabher (ed.) *The Embedded Firm: on the socioeconomics of industrial networks*, London: Routledge.

¹⁰ See, for example, Sacks, J. (2002) *The money trail Measuring your impact on the local economy using LM3*, London: New Economics Foundation.

¹¹ See: Lang, M, (2019) *A perspective on the foundation economy*, Cardiff: Institute of Welsh Affairs; Foundational Economy Collective (2018) *Foundational economy: the infrastructure of everyday life*, Manchester: Manchester University Press; Guinan, J. and O'Neill (2020) *The case for community wealth building*, Cambridge: Polity Press.

¹² This term is used to draw a crude distinction between point of sale/consumption and place of production and extra-regional consumption: examples may include the Nissan which sells most of its cars elsewhere, or of call centres which process messaging that primarily concerns consumers in 'other' areas.

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for example, ubiquitous vape shops, micro-pubs and nail bars, or previously, video rental stores).

- **People:** apart from sole-traders who rely on their own mettle to succeed, businesses need to employ people who are or who can become sufficiently committed, motivated, skilled and knowledgeable to make the business a success. Businesses also need customers who will buy their products and champions who will recommend them to others. Champions, customers and employees are resources, but it is not a one-way street; so businesses must also invest in the quality of their experience to ensure that reciprocal trust and confidence is built over time to sustain profitability (see section below on innovative ways businesses can do this).
- **Support:** without support it is hard to get businesses off the ground and sustain them. *Trust and confidence* are essential resources that businesses must build from their customers and staff if they are to invest their own energy and ideas into the business rather than rely wholly on the owner to lead on all fronts. Finance, whether from government grants, loans from financial institutions or loans or gifts from family and friends are essential to establish businesses. But it is a reciprocal arrangement: grants, gifts and loans are rarely given if trust and confidence is in short supply. *Help* is a resource which is often needed by businesses from a range of people including consultants, technicians and financiers to give support and encouragement – but this resource can be underused if businesses fail to recognise need or advice is unheard, or if those who offer support fail to understand what is desired, needed or what is practicable relative to resources and market demand.
- **Places:** As entities, discrete places are not autonomous – they interact with other places directly or indirectly. Nevertheless, within their own universe the economy and society of places affects the day-to-day experience of residents and shapes the options of people who want to start or relocate a business. In affluent local areas, the local marketplace is stronger because people have disposable income. New businesses therefore have more scope to entice better-off people to buy their goods and services. The extent to which places are proximate to and well-connected with other places can create opportunities for residents to commute and can attract incomers to share the experience of their favourable social, cultural and economic environment. More isolated, badly connected and relatively poor places may offer fewer opportunities for business if locals have limited disposable income. But if rents or properties are cheaper and wage levels low, this may attract businesses to establish there. Defining the strength of local assets in places from a business point of view is not therefore a straightforward exercise.

No matter how many ‘assets’ or ‘resources’ that businesses have to hand, their utility cannot be realised unless entrepreneurs can work out ways of using them creatively to achieve the objective of establishing and sustaining a successful business.

Success is a relative term. Some entrepreneurs may want to reach for the sky and join the ranks of the global business elite, others may be content to earn a decent living by being their own boss, doing the work they enjoy in a place to which they feel committed. Either way, people who run businesses must be creative in their use of resources. Often in the academic, policy and business support literature this is called ‘innovation’.

There is no need to present a thorough review of the literature on innovation.¹³ Neither, at this stage of the research is it necessary to over-theorise types of

¹³ We make no claim that the categories which are listed are new or original – but they derive from our own distillation of material in the academic, business policy and practice literature with the purpose in mind of using them to guide future qualitative research. A reasonably extensive review of the literature that has been consulted can be found in the bibliography: see, for example: Athey, G.,

innovation, to grade them in importance nor to speculate about relationships between them. Instead, the following list of categories should be regarded as an *aide memoir* to structure thinking.

These categories arise from our reading, interpretation of the statistical data which is presented in this report, and from qualitative evidence and understanding gleaned from this and related projects undertaken in North East England.¹⁴

- **Market innovation:** to 'produce consumers' by devising products or services which currently do not exist but have potential to capture the imagination of buyers.
- **Product innovation:** to entice customers to buy or replace existing products by making them, for example, more energy efficient, faster, sleeker or more beautiful.
- **Process innovation:** to make products in a more efficient way by, for example, devising methods of reducing production costs or increasing productivity.
- **Organisational innovation:** to sustain or enhance quality and productivity by, for example, increasing employee efficiency, commitment and motivation by working in different ways or contexts.
- **Collaborative innovation:** to maximise benefits from complementary working with supply chains, knowledge-sharing or marketing and selling cooperatively.
- **Service innovation:** by adding value to products or services, for example, associative product kudos, improving the customer experience and rectifying problems.
- **Place innovation:** by enhancing the broader customer environment (digitally or physically) to improve allure, reputation, footfall and customer retention.
- **Social innovation:** by going the extra mile to contribute to environment and society by starting or supporting local social initiatives politically, financially and with in-kind support.

Further research would be needed to find out more about how assets and their innovative use varies from business to business and from place to place. We are fairly certain, even at this stage of the research, that there is no simple formula for success.

Glossop, C., Harrison, B., Nathan, M. and Webber, C. (2007) *Innovation and the city: how innovation has developed in five city-regions*, London: Nesta; Beaudry, C. and Breschi, S. (2002) 'Are firms in clusters really more innovative?', *Economics of Innovation and New Technology*, 12 (4) 325-342; and, Brinkley, I. (2010) *Innovation, creativity and entrepreneurship in 2020*, London: The Work Foundation.

¹⁴ As researchers and practitioners, we have been involved in a range of projects over several years for many agencies and institutions that have brought us into contact with public, private and third sector practitioners and policy makers. Examples include, for example, the delivery of 25 regional research and policy seminars for the Institute for Local Governance on a wide range of topics on economy, culture and society in North East England, several projects on interactions between the public, private and third sectors; evaluations of practice interventions associated with organisational development and support; and, explorations of the entrepreneurial experiences of organisations and enterprises. More detail on our research, evaluation and policy analysis can be found here: <https://www.stchads.ac.uk/category/research/research-news/>.

1.3 Research methodology

This project was designed to look at social and economic vitality and business innovation in the context of place. Our aim was to look at this topic with ‘fresh eyes’ and employ conceptual and methodological approaches to research to look at issues from different angles.

The conceptual approach to this research project is distinctly sociological because taken-for-granted assumptions or measures of ‘economic vitality’ and ‘business success’ are subjected to critical scrutiny. Taking a critical stance makes it possible to reinterpret existing statistical evidence from novel viewpoints. And when new qualitative evidence is collected – new questions can be asked which have arisen from the interpretation of statistical data.

Comparative analysis of regional variations in business activity and economic vitality already exists. There is also a wealth of comparative evidence on social wellbeing in localities. But these two sets of data are rarely explored together in a fully integrated way. The aim of this project was to collate business and social data from different sources and, where possible, match these data so that more finely-tuned regional and local comparative analysis could be undertaken.

It is possible to collate business data on some aspects of innovation (such as licenses and patents) at the local level – by matching Orbis¹⁵ data with Office for National Statistics (ONS) post-code look-ups – but the cell sizes are far too small to make valid comparisons. It was necessary to find variables which provide a general indication of business vitality by area. The most useful of these is business start-ups.

There has already been some valuable research along these lines in North East England, but this was limited to start-ups in one year – resulting in cell sizes being too small to compare with confidence.¹⁶ Consequently, in this project, all start-ups in the last three years were counted to get a stronger statistical base for comparison.

These data were searched by post-code and extracted from Orbis. Data were collected on business size (defined by the number of employees), legal form and industrial sector using Statistical Classification of Economic Activities in the European Community (NACE) categories to facilitate subsequent international comparison if required¹⁷. When matched and merged using ONS look-ups, it was possible to analyse data from the smallest available statistical areas up to regional level.

A range of variables were included in the dataset using a variety of spatial levels ranging from the smallest available statistical areas to regional levels.¹⁸ Additionally, locational data on travel-to-work areas, rural-urban locations, national parks, LEP areas, and so on were included in the data set.

¹⁵ Orbis is an online subscription service to source worldwide information on company data. See: https://www.bvdinfo.com/en-gb/our-products/data/international/orbis?gclid=Cj0KCQjw9YWDBhDyARIsADt6sGZ8JGjPOpvK6SV1sorw5ACqO_G78XyfVlhJGBTB-RkJ7J7-QjbLzGlaAgYaEALw_wcB#secondaryMenuAnchor1.

¹⁶ See: Charles, D. (2020) *Mapping new firm formulation rates in the North East LEP area*, Newcastle: Incite, Newcastle Business School, Northumbria University.

¹⁷ For further detail on NACE categories, see: [https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_\(NACE\)](https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_(NACE))

¹⁸ Where possible, data were matched using Lower Layer Super Output Areas (LSOA) and electoral wards. Additionally, Middle Layer Super Output Areas (MSOAs), upper and lower tier local authorities and regions were also included. For further information on how such categories are constructed by ONS, see: <https://www.ons.gov.uk/methodology/geography/ukgeographies/censusgeography#:~:text=2011%20Super%20Output%20Areas&text=Simply%20where%20populations%20have%20become,merged%20with%20an%20adjacent%20one.>

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Social data were matched with businesses by area using the English Indices of Deprivation (EIDs).¹⁹ These indices provide ranked scores from neighbourhoods up to regional level on a range of social criteria such as educational credentials, health and wellbeing, income deprivation, access to services, quality of the living environment and so on.

For the purposes of this study, which is interested in the relationship between area assets and business vitality, the EID rankings were interpreted in a novel way. Rather than focusing on what areas *lacked* (i.e., emphasising elements of deprivation) the focus is on what assets areas *have*. This is little more than a nuance statistically – but represents more of a radical departure from convention analytically.

Data were collated to facilitate case-study analysis on two levels. At the upper level, data were collated in case-study areas of similar size to the North East LEP area. Two case-study areas were defined to reflect broadly *similar* local circumstance to the North East LEP area; and two were selected because they were quite *different*. More detail on how they were selected is provided in Section 2 of this report.

Within the North East LEP area, eight local case-study areas were defined of broadly similar size (by population) but with distinct characteristics to offer opportunities for comparative statistical analysis. These areas were built by collating electoral ward level data to the required boundaries. Detail on each of the case-study areas is provided in Section 3.

Additional datasets were drawn upon in the study to collate data on business population, local population by age and working population, amongst other things as required for the analysis. Detail on data sources and how they were analysed is provided in Sections 2 and 3.

The research was designed to raise questions about interactions between area assets and economic vitality – as measured by the number of business start-ups. Clearly, this can only tell us so much about other aspects of business entrepreneurship and innovation. Consequently, a follow up study would be required, to explore such issues more fully by undertaking qualitative interviews with businesses and other local stakeholders together with focus groups across the North East LEP area.

¹⁹ Full technical explanatory detail on the construction and use of EIDs can be found here: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>.

Section 2

Comparative case-studies in England

As argued in the introductory section of this report, comparative analysis is a useful way of bringing a new perspective to the interpretation of local social and economic conditions and prospects for future development. In the comparative analysis that follows, the aim is to explore similarities and dissimilarities in the infrastructural and social assets of areas and how they may influence local entrepreneurial vitality and innovative business activity.

When conducting comparative area-based analysis, it is necessary to ensure that a measure of balance is achieved between areas in terms of size and characteristics. Consequently, in the five case-study areas chosen some places have characteristics which the North East of England may aspire to mirror while others may share the same kinds of challenges that face this region.

To reiterate a point made in the introductory chapter, the problem with making comparisons with areas which appear to be *more successful* than the North East of England, is that this region may be shown to have *failed to achieve its potential*. Using exemplary or 'gold standard' comparative benchmarks, in short, can be misleading because areas do not have equivalent stocks of local social and economic assets.

Development journeys proceed at different paces depending on the human, financial and material resources areas have to hand. Furthermore, journeys are affected by external forces which may be largely out of their own control – such as proximity to national or global markets.

In the analysis that follows, evidence is presented firstly to explore the 'entrepreneurial vitality' of case-study areas by comparing numbers of business start-ups.²⁰ Secondly, interpretation of variations in entrepreneurial vitality is undertaken by looking at a range of social indicators that capture evidence of local assets.

The purpose of the exercise is to highlight where the five case-study areas share similar patterns of change (although the pace and impact of these changes may vary). The exercise also aims to uncover differences which appear to be specific to North East England, which as the research project proceeds will require further exploration and analysis.

²⁰ In ONS official statistics, business start-ups are normally referred to as 'business births'.

2.1 Characteristics of five areas for comparative analysis

Five case-studies have been defined for comparative analysis. The following features were taken into consideration when selecting areas.

- All of the case-study areas have **multi-centred** urban characteristics.²¹ There are at least two significant urban areas in each case-study (for example, in the South East, the cities of Portsmouth and Guildford; and in the North Midlands, the cities of Stoke-on-Trent and Derby.
- Each case-study area has large **rural areas**. For example, in the South West, there are extensive rural areas in Dartmoor, Exmoor and Bodmin Moor. In the East of England, there are large rural areas in Sussex. The extent to which these rural areas can be described as spatially isolated or focused upon conventional rural economic activities varies significantly.²²
- The chosen areas do not necessarily share similar characteristics in terms of **connectivity**. The North East, South West and to a lesser extent North Midlands are somewhat more distant from London than East of England and South East England. This will provide opportunities for analysis of the importance of spatial proximity to the capital to regional entrepreneurial vitality.
- The **local human resource assets** of case-study areas vary considerably as will be shown in this section. Three areas have smaller stocks of human capital and entrepreneurial vitality (North Midlands, North East and South West), while in the South East and East of England case-study, there are larger stocks of human capital and levels of entrepreneurial vitality.

These areas do not, and are not intended to conform to conventional definitions of regional or sub-regional boundaries, LEP areas or combined authorities. There is already a good deal of comparative research using these more conventional boundaries.²³ By taking this approach it is easier to set aside taken-for-granted assumptions about regional variations and look with 'fresh eyes' to explore factors which may have been overlooked or under-explored elsewhere.

²¹ There is a substantial literature on multi-centred urban areas, see for example: Kloosterman, R.C. & Lambregts, B. (2001) 'Clustering of economic activities in polycentric urban regions: the case of the Randstad', *Urban Studies*, 38 (4) 717-732; Kloosterman, R.C. & Musterd, S. (2001) 'The polycentric urban region: towards a research agenda', *Urban Studies*, 38 (4) 623-633; Meijers, E. (2007) 'Summing small cities does not make a large city: polycentric urban regions and the provision of cultural, leisure and sports amenities', *Urban Studies*, 45 (11) 2323-2342; Musterd, S. & van Zelm, I. (2001) 'Polycentricity, households and the identity of places', *Urban Studies*, 38 (4) 679-696; Parr, J.B. (2004) 'The polycentric urban region: a closer inspection', *Regional Studies*, 38 (3) 231-240; and Chapman, T. (2011) 'Smoke and mirrors: the influence of cultural inertia on social and economic development in a polycentric urban region', *Urban Studies*, 48 (5), 1037-1058.

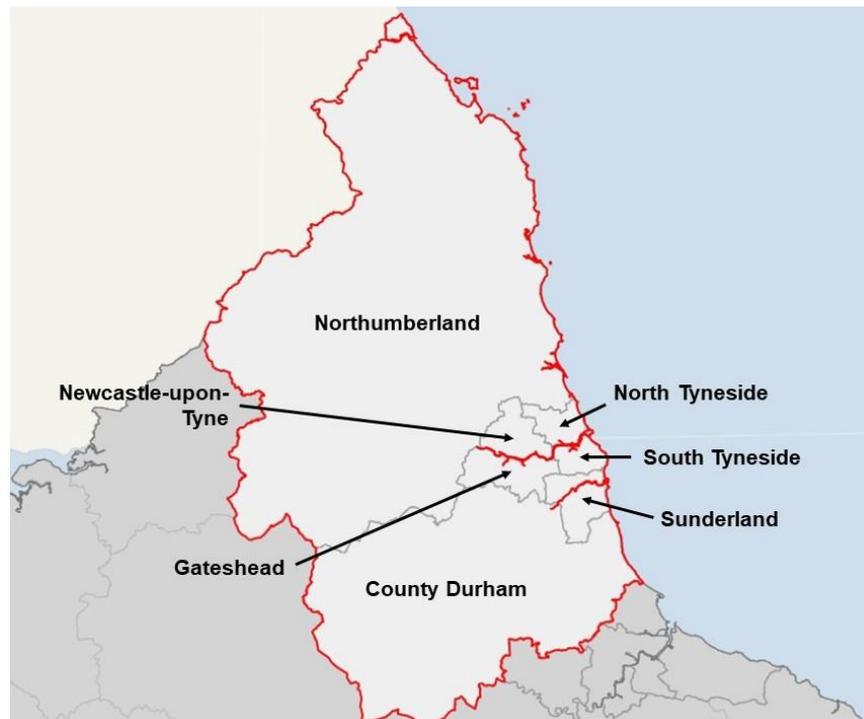
²² There is a substantial and growing literature on entrepreneurship and innovation in rural areas, see for example: Alsos, G. A., Carter, S. & Ljunggren, E. (2011) *The handbook of research on entrepreneurship in agriculture and rural development*, London: Edward Elgar Publishing; Bosworth, G. & Atterton, J. (2012) 'Entrepreneurial In-migration and neo-endogenous rural development', *Rural Sociology*, 77, 254-279; Steiner, A. & Atterton, J. (2015) 'Exploring the contribution of rural enterprises to local resilience', *Journal of Rural Studies*, 40, 30-45; Korsgaard, S., Ferguson, R. & Gaddefors, J. (2015) 'The best of both worlds: how rural entrepreneurs use placial embeddedness and strategic networks to create opportunities', *Entrepreneurship & Regional Development*, 27, 574-598; Shucksmith, M., Brown, D. & Vergunst, J. (2012) *Constructing the rural-urban interface: Place still matters in a highly mobile society. Rural Policies and Rural Transformations in the US and UK*. London: Routledge.

²³ As discussed below in individual case-study areas, local LEPs have been issued guidance to develop evidence-based Local Industrial Strategies. See: H.M. Government (2018) *Local industrial strategies: policy prospectus*, London: OGL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/744544/local-industrial-strategies-policy-prospectus.pdf. The government's UK Industrial Strategy is available here: <https://www.gov.uk/government/topical-events/the-uks-industrial-strategy>.

North East England case-study area

This area covers all of North East England apart from Tees Valley.²⁴ The area is spatially varied with extensive rural areas in the north and west. There is a major urban area which is centred on Tyneside and Wearside where the cities of Newcastle-upon-Tyne and Sunderland are situated.

The area has experienced significant economic challenges and restructuring over the last half century following the decline of major staple industries (coal mining, steel making, heavy engineering and shipbuilding). The southern half of the region, in particular, is characterised by a concentration of former industrial towns and pit villages.



This area is covered by the North East Local Enterprise Partnership.²⁵ North East LEP puts strong emphasis on four sectors of strategic importance: digital, advanced manufacturing, health and life sciences, and energy. Four service sectors are also identified as playing a pivotal role in economic development: education; financial, professional and business services; transport and logistics; and, construction.

The area has two combined authorities: North East Combined Authority²⁶ which covers County Durham, Gateshead, South Tyneside and Sunderland; and North of Tyne Combined Authority²⁷ which includes Northumberland, Newcastle-upon-Tyne and North Tyneside.

The case-study area has a population of ~1,994,000 and a working age population of ~1,208,200. Black, Asian and minority ethnic (BAME) groups constitute 4.6% of the population – which is considerably lower than in the North Midlands and South East England case-study areas (at ~7-8%). There are also wide variations in the

²⁴ Tees Valley is generally included in definitions of North East England, but this area is not covered by the North East LEP. Tees Valley is a mayoral combined authority which is composed of five unitary authorities: Darlington, Hartlepool, Middlesbrough, Stockton-on-Tees and Redcar and Cleveland. Where it is necessary to use official statistics for the whole of the region of North East England, Tees Valley is included. In some data tables and charts, Tees Valley data are included for comparative purposes.

²⁵ See: <https://www.northeastlep.co.uk/>.

²⁶ See: <https://northeastca.gov.uk/>.

²⁷ See: <https://www.northoftyne-ca.gov.uk/>.

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percentage of BAME residents within the North East England case-study area: ranging from just 1.6% in Northumberland to 14.5% in Newcastle-upon-Tyne.²⁸

As shown in Table 2.1, the area does not compare favourably with other case-studies in terms of personal and social wellbeing. Over 350,000 people suffer from income deprivation (18%) and child poverty levels are high (24%). That stated, measures of child development at age five and performance at GCSE are not too far behind other case-study areas.

Unemployment has been relatively low in recent years (3%), but still remains considerably higher than more affluent regions such as East of England (1%) or South East England (less than 1%). Long-term unemployment is considerably higher than in other areas – more than four times the rate of South East England.

Poverty and worklessness tend to go hand-in-hand with relatively poor health and higher mortality rates than in the most affluent areas. That stated, the percentage of the North East England population with long-term limiting illnesses (22%) is not much different from the English North Midlands (20%) and South West England (21%) – but is considerably higher than in the South East England (15%) and East of England (17%) case-study areas.

²⁸ In each regional case-study, diversity in the populated has been taken into account as this may have a bearing in subsequent qualitative research on patterns of entrepreneurship and levels of formal support from agencies or informal support from within the community.

Table 2.1 Population, employment, deprivation and public health Indicators						
Key population statistics	North East England case-study area	English North Midlands case-study area	East of England case-study area	South East England case-study area	South West England case-study area	England
Population (from ONS estimates 2020)	1,993,997	1,998,011	1,597,773	2,390,228	1,925,432	55,619,400
Working population (ONS estimates 2020)	1,209,212	1,178,304	932,747	1,402,266	1,094,866	36,300,000
Population aged over 65 (ONS estimates 2020)	388,368	380,635	339,890	462,711	455,664	10,030,500
Percentage of population Black, Asian or Minority Ethnic (%) ²⁹	4.6	7.2	7.2	7.5	2.5	14.6
Social and personal wellbeing indicators³⁰						
Population suffering income deprivation	350,151	263,928	179,380	201,240	241,999	7,790.220
Income deprivation (%)	18.1	13.8	11.0	9.0	13.3	14.6
Child poverty (%)	23.7	19.0	15.1	12.5	16.9	19.9
Child development at age 5 (%)	56.9	59.3	60.2	62.5	62.3	60.4
GCSE achievement (%)	55.3	53.4	53.9	58.9	55.4	56.6
Unemployment (%)	3.0	1.5	1.1	0.9	1.4	1.9
Long-term unemployment (Rate/1,000 working-age population)	6.4	2.4	1.6	1.4	2.1	3.6
Limiting long-term illness or disability (%)	21.9	19.5	16.6	15.2	20.5	17.6
Deaths from all causes, under 75 years (SMR) ³¹	117.1	102.2	87.6	85.9	92.6	100.0
Deaths from causes considered preventable (SMR)	121.8	104.1	86.0	84.4	93.7	100.0

²⁹ Number of people stating their ethnicity as not White (not any White category) as a percentage of the total number of respondents to the question, 2011 (%).

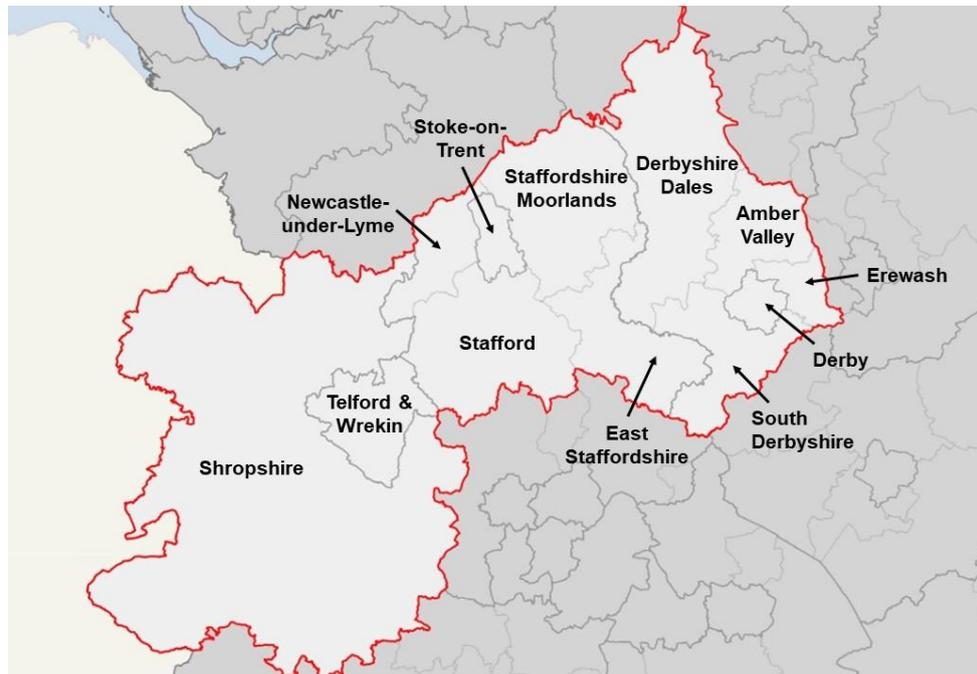
³⁰ Extracted from Public Health England in each case-study area: <https://www.localhealth.org.uk/#c=indicator&view=map15>.

³¹ SMR 'Standardised Mortality Ratio', Technical Briefing 3, Commonly used public health statistics and their confidence intervals. Association of Public Health Observatories. <http://www.apho.org.uk>.

English North Midlands case-study area

This case-study area includes Shropshire, Telford and Wrekin, Stoke-on-Trent, Derby and western districts of Derbyshire and northern districts of Staffordshire. The case-study area has significant tracts or relatively isolated rural areas in the Staffordshire Moorlands, Derbyshire Dales and Shropshire. As such, these rural areas are also quite dissimilar in social and economic terms.

The case-study area has a population of ~1,998,000 and a working age population of ~1,178,300. Black, Asian and minority ethnic groups constitute 7.2% of the population.



There are two large urban areas: the conurbation of Stoke-on-Trent/Newcastle-under-Lyme and the City of Derby. Smaller urban areas include Telford, Stafford and Shrewsbury.

The North Staffordshire conurbation, which includes Stoke-on-Trent and Newcastle-under-Lyme has experienced several decades of economic challenges following the decline of the pottery, steel and coal mining industries. The Stoke-on-Trent and Staffordshire Enterprise Partnership³² has the objective of tackling challenging local conditions by encouraging growth in its manufacturing sector – particularly in the field of materials innovation.³³

The city of Derby is aligned to the development strategy in the East Midlands and is a member of the D2N2 LEP an area covering Derbyshire and Nottinghamshire. Derby is widely recognised for its specialist industrial strengths and location for major engineering companies including Rolls Royce, Toyota UK and Bombardier. The city's Economic Growth Strategy places emphasis on the development of a skilled workforce and the creation of higher value jobs.³⁴

Telford and Wrekin and Shropshire form the northern area of The Marches LEP.³⁵ The area's strategic documentation is up-beat about economic prospects and has set

³² See: <https://www.stokestaffslep.org.uk/our-lis/>.

³³ See Stoke-on-Trent and Staffordshire Enterprise Partnership (2020) Local Industrial Strategy: <https://www.stokestaffslep.org.uk/app/uploads/2019/06/LIS-Final.pdf>.

³⁴ See: <http://degs.derby.gov.uk/wp-content/uploads/2018/12/App-2-Derby-Economic-Growth-Strategy-Delivery-Plan-final-Dec18.pdf>.

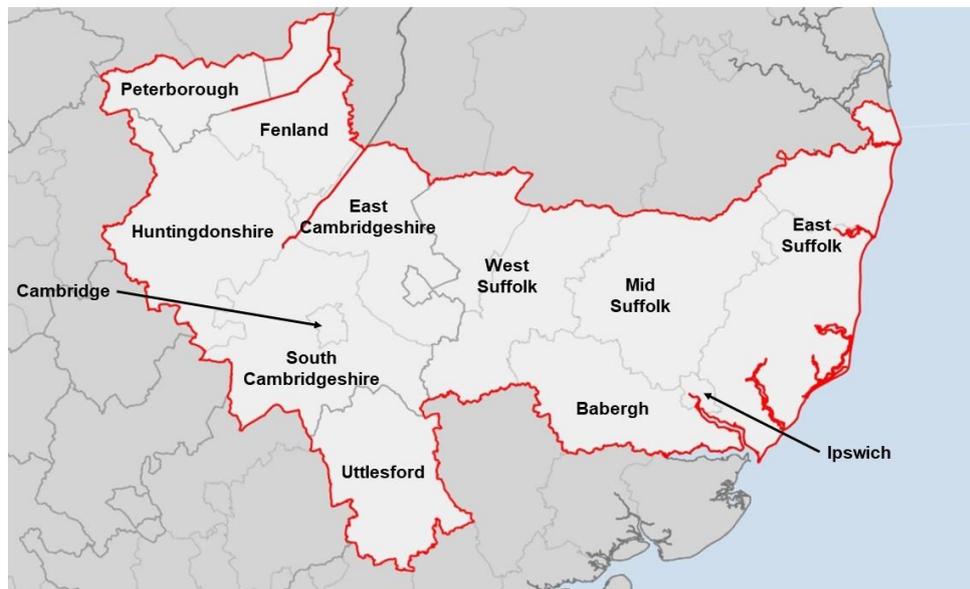
³⁵ See <https://www.marcheslep.org.uk/about/the-marches/>.

itself ambitious objectives.³⁶ Core sectors are identified as advanced manufacturing, business and professional services and food and drink manufacture. Environmental technology, cyber security, agri-tech and health care are identified as emerging sectors.

East of England case-study area

This area includes Cambridgeshire, Suffolk and Uttlesford in Essex. The case-study area has a population of ~1,598,000 and a working age population of ~933,000. Black, Asian and minority ethnic groups constitute 7.2% of the population.

The east of this area is largely rural with the exception of Ipswich and the coastal towns of Felixstowe and Lowestoft. Suffolk and neighbouring Norfolk are served by the New Anglia LEP which, in strategic terms, has identified a number of priority sectors including: agriculture, food and drink; the visitor economy, financial services and insurance, ports and logistics amongst others.³⁷



In the west of the case-study area, the cities of Cambridge and Peterborough dominate economically. The wider area constitutes the Cambridgeshire and Peterborough Combined Authority.³⁸ The former LEP has, since the establishment of the combined authority, become the 'Business Board'.

This area is widely recognised internationally as an economically vibrant area that has achieved considerable growth in recent years driven by industrial innovation. The area has strengths in a number of sectors including: ICT, software and telecoms, biotech and life sciences, low carbon environmental goods and services.³⁹ Commentaries on the area's economic vitality is often associated with positive interactions between business and Cambridge University.⁴⁰

³⁶ See: https://www.marcheslep.org.uk/download/economic_plans/strategic-economic-plan-update-2019/The-Marches-LEP-Strategic-Economic-Plan-2019.pdf.

³⁷ See: <https://newanglia.co.uk/economic-strategy-for-norfolk-and-suffolk/>.

³⁸ For further detail, see: <https://cambridgeshirepeterborough-ca.gov.uk/>.

³⁹ For a brief summary of local industrial strengths, see: <https://www.careersandenterprise.co.uk/partnerships/greater-cambridge-greater-peterborough-local-enterprise-partnership-lep>.

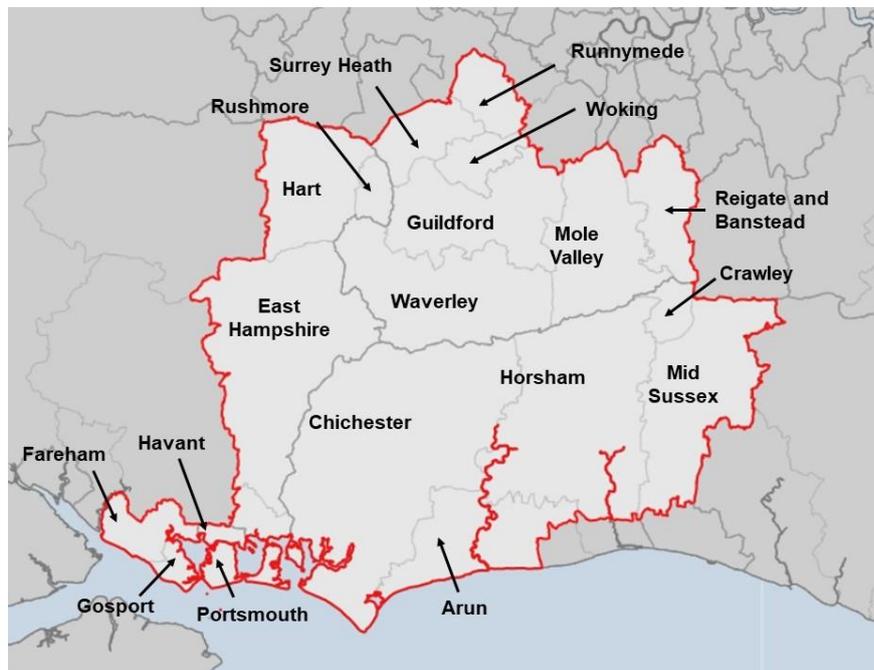
⁴⁰ The Economist (2015) 'Getting to Cambridge', *The Economist*, August 22nd. For a broader discussion see: Etzkowitz, H. (2008) *The triple helix: university-industry-government innovation in action*, London: Routledge.

Uttlesford in Essex is served by the South East LEP,⁴¹ and is included in this case-study area because of its pivotal role in facilitating international connectivity at Stansted Airport.

South East England case-study area

This case-study area has varied spatial characteristics from the largely rural area of the South Downs, a coastal area stretching from Gosport to Arun and in the north a largely urban area comprising several dormitory towns within London's commuter belt. The area is densely populated and predominantly affluent – and especially so in areas proximate to the capital.

This is the largest case-study area by population (2,390,000) and has a working age population of 1,402,000. Black, Asian and minority ethnic groups constitute 7.5% of the population.



The area is served by three LEPs. Coast to Capital⁴² runs from Arun on the coast to Reigate in the North. Gatwick Airport, a major economic hub, is situated in this LEP area to the north of Crawley.

Solent LEP covers the coastal local authority areas of Fareham, Havant, Gosport, Portsmouth and the southern districts of East Hampshire.⁴³ Advanced manufacturing, associated with military and maritime engineering feature as core drivers for growth and innovation in the area.

Enterprise M3⁴⁴ LEP serves the case-study area in Surrey and eastern Hampshire. As its name suggests, its focus is the M3 corridor where strong emphasis is placed on the knowledge, digital and design-based economy.⁴⁵

⁴¹ See: <https://www.southeastlep.com/>.

⁴² See: <https://www.coast2capital.org.uk/>.

⁴³ See: <https://solentlep.org.uk/> The area's enterprise strategy can be found here: https://solentlep.org.uk/media/1121/solent_strategic_economic_plan.pdf.

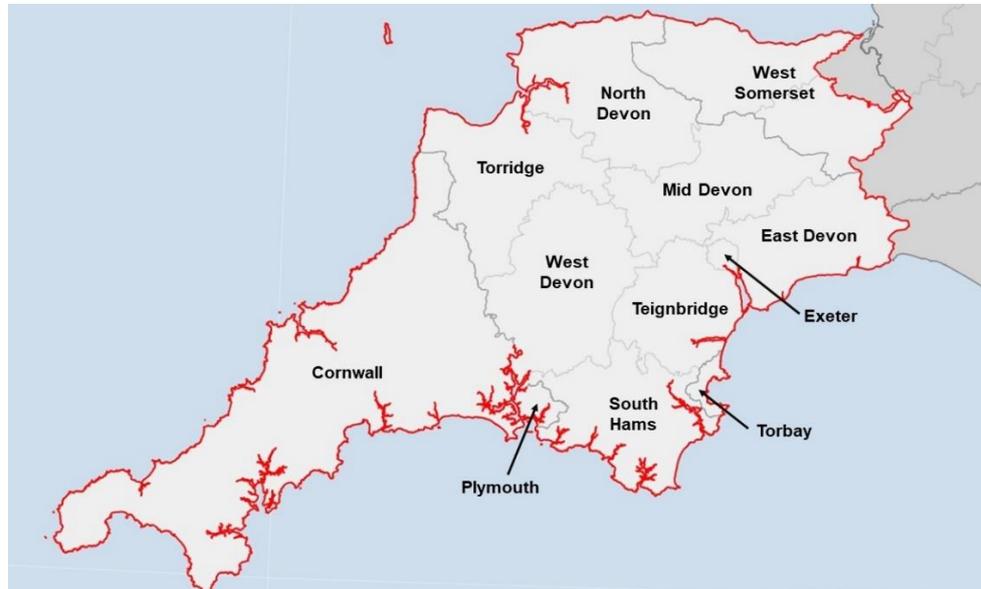
⁴⁴ See: <https://www.enterprisem3.org.uk/>.

⁴⁵ A Strategic Plan for the Enterprise M3 Area: 2018-2030 <https://www.enterprisem3.org.uk/sites/default/files/2020-02/Strategic%20Economic%20Plan%202018.pdf>.

South West England case-study area

This case-study area includes Cornwall, Devon and West Somerset. The area is widely known for its coast and countryside as areas of natural beauty. The area is largely rural in character and is spatially distant from London.

The case-study area has a population of 1,925,000 and a working age population of 1,094,000. Black, Asian and minority ethnic groups constitute 2.5% of the population – by far the smallest proportion of the five case-studies.



The area has four larger urban areas centred on Plymouth, Taunton, Torbay and Exeter, all of which are served by the Heart of the South West LEP.⁴⁶ As this is a varied spatial area, the Local Industrial Strategy⁴⁷ reflects its diverse economic fabric – but with over 60 million visitors to the area each year, tourism is a dominant theme. The industrial strategy also recognises that two of its larger urban areas, Plymouth and Torbay, have struggled to sustain and build upon economic strengths,

Cornwall and Isles of Scilly LEP⁴⁸ is developing a new Industrial Strategy⁴⁹ which strongly emphasises a shift towards a carbon-neutral economy and the need to strike a new balance between the area's natural and material resources. The economy faces specific challenges including rural peripherality and a dispersed population and a large number employees in low-wage sectors. As the Industrial Strategy is under development, it is in a position to address several of the government's 'Grand Challenges', especially those associated with clean growth, an ageing society and the future of mobility.

2.2 Entrepreneurial vitality in case-study areas

As discussed in Section 1 of the report, a series of indicators are commonly used to assess entrepreneurial vitality. A drawback of using such indicators is that robust evidence is rarely available below the regional level. As this study aims to explore variations at a local level, evidence is drawn upon which is available at lower-tier local authority district or unitary authority levels (and where possible at electoral ward level).

⁴⁶ See: <https://heartofswlep.co.uk/>.

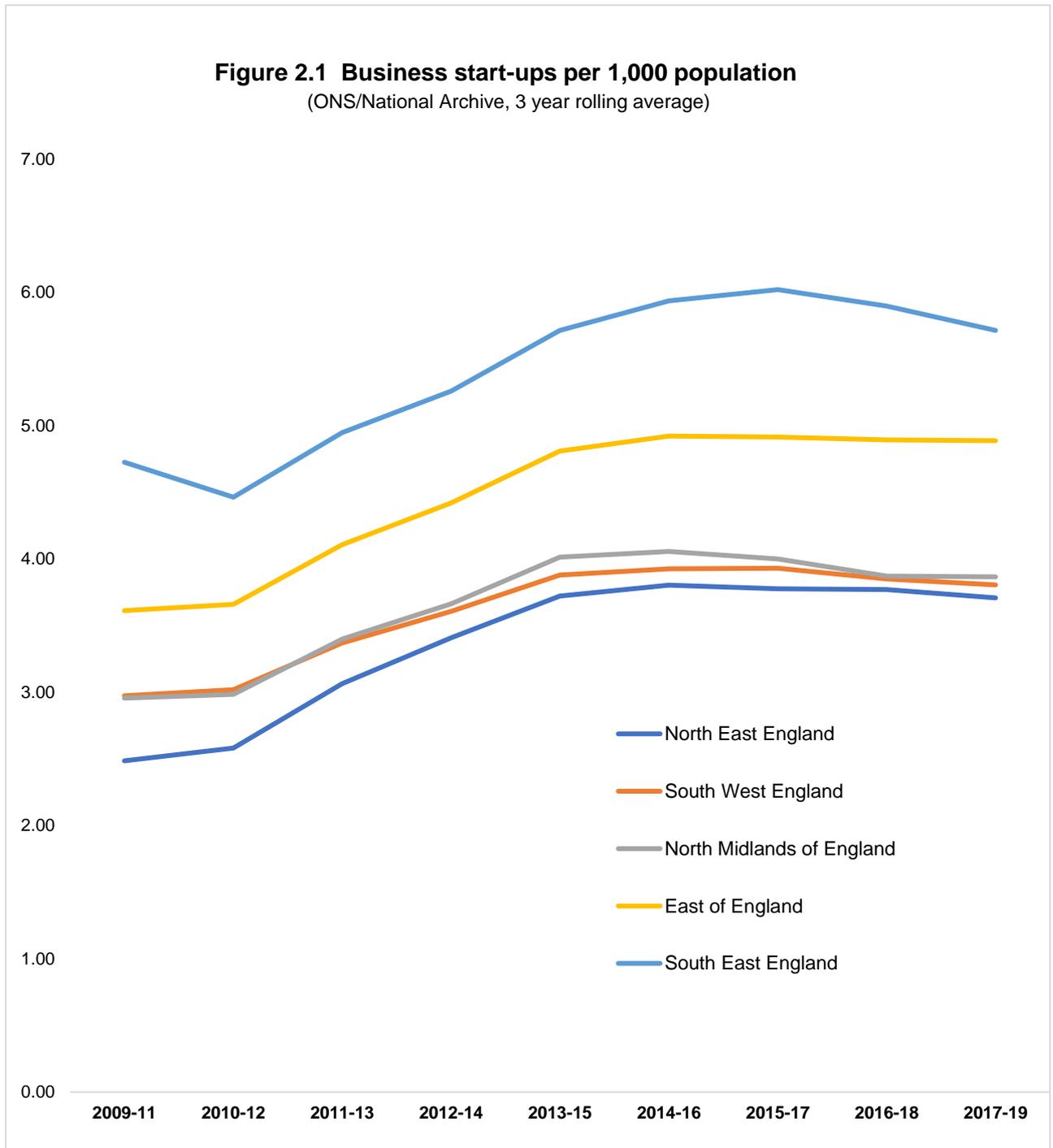
⁴⁷ See: <https://heartofswlep.co.uk/wp-content/uploads/2020/11/201119-Heart-of-the-South-West-Local-Industrial-Strategy.pdf>.

⁴⁸ See: <https://www.cioslep.com/>.

⁴⁹ See: <https://www.cioslep.com/assets/file/Final%20CioS%20DRAFT%20Industrial%20Strategy%20-%2009.03.20.pdf>.

Comparing business start-ups at local authority level provides a useful starting point for comparative time-series analysis. As shown in Figure 2.1 the general trends in business start-ups are more or less identical when comparing the five case-study. Starting from a relatively low level of entrepreneurial vitality following the global financial crisis of 2008, all activity rises at more or less the same pace until 2014-2015 and levels off thereafter. This suggests that none of the areas under scrutiny were able to withstand substantive global and or national economic pressures.

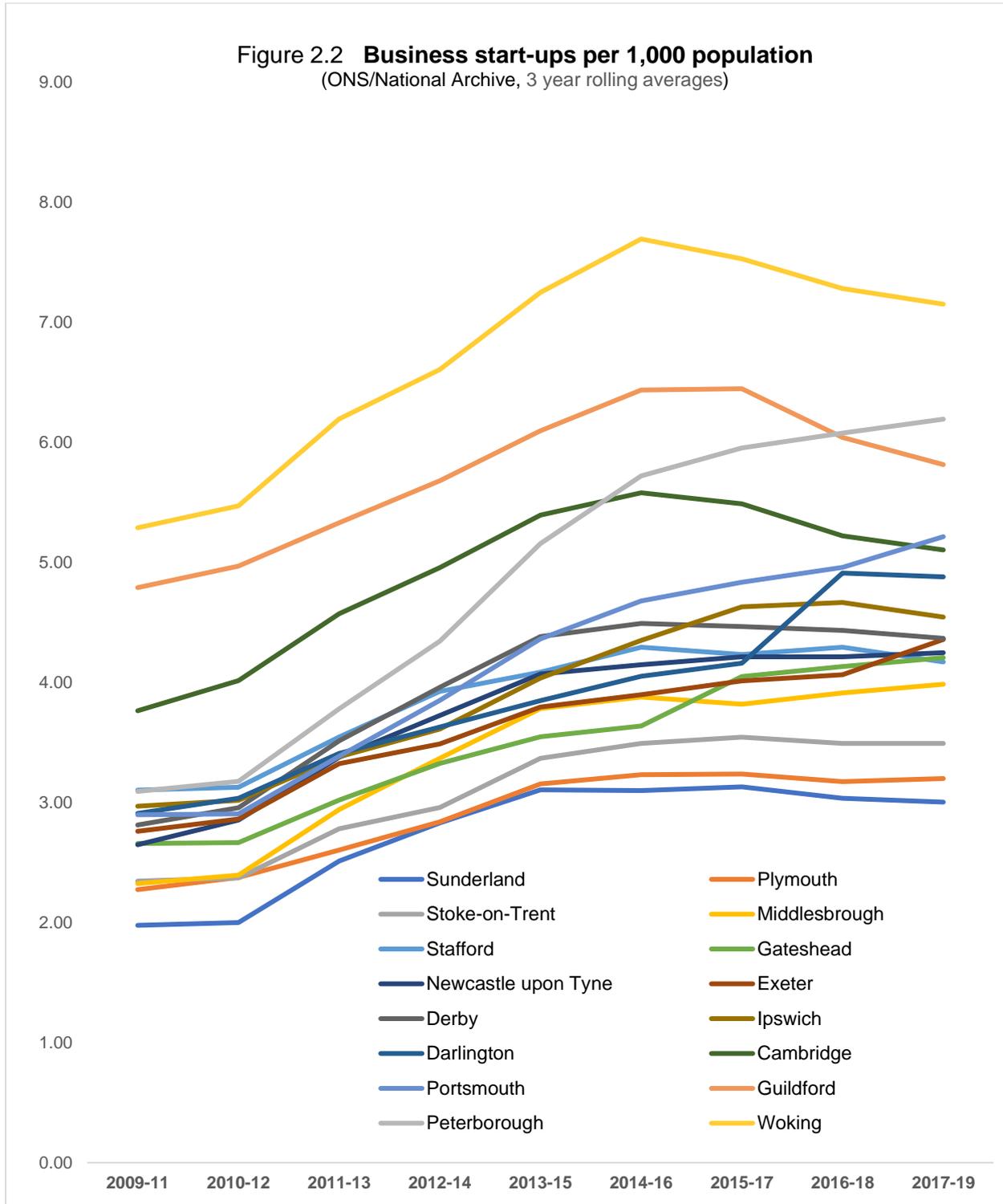
While the general pattern of change is the same in all areas, the volume of entrepreneurial activity varies significantly. In South East England and East of England case-study areas, indications of economic vitality are stronger than in the case-study areas in South West England, the English North Midlands or in North East England.



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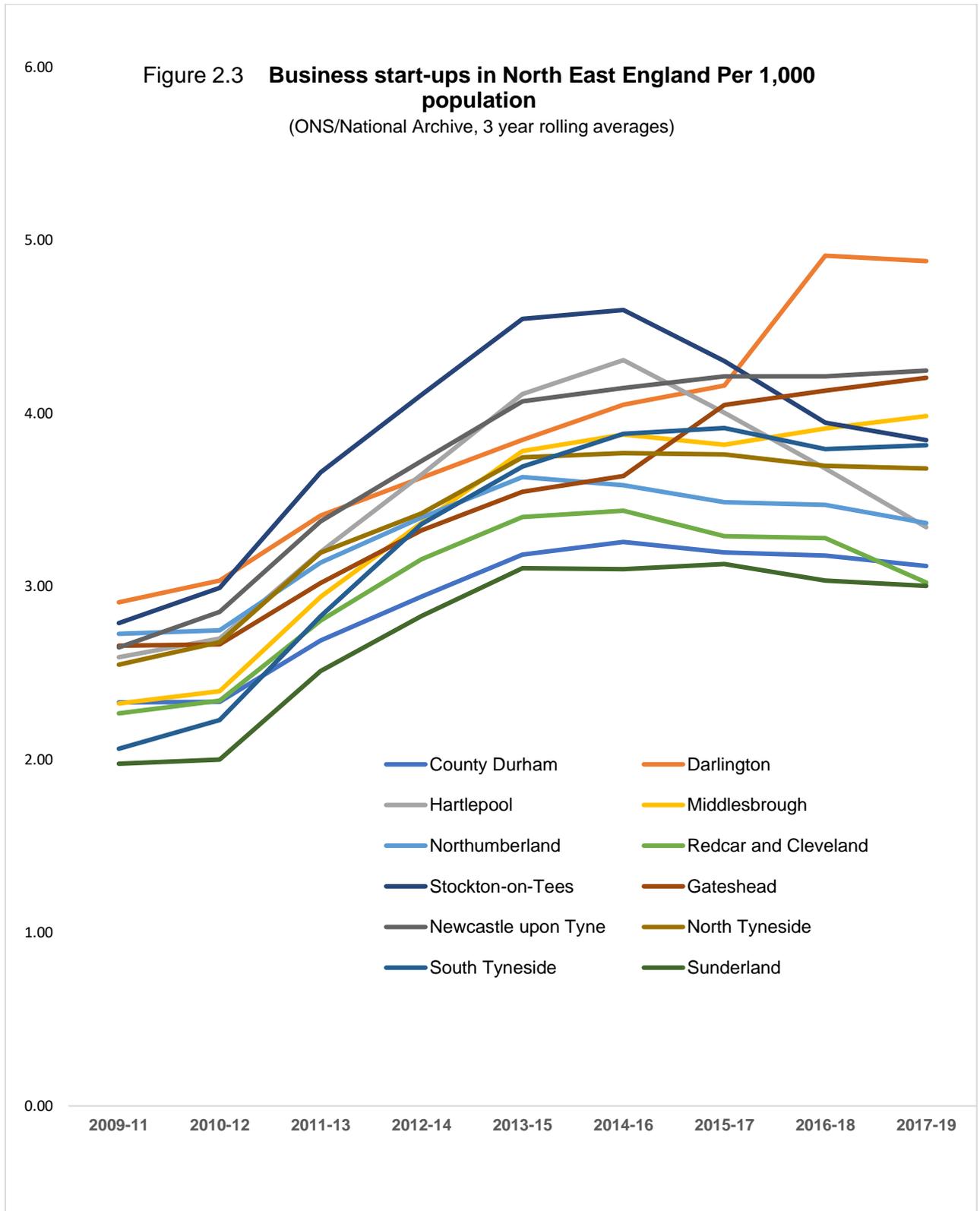
As the case-study areas are quite large and varied in spatial, social and economic terms, variations within these localities would be expected. As Figure 2.2 shows, such differences are clearly apparent when the number of business start-ups per 1,000 population are compared across principal towns and cities.

It is apparent that within the wider North East region, business start-ups in Darlington (in Tees Valley) compares favourably with towns and cities in other case-study areas – but with nothing like the business start-up rates of Woking, Peterborough and Guildford. Sunderland, Plymouth and Stoke-on-Trent are shown, using this measure, to have the lowest level of entrepreneurial vitality. Within the North East LEP area, Newcastle-upon-Tyne and Gateshead are shown to be the most successful in this respect.



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Within the wider North East England (including Tees Valley for comparative purposes) it is apparent that differences in entrepreneurial vitality are quite pronounced (see Figure 2.3). Darlington, Gateshead, Newcastle-upon-Tyne and to a lesser extent Middlesbrough have performed quite well between 2009 and 2019. County Durham and Hartlepool enjoyed substantive growth in business start-ups until 2014-16 after which there was considerable decline.



To explore the reasons for the variations in entrepreneurial vitality presented above, it was necessary to match data on business start-ups with local area statistics on population characteristics. Data on business start-up locations over the last three years using postcodes were collated from searches on Orbis and then matched with NOMIS⁵⁰ labour market statistics and ONS population and social statistics electoral ward levels.

As Table 2.2 shows, the number of business start-ups between 2018-2020 per 1,000 working age population varies considerably. In South East England and East of England case-study areas, there were 22.6 and 21.2 start-ups respectively compared with between 15.0 and 15.7 in North East England, English North Midlands and South West England case-study areas.

There is some evidence to suggest that there is a slightly larger percentage of younger aged people in the working populations in the more successful areas – but by no means sufficient to explain variations. A more likely explanation is that variations in area assets may account for differences in the number of business start-ups.

Table 2.2 Business population and start-ups 2018-2020 in five case-study areas							
	Number of enterprises⁵¹	Start-ups last three years⁵²	New businesses as a percentage of total business stock	Total population	Working age population	All enterprises per 1,000 working population	Start-ups per 1,000 working population
North East England case-study area	67,735	18,306	27.0	1,993,997	1,209,212	56.0	15.1
English North Midlands Case-study area	86,585	20,038	23.1	1,998,011	1,178,304	73.5	17.0
East of England case-study area	85,215	20,247	23.8	1,597,773	932,747	91.4	21.7
South East England case-study area	126,865	31,824	25.1	2,390,228	1,402,266	90.5	22.7
South West England case-study area	94,050	17,654	18.8	1,925,432	1,094,866	85.9	16.1

⁵⁰ Further detail on the scope and use of NOMIS can be found here: <https://www.nomisweb.co.uk/>.

⁵¹ Data for unitary authorities or lower-tier local authorities were extracted from Nomis and collated to case-study area level. <https://www.nomisweb.co.uk/>.

⁵² Source: Orbis: see methodology section for explanation

Business size

The above analysis indicates that there are proportionally fewer start-ups in the North East England case-study area than in other case-study areas. This may be partly explained by considering the number of employees in firms in this region.

As indicated in Table 2.3, businesses are proportionally larger in the North East England case-study area: 3.8% of employees work in companies with over 50 staff in this region, compared with only 2.7% in the South East England case-study area and just 2.5% in the South West England case-study area.

	Micro businesses (0 To 9 employees)	Small businesses (10 To 49 employees)	Medium sized businesses (50 To 249 employees)	Large businesses (250+ employees)	Number of enterprises
North East England case-study area	80.7	15.6	3.2	0.5	67,735
English North Midlands Case-study area	83.7	13.2	2.7	0.4	86,585
East of England case-study area	84.0	12.9	2.8	0.4	85,215
South East England case-study area	85.7	11.6	2.3	0.4	126,865
South West England case-study area	84.1	13.4	2.2	0.3	94,050

Figure 2.4 presents estimates for the percentages of employees in businesses of different sizes in the five case-study areas.⁵³ It is evident from these data that there is likely to be a higher proportion of employees in medium-sized or large businesses in the North East England case-study area than in other areas.

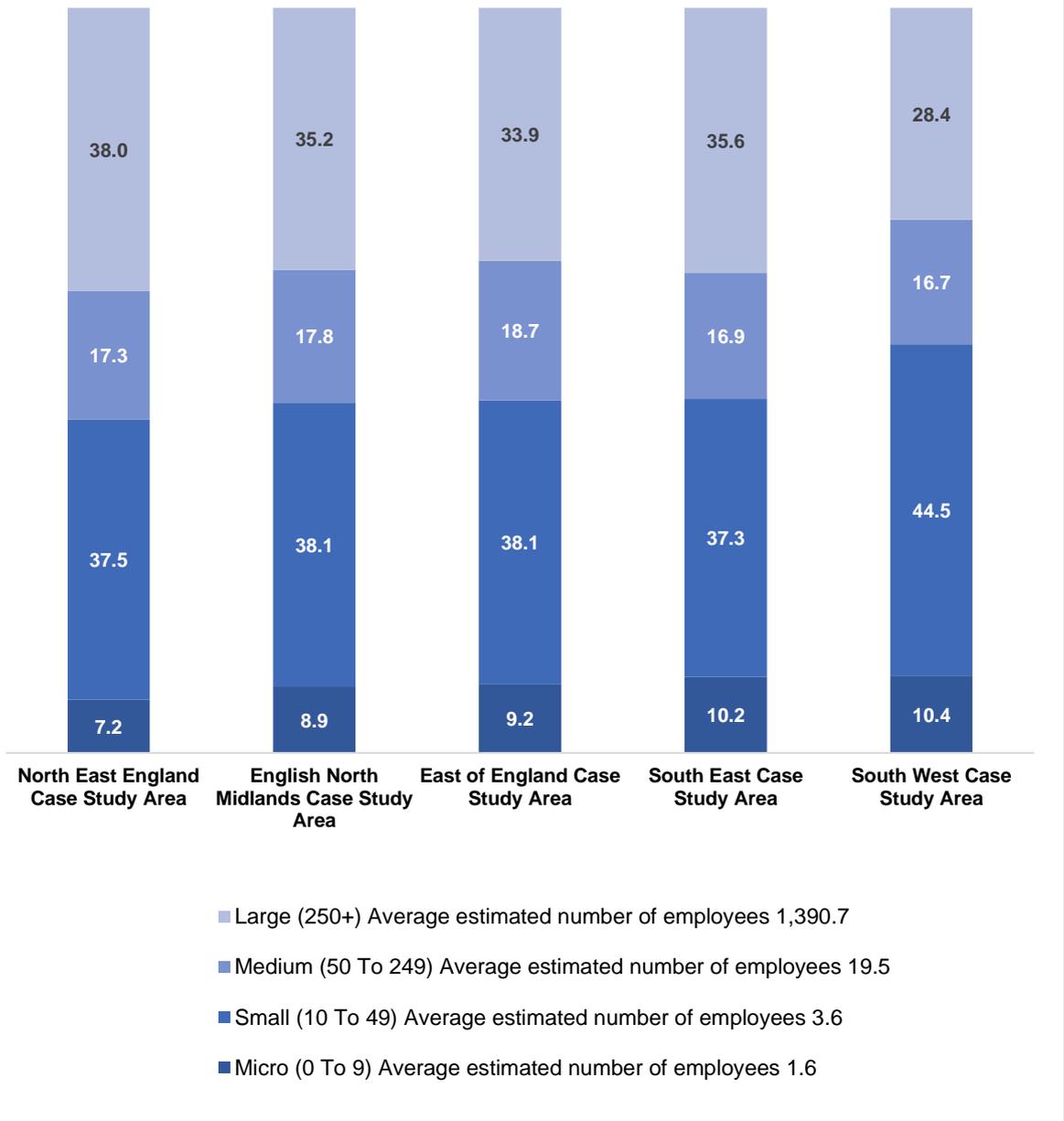
It is estimated that 55% of employees in the North East England case-study area work in medium or large businesses compared with only 45% in the South West England case-study area. Relatively few employees in the North East England case-study area work in micro businesses (7%) compared with over 10% in the South East England and South West England case-study areas.

It is widely understood that routes into setting up businesses are often associated with working in micro or small firms. For example, people working in construction trades such as electricians, plumbers and fitters who later set up in their own businesses; a similar pattern occurs in the professions such as accountancy, law, surveying, dentistry and so on.

These differences could have a tangible effect on experiences of employment in the region and could diminish the likelihood of people in North East England case-study area from setting up businesses of their own

⁵³ These estimates were produced by calculating the average number of employees in each business size category using ONS Business Population Estimates 2020 for the UK. As such, this may lead to minor over/underestimations of case-study area variations. The estimated averages are as follows: non-employers and micro businesses = 1.6 employees, small = 3.6, medium = 19.5 and large businesses = 1,390.7. The published tabular data from which these estimates were made is available at: <https://www.gov.uk/government/statistics/business-population-estimates-2020/business-population-estimates-for-the-uk-and-regions-2020-statistical-release-html> (downloaded 4th March 2021).

Figure 2.4 **Estimated employment distribution in businesses of different sizes in five case-study areas**
 (Source: BEIS Business Population Estimates, 2020)



In the North East England case-study area there is also likely to be a higher proportion of people working in public sector organisations. As shown in Table 2.4 the proportion of is higher in this region (20%) when compared with South East England (14%) or East of England (14%) case-study areas.

Furthermore, public-sector organisations tend to be larger employers, reinforcing the argument that people in the North East England case-study area are more likely to be culturally accustomed to working for large employers.

Table 2.4 Percentage of regional employees in public sector jobs (2020)			
	Public sector employees ⁵⁴	Total working population ⁵⁵	Percentage of employees in public sector jobs
North East England	238,000	1,200,000	19.8
North West England	629,000	3,436,000	18.3
Yorkshire and The Humber	471,000	2,539,000	18.6
East Midlands of England	357,000	2,300,000	15.5
West Midlands of England	450,000	2,785,000	16.2
East of England	428,000	3,065,000	14.0
London	762,000	4,764,000	16.0
South East England	658,000	4,596,000	14.3
South West England	454,000	2,715,000	16.7

Industrial sectors

Local market conditions in case-study areas are likely to have an impact on opportunities for new business start-ups. Such conditions are affected by levels of local affluence and access to more distant markets. Table 2.5 shows percentage of start-ups over the last three years across industrial sectors in each case-study area.

It is clear that in each case-study area that a number of key sectors are the focus for a majority of new start-ups.

- **Construction:** is the location for between 11-15% of start-ups in case-study areas. The percentage of start-ups in this sector is higher in the North East (14%) and South West (15%) case-study areas.
- **Retail, real estate and administrative and support services:** in these sectors, a similar percentage of start-ups are found across case-study areas.
- **Professional, scientific and technical:** there is a higher proportion of start-ups in this sector in the East of England case-study area (18%).

There are some other variations in the proportions of start-ups in smaller sectors. For example, and as may be expected given its rural character, the South West England case-study area has about twice as many start-ups as in other regions. It is also evident that there are larger numbers of start-ups in accommodation and food services in the South West and North East case-study areas – both of which rely more heavily on the visitor economy.

The data presented in Table 2.5 can be reconfigured into row percentages to get a better impression on the extent of reliance on sectors to provide opportunities for new start-ups. These data, which have been standardised to control for variations in the size of case-study areas, show that case-study areas appear to have a stronger focus in some sectors for new business start-ups.

⁵⁴ Source: ONS

([ons.gov.uk](https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/datasets/publicsectoremploymentreferencetable))<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/datasets/publicsectoremploymentreferencetable> (downloaded 13th March 2021).

⁵⁵ Source: Nomis regional statistics <https://www.nomisweb.co.uk/> (extracted 13th March 2021).

Innovation in the context of place

The North East England case-study area appears to have made a stronger performance in accommodation and food services, human health and social work, public administration and defence, energy, arts and entertainment and professional and technical services. At the other end of the spectrum, there appear to be a weaker performance in establishing new firms in transport, food manufacture, information and communication and domestic services.

In comparative terms, the South East England case-study area is shown to be more prolific in producing information and communication and professional, scientific and technical start-ups. Whereas the East of England case-study areas seems to have developed new firms in the transport sector and other manufacturing.

Table 2.5 Percentage distribution of start-ups (last three years) in case-study areas					
<i>Column percentages</i>	North East England case-study area	English North Midlands case-study area	East of England case- study area	South East England case- study area	South West England case- study area
Agriculture, forestry and mining	1.3	1.1	1.3	0.8	2.1
Food manufacturing	0.5	0.6	0.6	0.6	1.1
Other manufacturing	4.6	5.3	5.8	3.4	4.7
Electricity, gas, water utilities	1.0	0.6	0.5	0.5	1.1
Construction	14.2	11.9	11.4	12.7	14.7
Retail	9.5	10.6	9.3	8.7	10.1
Transport	2.4	6.0	7.1	2.5	2.2
Accommodation and food service	8.0	5.6	4.6	4.2	7.5
Information and communication	6.3	7.8	8.0	10.7	6.5
Financial and insurance	2.9	4.1	3.4	3.6	3.7
Real estate	9.0	7.7	8.2	8.0	9.3
Professional, scientific and technical	15.4	14.2	15.1	18.2	13.0
Administrative and support services	8.9	8.3	9.9	10.7	7.9
Public administration and defence	0.3	0.2	0.2	0.2	0.2
Education	2.2	2.0	2.1	1.8	2.2
Human health and social work	4.5	4.7	4.4	4.2	4.1
Arts, entertainment and recreation	2.7	2.3	2.5	2.6	3.0
Other services	5.9	6.2	4.6	5.4	4.8
Domestic service	0.6	0.8	1.0	1.3	1.8
Extraterritorial organisations	0.0	0.0	0.0	0.0	0.0

Table 2.6 Distribution of start-ups by industrial sector (standardised data, row percentages) ⁵⁶							
KEY		North East England case-study area	English North Midlands case-study area	East of England case-study area	South East England case-study area	South West England case-study area	N= (actual)
Highest							
Middle							
Lowest							
More likely to be associated with the local Foundation Economy							
Agriculture, forestry and mining		19.3	17.0	19.6	12.3	31.8	1,388
Electricity, gas, water utilities		26.2	16.6	13.5	14.7	28.9	797
Construction		21.9	18.3	17.6	19.5	22.7	14,494
Food manufacturing		14.6	18.1	17.9	16.9	32.5	732
Retail		19.6	22.0	19.4	18.1	20.9	10,638
Transport		11.7	29.6	35.2	12.6	10.9	4,309
Accommodation and food service		26.8	18.8	15.4	13.9	25.1	6,517
Real estate		21.4	18.3	19.3	18.9	22.1	9,408
Education		21.3	19.6	20.5	17.2	21.4	2,264
Human health and social work		20.4	21.6	20.1	19.3	18.6	4,877
Arts, entertainment and recreation		20.5	17.6	19.3	19.7	22.8	2,914
Other services		21.8	23.0	17.2	20.0	17.9	6,037
Domestic service		11.6	13.9	17.5	23.6	33.5	1,208
More likely to be associated with the national / global economy							
Administrative and support services		19.6	18.2	21.6	23.3	17.3	10,423
Public administration and defence		24.0	17.0	18.4	22.9	17.7	250
Other manufacturing		19.3	22.2	24.2	14.4	19.9	5,153
Information and communication		16.1	19.7	20.5	27.1	16.6	9,069
Financial and insurance		16.4	23.0	19.4	20.1	21.1	3,932
Professional, scientific and technical		20.3	18.7	19.8	24.0	17.1	17,388
Extraterritorial organisations		15.0	18.9	18.4	47.7	0.0	7

⁵⁶ The data have been standardised so that differences in volumes of start-ups in each region are proportionate within their own case-study area but equalised between case-study areas.

The above analysis (Tables 2.5 and 2.6) shows that levels of start-ups in some Foundation economy sectors, such as **retail** and **arts, entertainment and recreation** tend not to vary to any great degree in each of the case-study areas.

This is, perhaps, surprising and would require further analysis in a follow-up qualitative research project – because there are likely to be substantial variations in the market conditions of case-study areas – depending upon local affluence and spending power of households. The next section looks at variations in local social assets to help gauge whether this assertion can be evidenced.

2.3 Local social assets and entrepreneurial vitality

As discussed in Section 1, it is known that levels of entrepreneurial activity are closely associated with individual assets (such as educational credentials, skills, employment experience, family wealth and intergenerational entrepreneurial experience) and area assets (access to strong local market opportunities, access to finance, local business networks, business support infrastructure).

A good measure of population assets in discrete localities is available from the English Indices of Deprivation (EID). The indices provide a wide range of indicators on area strengths and weaknesses as related to population wealth, skills and educational credentials, economic activity, health and wellbeing amongst other things.⁵⁷

Usually, these indices are used in a negative way – to assess the extent to which social advantage is 'absent' in some areas. It is useful to reverse this approach and concentrate on the 'presence' of such advantages in some areas and speculate about the propensity for new businesses to be established in such 'asset rich' environments.

Figure 2.5 shows the number of start-ups per 1,000 working population by area assets (in quintiles from areas with the lowest levels of local assets to the highest). It is clear from this chart that there are many fewer start-ups in the poorest areas of North East England case-study (15.1) area than other case-study areas (for example, 25.4 in East of England).

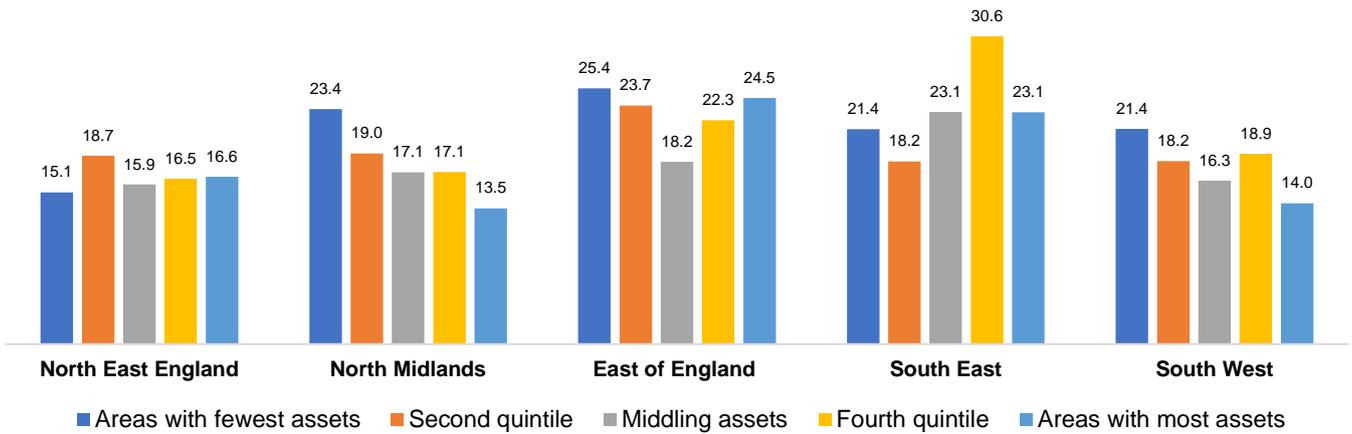
Furthermore, the evidence suggests that people living in affluent areas in the North East and North Midlands case-study areas are less likely to set up businesses than their counterparts in East of England or South East England.

Interpretation of these data is not straightforward as it cannot be known whether people who set up businesses are residents in high or low asset areas, or whether they have chosen to establish a business in other areas where, for example, property prices may be lower.

Nor can it be assumed that people set up businesses in the case-study area where they work or do so elsewhere. For example, it may be more likely that people in close proximity to London in the South East England and East of England case-study areas establish their businesses in or nearer to the capital city rather than in their home town than would be expected in other case-study areas.

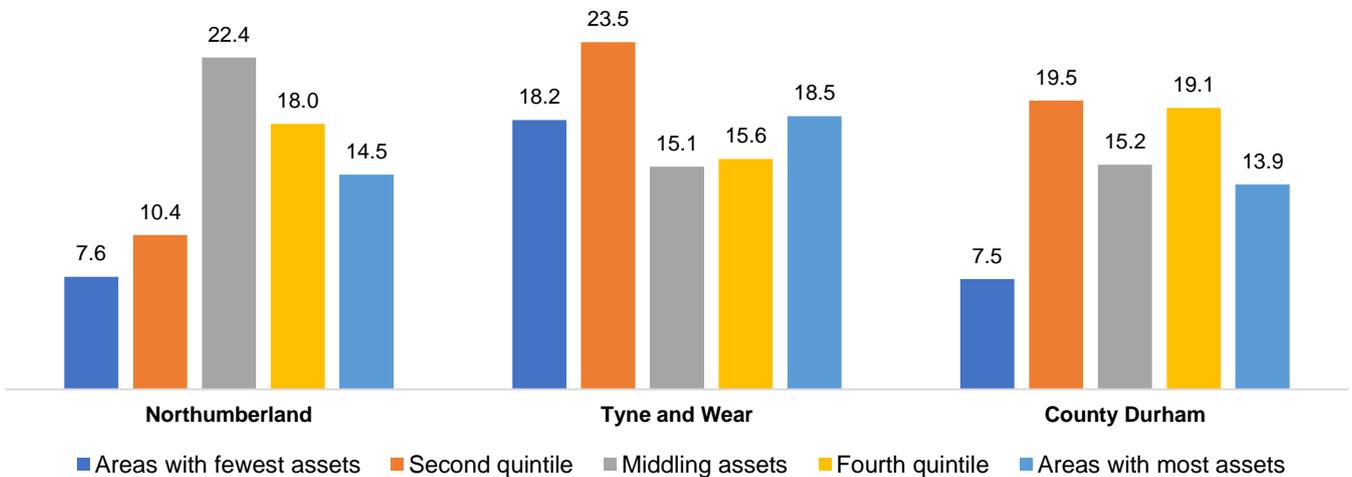
⁵⁷ See: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>.

Figure 2.5 **Number of start ups per 1,000 working population by area assets**
 (Source: business data Orbis 2021, social data ONS 2019)



Within the North East England case-study area it is apparent that entrepreneurial vitality varies when areas with strong or weak stocks of social assets are compared. As shown in Figure 2.6, in Northumberland and County Durham, the poorest areas have produced few start-ups per 1,000 working population – there is a strong likelihood that these are focused in former coalfield areas in East and West Durham and South East Northumberland.

Figure 2.6 **Number of start-ups per 1,000 population in areas of greater or lesser affluence** (Source: business data Orbis 2021, social data ONS 2019)



While the above findings are inconclusive, there is little doubt that stocks of social assets are stronger in South East England and East of England. As Table 2.7 indicates, when upper-tier local authority data are compared relative to each other (rather than to national averages) it is clear that the North East LEP area is less affluent and less well stocked with social assets.⁵⁸

⁵⁸ These data refer to the whole of upper tier local authority areas and will therefore include some districts outside of the case-study areas in the English North Midlands, South West England and South West England.

Table 2.7 Comparing stocks of social assets in relative terms ⁵⁹					
Upper-tier local authority (EID 2019)	Education, Skills and Training - rank order	Employment - rank order	Income - rank order	EID - rank order	Overall case-study rank order (Q1=most advantaged, Q5=least advantaged)
North East England Case-study					
Northumberland	Q2	Q3	Q2	Q2	Q3
North Tyneside	Q2	Q3	Q3	Q3	Q3
County Durham	Q3	Q4	Q4	Q4	Q4
Gateshead	Q4	Q4	Q4	Q4	Q4
Newcastle upon Tyne	Q5	Q4	Q5	Q5	Q5
South Tyneside	Q4	Q5	Q5	Q5	Q5
Sunderland	Q5	Q5	Q5	Q5	Q5
English North Midlands Case-study					
Shropshire	Q1	Q1	Q1	Q2	Q1
Staffordshire	Q2	Q2	Q2	Q1	Q2
Derbyshire	Q3	Q2	Q2	Q2	Q2
Telford and Wrekin	Q4	Q3	Q3	Q3	Q3
Derby	Q5	Q3	Q4	Q3	Q4
Stoke-on-Trent	Q5	Q5	Q5	Q5	Q5
East of England Case-study					
Cambridgeshire	Q1	Q1	Q1	Q1	Q1
Suffolk	Q3	Q2	Q2	Q2	Q2
Peterborough	Q5	Q3	Q3	Q4	Q4
South East England Case-study					
Surrey	Q1	Q1	Q1	Q1	Q1
Hampshire	Q1	Q1	Q1	Q1	Q1
West Sussex	Q1	Q1	Q1	Q1	Q1
Portsmouth	Q4	Q2	Q3	Q4	Q3
South West England Case-study					
Devon	Q1	Q1	Q1	Q1	Q1
Somerset	Q2	Q2	Q2	Q2	Q2
Cornwall	Q2	Q3	Q3	Q3	Q2
Plymouth	Q3	Q4	Q3	Q4	Q3
Torbay	Q3	Q4	Q4	Q4	Q4

In the final stage of analysis in this subsection, ‘projections’ are made on how many start-ups there **could have been** in North East England if the region was producing as many start-ups as in other case-study areas.

Interpretation of the findings is complicated because in some case-study areas there were none or few areas of deep social deprivation (such as is the case in some local

⁵⁹ The rankings have been created to show ‘relative’ placement to other upper-tier local authority area within the five case study areas – not against national rankings. The data do not completely match case study boundaries due to the use of upper-tier statistics.

authority areas in East of England and South East England). The exercise is interesting nonetheless because it demonstrates that, in relative terms, North East England is doing less well than ought to be if all things were equal.

The projections in the far-right column of Table 2.8 indicate that, all other things being equal, the number of start-ups in North East England could have been higher than the 25,120 achieved in the last three years. If this case-study area performed as well as South East England or East of England, there would be 31% more start-ups.

While the South West England and English North Midlands case-study areas are more similar, it is clear that there would still have been 7-8% more start-ups in North East England. The central columns of Table 2.8 shown how much variation there would be in areas with varying levels of local area assets.

- In areas with the lowest stocks of social assets, there were 7,158 start-ups in North East England. However, comparing with the record of other case-study areas which face similar challenges of deprivation and social exclusion, there 'should' have been about 3,000 or around 30% more start-ups.
- In case-study areas with middling social assets, The North East of England is doing similarly well compared with the English North Midlands and South West England case-study areas, but far less well than in the South East (there could have been 31% more start-ups).
- In the most affluent areas of North East England, there are about 30% fewer start-ups than could have been the case if conditions were the same as in South East England or East of England case-study areas. On the other hand, North East England is doing considerably better than similar areas in the English North Midlands or South West England case-study areas.

The question arising from this analysis requiring further exploration is what 'other factors' are compounding lower levels of entrepreneurial vitality in some areas? Speculative explanations will be offered in the concluding section of the report, together with suggestions about these could be researched in a follow up qualitative study.

Before this is attempted, it is necessary to explore the statistical evidence *within* the North East England case-study area by looking at the situation in eight spatially focused case-studies.

Table 4.3 Predicted number of start-ups in North East England 2018-2020 if at the same rate as other case-study areas						
	Areas with fewest assets	Second quintile	Middling assets	Fourth quintile	Areas with most assets	All areas
Actual number of start-ups in North East England⁶⁰	7,158	6,593	3,790	3802	3777	25,120
Predicted number of start-ups if at the same start-up rate as South East England case-study area	10,145 (+29.4%)	6,397 (-3.1%)	5,518 (+31.3%)	7,071 (+46.2%)	5,234 (+27.8%)	36,606 (+31.4%)
Predicted number of start-ups if at the same start-up rate as East of England case-study area	12,059 (+40.6%)	8,344 (21.0%)	4,335 (+12.6%)	5,140 (+26.0%)	5,562 (+32.1%)	36,589 (+31.3%)
Predicted number of start-ups if at the same start-up rate as South West England case-study area	10,154 (+29.5%)	6,399 (-3.0%)	3,882 (+2.4%)	4,371 (+13.0%)	3,179 (-18.8%)	27,030 (+7.1%)
Predicted number of start-ups if at the same start-up rate as North Midlands case-study area	11,086 (+35.4%)	6,671 (+1.2%)	4,082 (+7.2%)	3,953 (+3.8%)	3,064 (-23.3%)	27,395 (+8.3%)

⁶⁰ The North East England data include Tees Valley in this table.

Section Three

Comparative case-studies in North East England

This section will explore the extent of entrepreneurial vitality in the context of place in North East England. Its purpose is to find out if there are clearly identifiable interactions between enterprising activity and place characteristics.

It is not expected that similarities or differences between places which are identified can be explained from statistical analysis alone. The analysis should help to raise a series of questions which could then be explored in more depth in a follow-up qualitative study.

3.1 Social and demographic features of case-study areas

The case-study areas have been chosen because of their distinctive social characteristics. That stated and as shown in Table 3.1 the areas are of broadly similar size in population terms (with the exception of two predominantly rural areas).

	Total Population ⁶¹	Dependent children	Population Aged 16-65	Population aged 65 plus	Working population	% working population
North Northumberland case-study Area	63,609	14.5	50.7	34.8	33,319	52.4
North Tyne Valley case-study area	46,344	16.2	52.7	31.1	24,802	53.5
Newcastle North case-study area	94,356	18.8	60.1	21.0	57,096	53.5
Coast and Tyne case-study area	128,134	17.5	56.2	26.3	73,056	57.0
Gateshead Central case-study area	96,457	17.9	61.0	21.1	59,135	57.1
Sunderland Central case-study area	111,085	16.2	59.7	24.1	67,042	60.4
Durham East case-study area	99,869	18.1	57.1	24.8	57,406	57.5
Durham West case-study area	85,301	18.3	55.4	26.3	47,891	56.1

The case-study areas do not necessarily have similar levels of social assets. As shown in Table 3.2, there are significant disparities in income, exclusion from work, local health and wellbeing, skills and the quality of the local living environment. These variations will be discussed below in relation to each case-study area.

⁶¹ ONS Population data were extracted for case-study areas from data via Public Health England Local Health data mapping reports, accessed February 2021: <https://www.localhealth.org.uk/#c=indicator&view=map15>.

Table 3.2 Social assets in case-study areas										
	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or-out-of work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking
North Northumberland case-study area	5.49	5.96	5.37	5.08	6.21	7.76	4.82	5.55	4.62	5.55
North Tyne Valley case-study area	7.32	7.07	6.35	7.22	6.23	7.92	5.78	8.12	6.72	7.63
Newcastle North case-study area	6.41	6.07	5.99	6.81	4.44	5.51	7.20	8.01	6.76	6.79
Coast and Tyne case-study area	5.12	4.74	4.10	6.05	3.70	4.79	7.82	9.02	6.06	5.80
Gateshead Central case-study area	3.15	3.23	3.01	3.73	2.00	2.67	6.44	6.90	4.14	3.59
Sunderland Central case-study area	4.47	4.28	3.74	5.19	3.04	3.70	9.58	9.44	5.97	4.58
Durham East case-study area	3.17	3.24	2.28	3.47	2.09	3.04	8.38	9.80	4.50	2.87
Durham West case-study area	3.22	3.06	2.50	3.70	2.25	3.60	7.65	9.07	3.64	3.64

The eight case-study areas from within the North East England are described briefly below (full data tables on case-study areas and ward level social and economic characteristics are provided in Appendices).

At this stage of the research, it is only possible to produce rather crude pen portraits of each case-study area to help guide interpretation of data on entrepreneurial vitality in the second part of this section. Follow-up qualitative work would need to be done, however, to secure a richer account of local social and economic conditions.

North Northumberland case-study area

This area is characterised by its relatively isolated geography, with a small number of market towns which are situated in a low-population density rural context. The area is nationally recognised as an area of natural beauty and historical interest and plays a



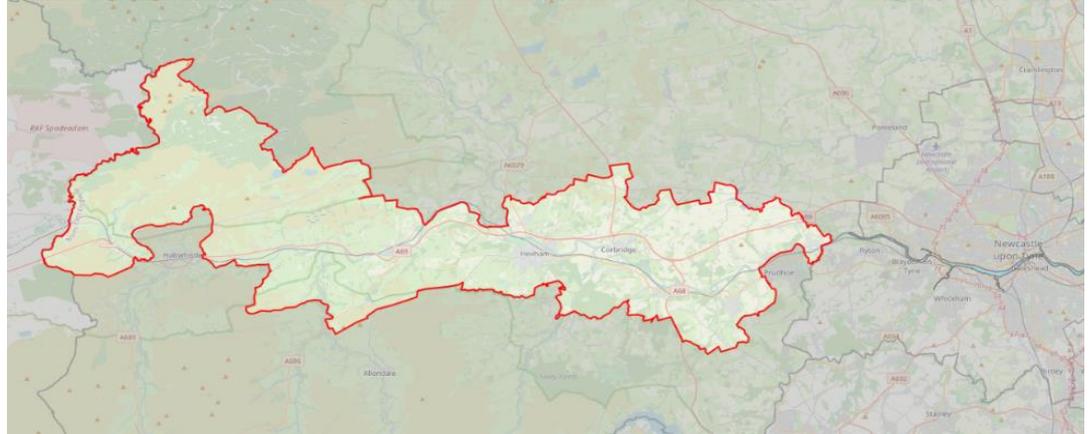
a key role in defining the identity of North East England and as such contributes substantively to the region's visitor economy.

The case-study area is comprised of 13 electoral wards, with a population of ~63,300. Its principal towns are Berwick-upon-Tweed on the Scottish border, Alnwick, Amble, Wooler and Rothbury. The area has a working population of 33,300 (52% of the resident population). 35% of the population are aged over 65.

The area is characterised by its middling levels of affluence (with an average EID score of 5.49); personal education or training assets are also in the middle range (score 5.08). None of the wards are categorised as having deep levels of social deprivation (Amble has the highest level of deprivation and lowest levels of skills – especially amongst children and young people).

North Tyne Valley case-study area

This case-study area has 11 wards, the most densely populated of which are based in Hexham, Corbridge, Stocksfield and Prudoe. While these towns and settlements are located in a rural context, they are well-linked to metropolitan Tyneside travel-to-work area by rail and good roads. The case-study area has a population of ~46,300 and working population of 24,800 (54% of the resident population).

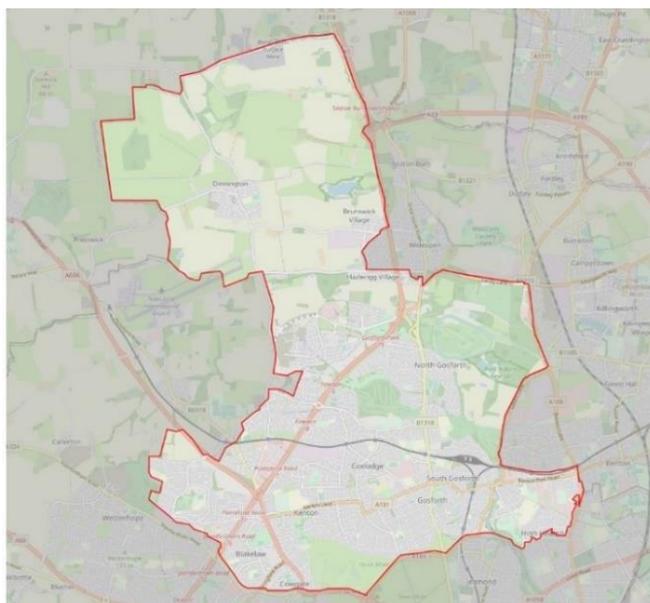


The area is generally quite affluent (average EID score of 7.3). There are pockets of considerable affluence in Hexham West, Corbridge, Prudhoe North and Stocksfield – human capital (as indicated by skill levels) in these areas are correspondingly high for adults and children and young people (scores 8.12 and 6.72 respectively).

Given the area's general affluence, it is expected that local market conditions and close proximity and access to metropolitan Tyneside may provide a conducive environment for new and innovative business activity.

Newcastle North case-study area

This case-study area is situated to the north of Newcastle city centre. It is largely suburban in character but has its own core retail and leisure area centred upon



Gosforth high street. The area has a population of ~94,300 and a working population of ~57,000. The population of people aged over 65 is relatively small at 21%.

The area has ten wards, most of which are relatively affluent areas with strong scores for human capital – but two of the wards are less affluent (with EID scores around 2.3 and corresponding low scores for adult and young people's educational credentials).

Given its proximity to the city centre and other areas of high-density employment, it is likely that much of the resident working population commute to work. The

interest in this case-study area, therefore, is in the provision of services to the population in this relatively affluent marketplace.

Coast and Tyne case-study area:

This is an area purposefully chosen for its mixed area characteristics. The area is divided into two by the River Tyne and straddles two local authority areas: North Tyneside and South Tyneside. With a resident population of 128,100 and a working population of 73,000, it is the largest case-study area.



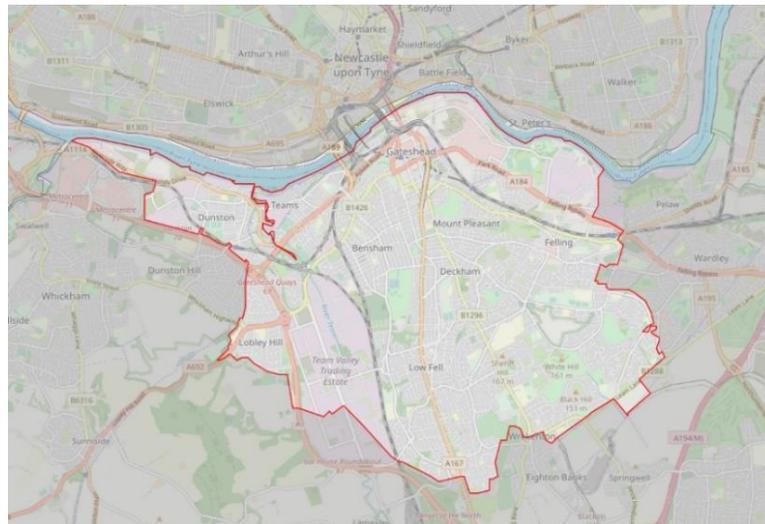
There area as a whole has a middling EID score of 5.12. There is considerable variation in the levels of affluence of its 14 wards. On both sides of the river, there are areas of considerable affluence (particularly Cullercoats, Monkseaton North, parts of Tynemouth and St Mary's) but also deep deprivation which is concentrated primarily in wards to the south of the river (Bede, Beacon and Bents, Primrose, Simonside and Rekendyke) but also north of the river

(Riverside). Measures of human capital, health and wellbeing tend to correspond closely with general indicators of affluence or deprivation.

The area is of mixed character with two medium sized trading estates to the north and south of the river, residential areas and a substantive recreational and tourism area on the northern seafront from Monkseaton to Tynemouth Priory.

Gateshead Central case-study area

This is a mixed area with a retail core to the North and a former high street area to its south which has suffered economic difficulties and is a subject of regeneration policy development. The northern retail area sits, to some extent, in the shadow of Newcastle city centre. There is a well-established arts and entertainment quarter on the riverside – soon to enhanced by the opening of a major conference, exhibition and events venue: Gateshead Quays.



The northern retail area sits, to some extent, in the shadow of Newcastle city centre. There is a well-established arts and entertainment quarter on the riverside – soon to enhanced by the opening of a major conference, exhibition and events venue: Gateshead Quays.

The area has a population of 96,500 and a working

population of 59,100 (57% of the resident population). There are wide disparities in the characteristics of wards in social terms, ranging from the more affluent ward of Low Fell to deeply deprived wards of Felling and High Fell.

This case-study area is the centre for public administration in the local authority and also to its western border incorporates much of the Team Valley Trading Estate which is a centre for significant employment.

Sunderland Central case-study area

This case-study area includes central and western parts of the city centre of Sunderland south of the River Wear and a smaller district on the north bank of the river including part of Sunderland University, the National Glass Centre and the Roker Beach seafront area.

The case-study area has a population of ~89,700 of which ~48,900 are of working age (60% of the resident population). About half of the wards are characterised by middling levels of affluence, but some have relatively deep levels of deprivation



(Pallion, Hendon, Southwick where there are indications of high levels of low participation in or exclusion from the labour market). Fulwell is the most affluent of the wards in this case-study area.

The city faced serious economic challenges following the collapse of the shipbuilding industry in the 1980s, but has been successful in attracting foreign direct investment (most notably in its Nissan factory complex and associated supply chain which sits outside of the case-study area)

Sunderland city centre is currently attracting substantive investment in response to a strategic emphasis on promoting cultural venues and strengthening the visitor economy to

revitalise the area and reinvigorate local business. In the case-study area there are established industrial estates in Southwick, north of the river, and Deptford and Hendon to the south.

Durham East case-study area

This case-study area has 14 wards, a population of ~99,900 and working population of 57,400 (58% of the resident population). Much of this area constituted the East Durham Coalfield which has faced



substantial social and economic challenges over the last few decades. The area hosts large industrial estates centred on Peterlee which was one of the first wave of new towns built in the post-war period

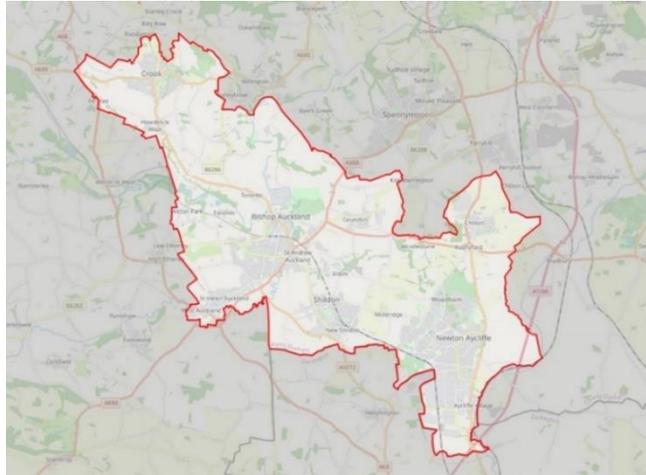
It is an area where there are swathes of deep and enduring deprivation following the economic shock of the closure of the East Durham coalfield. While the area has attracted substantive regeneration funding the area continues to face social and economic challenges.

A majority of wards in the area have widespread deprivation and correspondingly low levels of human capital. Seaham in the north of the case-study

area is the most affluent ward (with a score of 6.6 compared with a case-study area average of just 3.2).

Durham West case-study area

This case-study area has 10 wards, a population of 85,300 and working population of 47,900 (56%). The area's principal settlements are Bishop Auckland, Shildon, Crook and the new town, Newton



Aycliffe, to the south. The largest industrial estates are situated in Newton Aycliffe and Shildon. To the west of the case-study area is the largely rural and picturesque Durham Dales.

This area shares some similarities in demographic terms with the Durham East case-study areas due to the decline of the coal mining and heavy engineering. There is widespread social and economic deprivation in the area (with an

average EID score of 3.2). In recent years, however, there have been significant economic developments.

Newton Aycliffe attracted substantive foreign direct investment with the siting of Hitachi Rail and in Bishop Auckland there has been substantial private philanthropic and national lottery distributors' investment in the visitor economy via Auckland Castle Trust together with the establishment of a new site for the National Railway Museum in Shildon.

3.2 Entrepreneurial vitality in case-study areas

Currently, there is a lack of knowledge about the interactions between local social and economic wellbeing and entrepreneurial vitality. There are limitations on what can be achieved in statistical terms. As discussed in Section 1, most statistical indicators on innovation cannot be disaggregated below regional level. And when this is possible (such as exploration of patent and licenses) the number of cases is too small to make valid statistical comparisons.

Consequently, the primary focus of statistical analysis here is on entrepreneurial vitality – as indicated by the number of businesses which have recently started-up and an exploration of their size, location and industrial sector.

Table 3.3 presents summary data on entrepreneurial vitality in the eight case-study areas. To achieve comparability, the number of businesses and number of start-ups per 1,000 members of the working population were calculated. The following findings can be reported.

- It is apparent that business density per 1,000 members of the working population is considerably higher in the relatively rural and spatially remote case-study area of North Northumberland (90.6) and the rural but more urban-proximate case-study area of North Tyne Valley (92.3). Newcastle North case-study area, a largely suburban area, has the lowest density (39.7 per 1,000 working population).

- The number of start-ups per case-study area varies considerably. The most prolific area is Gateshead Central case-study area with 25 start-ups per 1,000 working population compared with lower counts in Sunderland (14.6), Durham East (15.3) and North Tyne Valley (15.5) case-study areas.
- To test the reliability of these findings a second comparison is made – assessing the percentage of start-ups relative to the size of the business stock in each case-study area. These data indicate that the most prolific areas for business start-ups are Newcastle North (43%), Gateshead (40%) and Coast and Tyne (34%) case-study areas.
- It is interesting to note that those case-study areas with the highest business density (North Northumberland and North Tyne Valley) have low percentages of start-ups. It is not known at present whether this represents a ‘saturation’ effect – limiting obvious scope for new businesses.

Table 3.3 Social assets and entrepreneurial vitality

	Working population in wards and case-study areas ⁶²	Business population estimates 2020 ⁶³	Number of start-ups (in last three years ⁶⁴	Number of businesses per 1,000 working population	Number of start-ups (last 3 years) per 1,000 working population	Start-ups as % of whole business stock
North Northumberland case-study area	33,319	3,020	611	90.6	18.3	20.2
North Tyne Valley case-study area	24,802	2,290	385	92.3	15.5	16.8
Newcastle North case-study area	57,096	2,175	970	39.7	17.0	42.8
Coast and Tyne case-study area	73,056	4,385	1,505	60.0	20.6	34.3
Gateshead Central case-study area	59,135	3,695	1,481	62.5	25.0	40.1
Sunderland Central case-study area	67,042	3,515	976	52.4	14.6	27.8
Durham East case-study area	51,837	2,640	794	50.9	15.3	30.1
Durham West case-study area	47,891	3,160	845	66.0	17.6	26.7

A second approach to comparative analysis involves correlation of local social assets (as measured by EID) with business start-ups. To simplify analysis, only two social asset indicators are used in Table 3.4: average EID score to provide a broad indication of local social and economic wellbeing; and, human capital assets (as indicated by educational/training scores).

The headline finding from this analysis is that there tend to be higher levels of start-ups in the least affluent areas. While this needs further exploration, the likelihood is that many of these start-ups are situated in business parks/industrial estates (which

⁶² ONS Population data were extracted for case-study areas from data via Public Health England Local Health data mapping reports, accessed February 2021: <https://www.localhealth.org.uk/#c=indicator&view=map15>.

⁶³ These data were extracted from NOMIS using Middle Layer Super Output Areas rather than the Lower Layer Super Output Areas which were used to accumulate Electoral Ward boundary data. Consequently, these business counts do not exactly match Ward boundaries – although they seem to provide a reasonably good match in most cases. The data refer to counts of ‘local units’ rather than ‘enterprises’ to achieve the best insight into local business population characteristics. Data were extracted on 10th March 2021 from this Nomis website address: <https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=141>.

⁶⁴ These business start-up counts were extracted from Orbis data searches for the last three years (2018-2020). It is not possible using Orbis to download data by LSOAs or MSOAs. Consequently, post codes were used in the data search and extraction process and were subsequently matched using ONS look ups by LSOA, electoral ward, lower and upper tier local authority levels and by region. Once data were matched, it was possible extract case-study area datasets using SPSS.

are usually based in poorer areas) because infrastructure support is good and costs of establishing businesses are attractive.

More detailed appraisal of the data from each case-study area reveals that these assertions may partly be justified. Using tabular data presented for each case-study area (see Appendices) it is possible to see, for example, that in North Northumberland case-study area, Berwick North electoral ward (where there is an industrial estate) has 56.3 start-ups per 1,000 population – compared with just 4.2 in Berwick East. Similar findings can be observed in other electoral wards with industrial estates (for example, Beacon and Bents (35.9) in Coast and Tyne case-study area, Dunston and Teams (62.3) in Gateshead Central case-study area, Peterlee East (99.4) in East Durham case-study area, and Aycliffe East (67.2) in West Durham case-study area.

There is evidence to suggest that there are other pockets of entrepreneurial vitality at the local level. In Coast and Tyne case-study area, for example, there are many more start-ups in relatively affluent Tynemouth (48.7) and Whitley Bay (46.7).

What we cannot know from these data, of course, is whether the people who set up businesses in particular areas are resident in that ward. Or, indeed, whether many businesses are being set up by people who live in one case-study area but establish businesses elsewhere. It may be the case that many residents of North Tyne Valley and North Newcastle establish their businesses in Newcastle city centre or Gateshead Team Valley where the number of start-ups is known to be higher than other areas.

Taking the analysis in another direction, neither can it be known if new or existing businesses in a specific locality employ people who are residents of the area. Travel-to-work-area data are currently quite outdated.⁶⁵ but it is worth taking a look at broad commuting patterns in the region to help inform interpretation.

As Table 3.5 shows, there are high levels of employee mobility in North East England. Some areas draw in large numbers of commuters from other local authority areas, such as Newcastle upon Tyne where over 90,000 people come in to work. Other areas are characterised by significant outflows of commuters, such as County Durham (~66,000) and Northumberland (~46,000).

⁶⁵ Travel to work data from the 2021 Census when available, may be profitably explored at the local level to observe commuter flows into, for example, trading estates, business parks and major urban centres.

Table 3.5 Commuting inflows and outflows from local authority areas⁶⁶			
	Commuting inflow from other local authority areas	Commuting outflow to other local authority areas	Difference
Northumberland	23,527	45,551	-22,024
Newcastle-upon-Tyne	90,140	39,326	50,814
Gateshead	43,006	42,954	52
North Tyneside	32,519	44,290	-11,771
South Tyneside	14,407	28,707	-14,300
Sunderland	40,898	36,249	4,649
County Durham	35,193	66,154	-30,961
Darlington	18,479	15,349	3,130
Hartlepool	8,379	11,963	-3,584
Middlesbrough	30,084	21,716	8,368
Redcar	12,813	23,302	-10,489
Stockton	30,018	30,786	-768

These data, though somewhat out of date, show that boundaries between local authority areas exhibit high levels of permeability.

Taking the analysis one step further, Table 3.6 focuses on commuting flows in and out of the regional capital, Newcastle-upon-Tyne. These data provide strong evidence to suggest that real caution should be taken before making assertions about the social and economic vitality of discrete areas.

Table 3.6 Commuting inflows and outflows from Newcastle-upon-Tyne			
	Commuting inflow into Newcastle-upon-Tyne	Commuting outflow from Newcastle-upon-Tyne	
From North Tyneside...	24,932	10,848	...to North Tyneside
From Gateshead...	19,941	9,944	...to Gateshead
From Northumberland...	19,289	6,275	...to Northumberland
From County Durham...	8,862	2,311	...to County Durham
From Sunderland...	6,161	3,200	...to Sunderland
From South Tyneside...	6,482	1,551	...to South Tyneside
From Tees Valley... ⁶⁷	1,487	901	...to Tees Valley

As noted in the introductory section of this report, there is currently a strong policy-driven agenda to tackle social and economic problems in so-called 'left behind

⁶⁶ Source: 2011 Census data extracted from NOMIS: <https://www.nomisweb.co.uk/census/2011/wu03uk/chart> (Downloaded 10th March 2021).

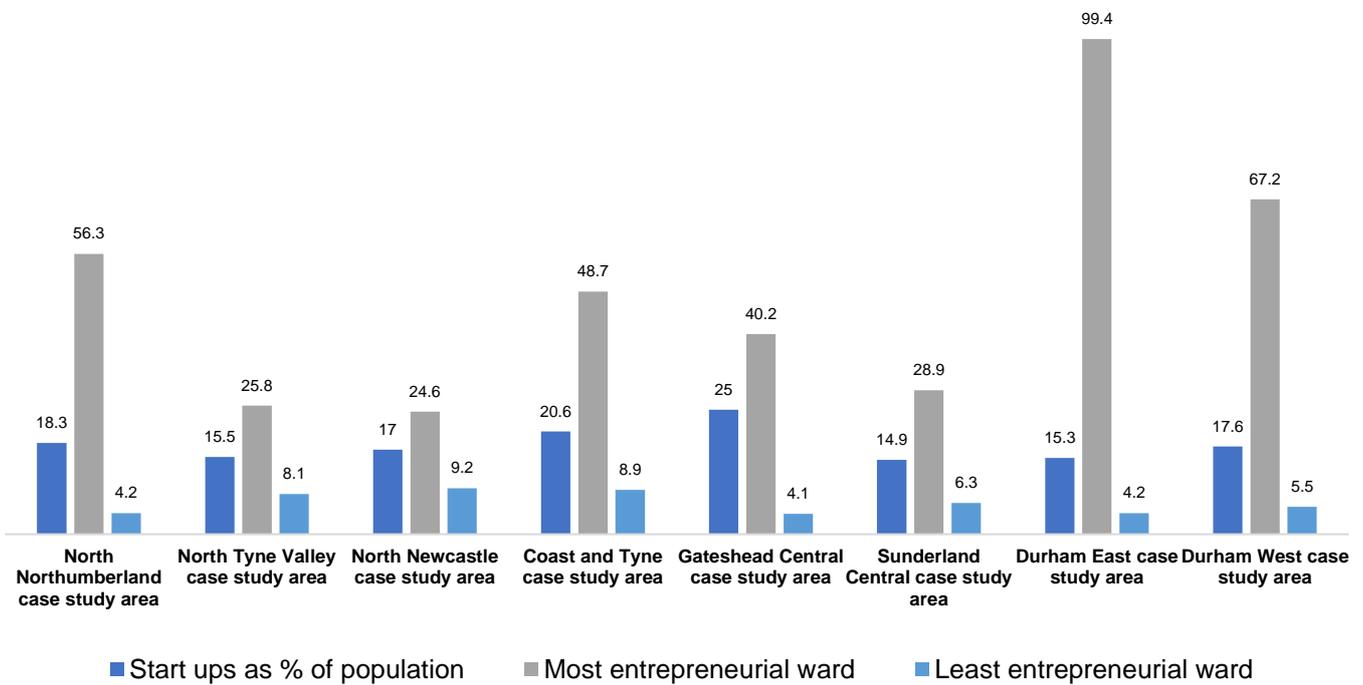
⁶⁷ Data only available from Darlington, Hartlepool, Middlesbrough and Stockton-upon-Tees.

places'. What the above evidence suggests is that it is harder to determine the economic vitality of places than is generally believed because two sets of indicators (social and economic) are rarely matched up and compared directly.

While much is not yet understood – what we do know from this analysis is that there is no direct or simple correlation between the social and economic wellbeing of a local area and business vitality. Furthermore, it is evident that even within quite small case-study areas there can be substantive variations. As Figure 3.1 shows, variations in the number of start-ups in the most and least affluent wards of case-study areas can be pronounced.

Figure 3.1 Business start ups 2018-2020 as an indicator of local economic vitality

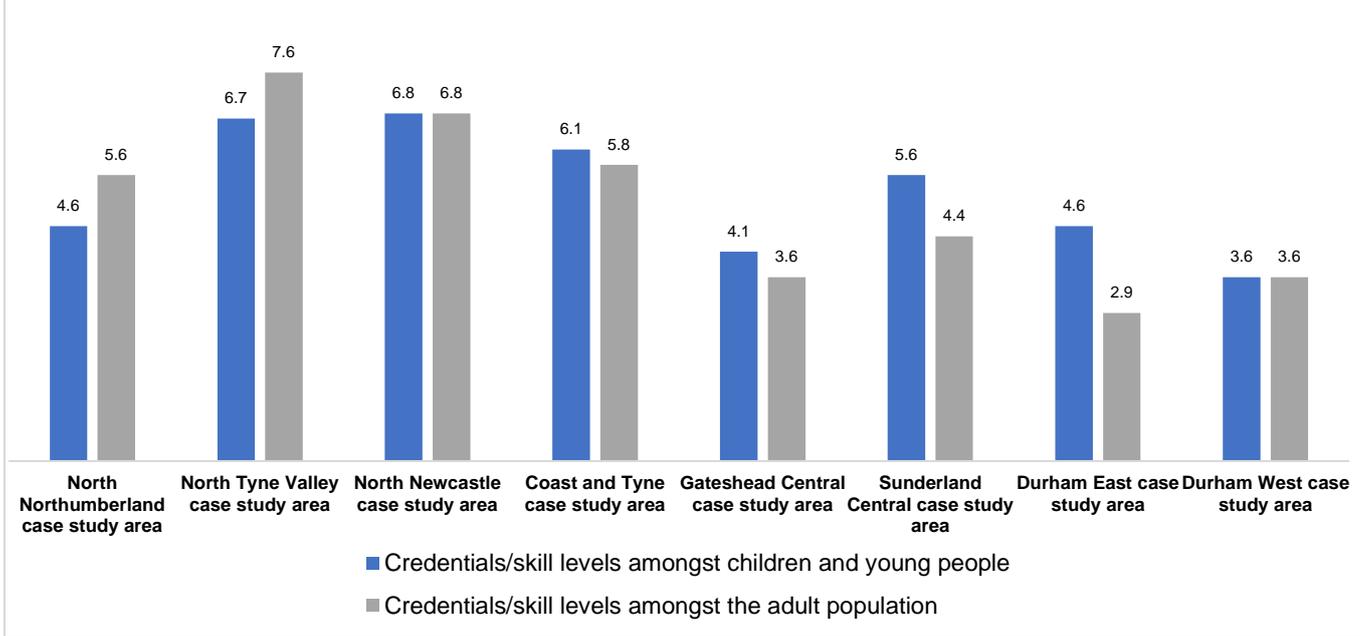
(Source: Orbis/ONS number of business start ups per 1,000 working population)



Similarly, as shown in Figure 3.2, when assessing levels of human capital in specific areas, it is possible to say that some places have higher levels of assets than others, but what cannot be determined is where those assets are employed due to commuting patterns. North Tyne Valley and North Newcastle have the highest levels of human capital in the local population while Gateshead Central, Durham East and Durham West have the lowest. But as shown above, this does not necessarily translate in any meaningful way into levels of start-ups in discrete areas.

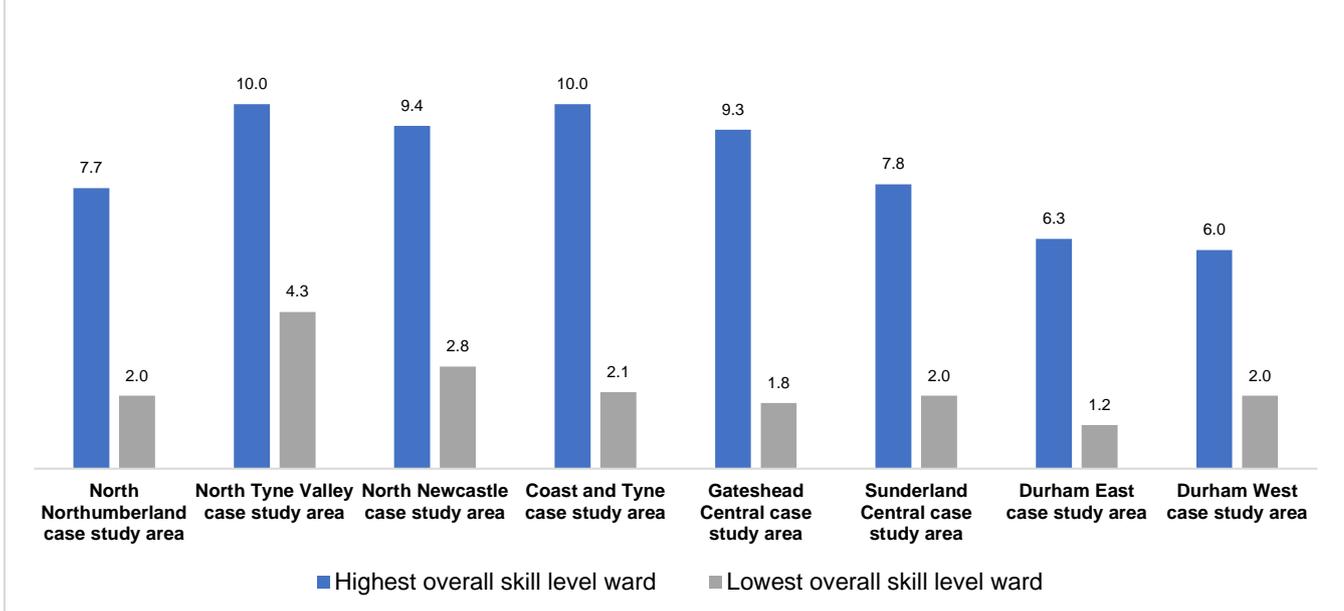
Instead, other factors must be taken into account, such as the presence of an industrial estate, good transport and communications, business support, proximity to universities and a host of other potential factors. There is no scope to assess the relative importance of such factors statistically, so it is necessary to undertake qualitative work to inform interpretation.

Figure 3.2 Human capital in case-study areas
(EID indices of skills and qualification levels in case-study areas)



It is also necessary to be cautious about making generalisations about levels of human capital assets in case-study areas. As indicated by Figure 3.3, which compares the highest and lowest scoring human capital wards in each case-study area, there are significant variations. Only in Durham East and Durham West are the variations less pronounced because these areas exhibit a greater degree of demographic homogeneity. Furthermore, people with higher stocks of social and financial capital assets will be more geographically mobile both for work and leisure activities – so reducing the viability of regarding small areas as discrete social entities.

Figure 3.3 Human capital in case-study areas
(comparing highest and lowest scoring wards in each case-study area)



3.3 Comparing sector structure in case-study areas

As discussed above, it is clear that mobility between areas by employees and entrepreneurs makes it difficult to make clear-cut area comparisons. In other respects, local social and economic portraits of the resident population in case-study areas may be useful for assessing the strength of the local marketplace for specific sectors.

As indicated in Section 2 of this report, at a wider geographical level there appears to be a correlation between local financial wealth and the strength of business vitality. Clearly, if a large number of residents in an area have significant spending power, that can translate into local business opportunities to provide goods and services they may want to buy.

Furthermore, local demographic characteristics of an area may have an impact on the kinds of services that may be in high demand. As shown in Section 2, there is higher demand for domestic services in South West England (where there is a larger population of affluent older people) and in South East England (where there is a large affluent and commuting working population). In North East England and the English North Midlands, the marketplace for such service is smaller.

Assessing the strength of discrete local marketplaces has become harder to assess in recent decades with increased car ownership and the wider market reach of households. Similarly, the growth in online shopping has started to alter consumer behaviour. This is not to say the impact of such factors on local marketplaces is entirely predictable. Indeed, there is growing expectation of a resurgence of local market niches which reflect either local demand or the strength of the local visitor economy.⁶⁸

There is some scope to explore the current vibrancy of local markets statistically by comparing local indicators of social wellbeing and affluence with the distribution of new business start-ups in industrial sectors. Table 3.6 presents the percentage breakdown of new businesses by sector in each of the case-study areas.

To make sense of these data, it is useful firstly to look at the largest sectors across the case-study areas. These include construction, retail, accommodation and food services, real estate services, professional, scientific and technical services and administrative and support services. In all case-study areas, there tend to be a good number of start-ups in these sectors, but there are both similarities and pronounced variations depending on sectors.

- **Retail** start-ups are proportionally quite similar across all case-study areas. Deeper analysis (see Appendices for individual wards) shows that there are clear concentrations of start-ups in some areas. In North Tyne Valley, for instance, more start-ups are located in Hexham Central and Prudhoe North where, presumably, market conditions are stronger. Similarly, in North Northumberland, Alnwick is clearly the most active area for retail start-ups, followed by Berwick North and Wooler.
- **Construction** start-ups are more common in Durham East (15%) and Durham West (22%) than in other case-study areas. And within these areas, activity is heavily focused in specific wards (Blackhalls, Peterlee East, Shotton and South Hetton in East Durham; Aycliffe East, Shildon and Dene Valley in West Durham).

⁶⁸ Evidence is currently largely anecdotal, see, for example: Chakelian, A. and Goodier, M. (2020) 'The rise of the "Polo mint" economy: Has Covid-19 revived Britain's local high streets?' *New Statesman* (22nd September). Grimsey Review (2021) *Build Back Better: Covid-19 supplement for town centres*: <http://www.vanishinghighstreet.com/wp-content/uploads/2020/06/Grimsey-Covid-19-Supplement-June-2020.pdf>.

- **Professional, scientific and technical** start-ups seem to be more common in North Northumberland, North Tyne Valley, North Newcastle and Coast and Tyne than in other areas. More detailed analysis from ward level data (see Appendices) suggests that these start-ups tend to be concentrated in specific areas – in the case of Newcastle North, they are predominantly based in relatively affluent Castle, Gosforth and Parklands wards. In Coast and River case-study area, these start-ups are heavily concentrated in Tynemouth, Whitley Bay and Riverside Wards.
- **Accommodation and food services** start-ups were most common in North Northumberland and Sunderland Central. In North Northumberland, a majority of these start-ups were based in Alwick and Berwick North – as would be expected for towns which are heavily committed to the visitor economy. In Coast and Tyne, the majority of start-ups were focused in Beacon and Bents, Whitley Bay and Tynemouth wards.
- Some sectors contribute few start-ups in any of the case-study areas. But again, there are exceptions. Start-ups in **agriculture, forestry and mining**, for example and as would be expected, are more common in the rural areas of North Northumberland and North Tyne Valley than other areas, but were also higher than average in Coast and Tyne and North Tyne Valley.

From these headline data, it is hard to determine with any confidence what factors led to higher levels of start-ups. Hence the importance of more detailed qualitative exploration in areas where there seems to be evidence of high levels of activity or, conversely, low levels of activity in areas with similar characteristics.

Table 3.7 Percentage of start-ups in industrial sectors in eight case-study areas

Percent of start-ups in each NACE industrial category	North Northumberland	North Tyne Valley	North Newcastle	Coast and Tyne	Gateshead Central	Sunderland Central	Durham East	Durham West
Agriculture, forestry and mining	3.0	3.2	0.3	0.9	0.6	1.8	1.1	0.9
Food manufacturing	1.1	0.3	0.2	0.3	0.3	0.6	0.3	0.4
Other manufacturing	4.6	4.4	3.4	4.8	3.4	3.2	3.4	4.6
Electricity, gas, water utilities	2.0	0.6	0.4	0.5	1.1	1.1	1.4	0.9
Construction	14.3	9.0	8.4	13.7	10.9	12.2	15.4	21.6
Retail	10.0	11.7	7.8	9.2	10.1	11.0	8.8	10.9
Transport	2.4	1.7	0.8	1.8	2.1	1.4	3.4	5.0
Accommodation and food service	12.8	9.0	6.4	9.4	7.6	12.5	6.4	5.5
Information and communication	4.8	7.6	9.1	6.7	6.2	6.3	4.0	6.6
Financial and insurance)	2.2	2.9	3.3	2.2	3.5	2.5	1.0	3.4
Real estate	8.2	8.7	12.2	6.2	14.0	8.4	27.0	6.8
Professional, scientific and technical	15.8	16.6	16.3	16.4	11.3	12.8	9.9	13.6
Administrative and support services	6.5	9.3	9.6	10.6	9.6	8.6	6.5	8.1
Public administration and defence	0.2	0.6	0.2	0.2	0.1	0.2	0.1	0.4

Continued/.... Percent of start-ups in each NACE industrial category	North Northumberland	North Tyne Valley	North Newcastle	Coast and Tyne	Gateshead Central	Sunderland Central	Durham East	Durham West
Education	1.1	2.6	2.9	2.5	1.8	2.8	3.0	1.9
Human health and social work	1.7	3.5	8.3	3.2	7.9	5.7	2.5	2.3
Arts, entertainment and recreation	2.8	2.6	3.7	3.5	2.4	2.9	1.4	2.7
Other services	4.6	4.7	5.5	6.8	6.4	5.9	4.2	3.9
Domestic service	2.0	0.9	1.0	1.0	0.8	0.1	0.3	0.6
Extraterritorial organisations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of start-ups	461	343	957	1,485	1,439	967	708	823

Size of businesses in case-study areas

A consideration of the size of new businesses may provide some additional insights into the degree of entrepreneurial vitality of areas. Table 3.8 shows that area variations across the case-study areas are not pronounced. That stated, there are some differences which are worthy of note:

- There tend to be larger start-ups in East and West Durham case-study areas (3% of new businesses have more than 10 employees). This may be due to the presence of large industrial estates in both places.
- North Newcastle and Gateshead Central are the places where most of the largest new businesses (with over 50 employees) have been established.
- In North Northumberland (13%), North Tyne Valley (16%) and Sunderland Central (13%), there was a larger proportion of middling-sized new businesses (with 6-49 employees).
- The majority of start-ups in all case-study areas were small with just one employee: they were most prevalent in Coast and Tyne (52%) and North Newcastle (49%).

The above findings refer to the percentage of start-ups in each case-study area. By overall volume of start-ups, it should be noted that many more had been established in Coast and Tyne (n=782) and Gateshead Central (n=741) than in other areas. The smaller areas (by population) which were more rural in character had many fewer start-ups: North Northumberland (n=261) and North Tyne (n=164).

Table 3.8 Number of employees in business start-ups in case-study areas						
	1 employee	2-5 employees	6-9 employees	10 to 49 employees	Over 50 employees	Number of start-ups in last three years
North Northumberland case-study area	39.1	47.5	6.5	6.9	0.0	261
Hexham / North Tyne case-study area	40.2	43.3	10.4	5.5	0.6	164
North Newcastle case-study area	48.6	40.8	4.4	4.4	1.8	434
Coast and Tyne case-study area	52.8	38.1	4.0	4.6	0.5	782
Gateshead Central case-study area	44.1	43.6	4.9	5.7	1.8	741
Sunderland Central case-study area	42.6	43.1	6.7	6.5	1.1	462
Durham East case-study area	43.8	47.6	5.6	2.7	0.3	298
Durham West case-study area	46.8	43.8	6.4	2.8	0.2	436

Finally, to add further texture to the analysis, Table 3.9 presents data on the size of new businesses in industrial sectors across the whole of the North East England case-study area.

- The largest new firms (with over 250 employees) are few in number. These companies are concentrated primarily in the *financial and insurance services* sector (n=11), *education* (n=8) and *administrative and support services* (n=5).
- Medium sized companies (with 50-249 employees) are also concentrated mainly in these three sectors (n=54) but there were also several firms established in the fields of *human health and social work* (n=15) and *manufacturing* (n=6) and *accommodation and food services* (n=5).
- Small companies (with 10-49 employees) accounted for 608 start-ups. Almost a third of these companies were based in the *accommodation and food services* sector (n=194), followed by *retail* (n=63), *human health and social work* (n=54) and *construction* (n=53).
- Micro businesses (with fewer than 10 employees) were most common in the *professional, scientific and technical services* sector (n=2,085), followed by *construction* (n=1,764). Many of these new businesses may fall into the category of 'well-trodden paths' towards entrepreneurship as discussed in Section 1.
- Other significant sectoral contributors to the business community amongst micro businesses include *retail* (n=986), *accommodation and food services* (n=798) and *information and communication* (n=786).

Table 3.9 Number of start-ups (last three years) by size and industrial sector						
<i>NACE industrial categories</i>	Micro (under 10 employees)	Small (10-49 employees)	Medium (50 to 249 employees)	Large (over 250 employees)	Total number of start-ups in last three years	Percent of start-ups in each industrial category
Agriculture, forestry and mining	144	4	1	0	149	1.2
Food manufacturing	50	2	0	0	52	0.4
Other manufacturing	562	28	6	1	597	5.0
Electricity, gas, water utilities	105	11	0	1	117	1.0
Construction	1,764	51	4	0	1,819	15.2
Retail	986	63	4	0	1,053	8.8
Transport	277	14	2	1	294	2.5
Accommodation and food service	798	194	5	2	999	8.3
Information and communication	786	11	0	1	798	6.7
Financial and insurance)	263	7	23	11	304	2.5
Real estate	634	9	1	0	644	5.4
Professional, scientific and technical	2,085	30	8	2	2,125	17.7
Administrative and support services	1,012	59	11	5	1,087	9.1
Public administration and defence	38	1	0	1	40	0.3
Education	207	22	20	8	257	2.1
Human health and social work	526	54	15	2	597	5.0
Arts, entertainment and recreation	284	22	0	1	307	2.6
Other services	666	26	4	1	697	5.8
Domestic service	36	0	0	0	36	0.3
Extraterritorial organisations	1	0	0	0	1	0.0
Number of start-ups	11,224	608	104	37	11,973	100.0

Section 4

Discussion

The relationship between local social assets, entrepreneurial vitality and innovation in the North East Local Enterprise Partnership area has been explored statistically in this report. It is too soon to draw firm conclusions, but we would like to take the opportunity to offer preliminary observations which could underpin future qualitative research.

4.1 “Does nothing work outside London...? Apparently not.”

It is easy to fall into the trap of feeling gloomy about the prospects for North East England when looking in the mirror of more ‘successful places’. And especially so when reports from think tanks continually reinforce the message that this region is, in some sense, lagging behind.

A recent report by Lord Sainsbury of Turville, for example, claims that for several decades the productivity gap between south-eastern areas of England and northern England has been widening.

‘the South has been pulling away from the North for a century, and since 1911 for every job created in the North, Midlands and Wales 2.3 have been created in the South.’⁶⁹

Enormous differences can emerge when measures such as levels of gross value added produced per capita are compared. According to Sainsbury, in London £51,000 is produced per capita compared with just £21,000 in North East England.

The danger of making bald statistical comparisons such as these is that demands can be made of less successful regions to ‘catch up’.

If the country’s underperforming cities closed their output gap, the UK’s economy would be £69.9 billion larger. And, in particular it is the underperformance of the largest cities after London that is the biggest barrier to achieving the levelling up ambition. The eight largest cities after the capital account for 70 per cent of the above-mentioned output gap. Improving their economic performance to be in line with European counterparts would be equivalent to adding two extra economies the size of Newcastle to the national output.’⁷⁰

When London-centred government departments, party-political research units and independent think tanks position what is happening in south-eastern England as ‘typical’ or even ‘normal’, then comparisons with other areas can be misleading for several reasons.

Firstly, such arguments lend themselves to value-loaded assertions or accusations that some areas are responsible for their ‘failure’ to secure the same level of success as other areas. The use of pejorative terms such as ‘left behind places’ signifies that such places were not fit enough to keep up. When regions are positioned as statistically separate microcosms – substantive imbalances in political and institutional power tends to be overlooked. In reality - political, economic and

⁶⁹ Lord Sainsbury of Turville (2021) Levelling up the UK’s regional economies: increasing the UK’s rate of economic growth, London: Centre for Cities. [levelling-up-the-uks-regional-economies.pdf](https://www.centreforcities.org/wp-content/uploads/2021/06/levelling-up-the-uks-regional-economies.pdf) ([centreforcities.org](https://www.centreforcities.org)).

⁷⁰ Sainsbury (2021), *ibid*, p. 7.

corporate decisions made in the environs of London can profoundly affect the capability and capacity of regions to shape their own destinies.⁷¹

Secondly, the social, economic and political dominance of London affects relationships amongst other regions. When decision making is centralised, as is the case in the UK, regions are obliged to conform to expectations required of them. Furthermore, they may be forced into competition with one another when seeking investment, devolved responsibility or beneficial economic arrangements from government. Producing competitive regional or sub-regional bids to win government investment in towns,⁷² the creation of freeports or to relocate civil service functions provide recent examples.⁷³

Thirdly, while the UK government may have more clout in shaping regional policy than in some other European countries,⁷⁴ regions or sub-regions are not powerless. If local conditions are right, businesses, local authorities and other influential local institutions (such as universities and non-departmental government bodies) can take the initiative and effect change. Once regions gain pre-eminence in one industrial field or another, they work hard to protect their interests. By default, this can worsen the situation for other areas by *extracting* assets. An example is the so-called 'brain drain'⁷⁵ where people with skills that are in high demand are enticed to take up employment opportunities or set up businesses in other areas.⁷⁶

And finally, as regional economic disparities widen, poorer regions become more dependent upon firms from other 'more successful' regions or via direct foreign investment to provide employment for the resident population. 'Successful' regions tend to consolidate success by farming out manufacturing or processing work to branch-plants in regions where production costs are lower, while retaining high-value and knowledge-intensive elements of activity in core areas. Consequently, greater dependence can fall on government to provide public-sector jobs to compensate at least in part for a relatively under-developed local private sector.

⁷¹ See: Cox, E. and Raikes, L. (2015) *The state of the north 2015: four tests for the Northern Powerhouse*, Manchester: IPPR North; Cox, E. and Raikes, L. (2018) *Rhetoric to reality: a business agenda for the Northern Powerhouse*, Manchester: IPPR North; Hunter, J. (2019) *Business for a purpose: growing the civic core of the Northern Powerhouse*, Manchester: IPPR North; Swinney, P. (2016) *Building the Northern Powerhouse: lessons from the Rhine-Ruhr and Randstad*, London: Centre for Cities.

⁷² The term 'sub-regional' is used as a catch all phrase to capture a range of organisations that represent local interests such as Local Enterprise Partnerships and Combined Authorities rather than former officially sanctioned subregions such as 'Tyne and Wear' or 'Tees Valley'.

⁷³ BBC News: 'Budget 2021: What is levelling up and how is it going?' 4th March 2021 <https://www.bbc.co.uk/news/56238260>.

⁷⁴ See, for example, Fothergill, S. (2005) 'A new regional policy for Britain', *Regional Studies*, 39 (5), pp. 659-667; Hudson, R. (1989) *Wrecking a Region: state policies, party politics and regional change in North East England*, Cambridge: Cambridge University Press.

⁷⁵ In the academic literature this is generally referred to as either 'graduate migration' or 'human capital flight'. In media terms, the 'brain drain' is often used to refer to either an apparently irreversible processes or one which is difficult to stem. The reality can be different. For example, one academic study in the 1960s bemoaned the loss of Aberdeen University graduates to the Central Lowlands of Scotland and England (see Mackay, D. (1969) *Geographical Mobility and the Brain Drain*, London: George Allen and Unwin. The discovery of oil in the North Sea from the mid-1960s reversed this process for several decades. Recognising that graduate migration can potentially weaken regional economy and society, the North East LEP promoted the *Live, Work and Stay* campaign in 2019: see: <https://www.northeastlep.co.uk/news/can-encourage-graduates-live-work-stay-north-east>.

⁷⁶ Evidence on graduate retention is difficult to disentangle because of substantial variations in the percentage of university students arrive in the region from other regions and those who were resident in North East England. Analysis by Centre for Cities suggests that Newcastle retains more UK graduates than it loses. Between 2013-15, 40% of Northumbria University graduates remained in the region compared with 25% from Newcastle University. London is the most popular destination for Newcastle graduates. McDonald, R. (2017) *The great British brain drain*, London: Centre for Cities. <https://www.centreforcities.org/reader/great-british-brain-drain-analysis-migration-newcastle/detailed-look-movement-students-graduates/>. Research from 2012-13 suggests that indigenous graduate retention levels in North East England are the strongest in England, though well behind those of Scotland and Northern Ireland. See Government Office for Science (2014) *Future of Cities: graduate mobility and productivity: an experiment in place-based open policy-making*, London, OGL, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/510421/gs-16-4-future-of-cities-graduate-mobility.pdf.

Taken together these factors can produce pernicious problems for less economically powerful regions, such as lower levels of skill, pay, employment security, poorer career prospects and lower levels of entrepreneurial vitality in the local private sector. Because they have lower levels of control over their own economic destiny, such areas can be more vulnerable to economic shocks such as the global economic crisis of 2008 or more recently from Brexit or the Covid-19 pandemic. Such problems cause further reputational damage to regions.

4.2 Different but similar

The statistical analysis presented in this report shows that the situation in the North East LEP area is 'less different' from other areas than might be expected. For example:

- In all of the five English case study areas, the pattern of entrepreneurial vitality has followed a similar path over the last decade in response to national or global economic forces.
- Areas may have distinctive industrial strengths, but the distribution of new businesses across industrial sectors, especially in the foundation economy, is similar across all five case-study areas.
- Patterns of change in entrepreneurial vitality are similar across the five case-study areas – but there are big differences in the *volume* of activity. Areas closer to London have more activity.
- Areas with bigger stocks of local assets produce more new businesses. But when controlling for variations in these assets statistically, North East England still produces fewer new businesses than in other case-study areas.

In short, there is *something going on* in this region that dampens entrepreneurial vitality. Adopting a regional 'deficit' model to explain this is an unattractive option – not least because it could play into the hands of those who criticise the region for failing to 'keep up'.

At this stage we can do little more than speculate about the reasons for lower-than-expected levels of entrepreneurial vitality. A positive way forward may be to ask *where are people's energies being redirected?* That is, in what other ways are people in the region developing and exercising the kinds of attributes which are needed to be entrepreneurial? Here we list some possibilities:

- **Absorbed:** where creative and imaginative energy is used in other contexts – working as employees in business and the public sector or by setting up or working for third sector organisations.
- **Dispersed:** where knowledgeable and skilled people leave the region to set up businesses or engage in innovative work for employers elsewhere because they have been dissuaded from remaining in North East England.
- **Unrecognised:** where business acumen and innovative ideas are being used but is below the radar of business support organisations. Examples might include small-scale local makers or traders on Etsy, eBay or Amazon.
- **Dormant:** where individuals' interests and potential are unknown until factors (such as redundancy, inheritance, the life course or serendipitous circumstances) collide in such a way to awaken or force interest.
- **Deflected:** where people, used to working as employees in undemanding jobs realise their skills and potential in other domains such as creative hobbies or community involvement.

- **Shared:** where people are in a position to make a conscious decision to work more efficiently in order to capitalise on other resources in the region, that is, to enjoy other aspects of their lives.

All of the above provide potential explanations for lower levels of entrepreneurial vitality and the development of creative business ideas. But none of them are 'negative' explanations – they are about the 'presence' of entrepreneurial and innovative potential, not its 'absence'.

If there are distinct economic, social and cultural factors in operation that contribute to lower levels of entrepreneurship in this region, then it is important to explore them in an original and positive way. Rather than assuming that lower levels of entrepreneurial vitality *is* a problem – we need to work out *where, when* and *why* it is a problem. And then we need to find out what the options are for resolving issues.

For example, it is not *necessarily* a problem that some businesses do not want to grow. For many businesses, the market could not bear such ambition, or growth might make businesses unviable. But it *could be* a problem when there are clear prospects for the businesses to grow but they lack the ambition, finance, capacity or support to achieve that.

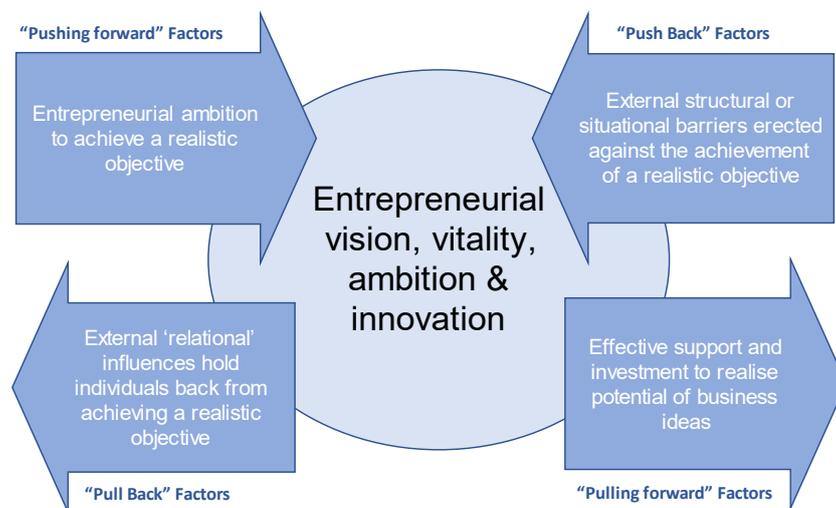
Similarly, there is little point in imposing over-ambitious targets on areas where there are insufficient assets to achieve them. But that does not mean that these areas should be neglected or written off – their potential should be assessed with an eye on the assets they *have to hand* – not *what they lack* in comparison with other areas.

4.3 Future research on business journeys and destinations

With these ideas in mind, further qualitative work could usefully explore in a more deeply textured way, how business ideas are conceived and how success is defined and achieved in local context. While it would be useful to look for positive and compelling examples to demonstrate how successes are achieved, those factors that can undermine success should not be neglected.

To illustrate this, Figure 4.1 shows that analysis must take into account the push and pull factors that benefit or undermine business journeys.

Figure 4.1 Push and pull factors that affect entrepreneurial vitality



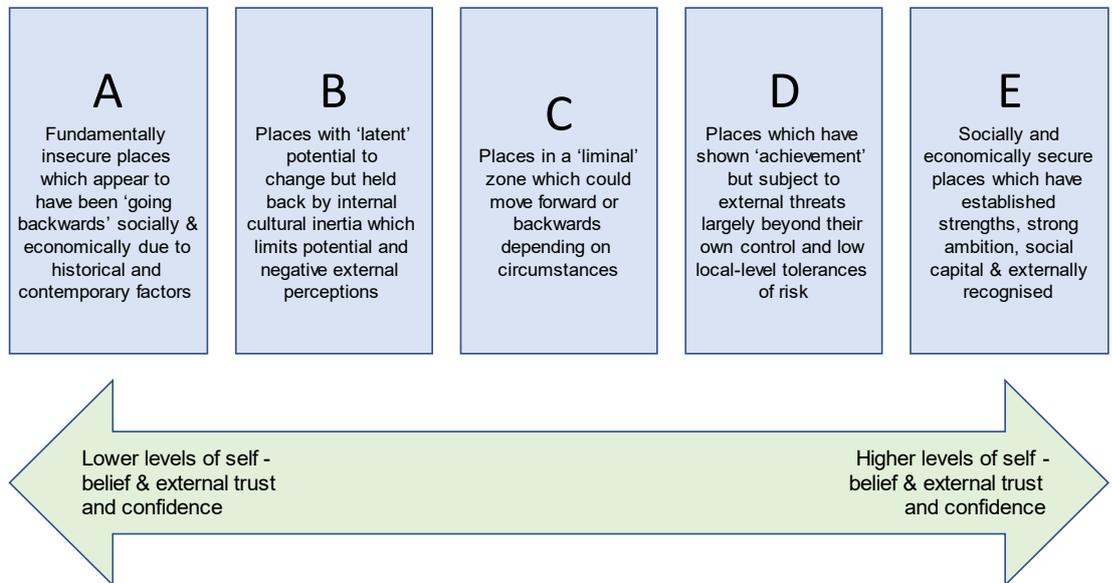
It is also necessary to look closely at the social and economic journeys and destinations of areas too. As this report has shown, some areas are rich in social and

economic assets which may advantage them. But nothing should be taken as read. Success can breed success, but it can also encourage complacency.⁷⁷ And in areas where there are comparatively few signs of business innovation and vitality, in should not be assumed that things cannot improve if success is recognised and potential is encouraged and supported.

Figure 4.2 shows diagrammatically that places can be at different stages in their journeys. It is highly unlikely that any places would be positioned at the extreme points on the continuum in this region or any other. Nowhere is asset free and beyond hope (position A) and nowhere is invincible or beyond reproach (position E). Most places lay somewhere in between and, as this report shows, often they are statistically not that far apart.

Before drawing conclusions about what should be recommended in policy and practice terms for places in positions B, C and D, more needs to be known about what is happening on the ground. It needs to be known if area assets are fully recognised locally and externally and whether the right kinds of support are being offered and taken up.

Figure 4.2 Area potential and entrepreneurial vitality



It is not a question of matching assets with outcomes for specific areas and then imposing measures to see how they have done; instead, it is anticipated that the situation will be more complex because of interactions between places. For example, interactions between places are affected by commuter flows, out-migration of skilled people to other areas, the spatial proximity of urban areas and markets, accessibility of support and finance from other areas and so on.

⁷⁷ Complacency and lack of investment and R&D by industrial leaders and local policy makers has been identified as a source of industrial decline in a number of studies, see for example: Hassink, R. & Shin, D-H. (2005) 'Guest editorial: the restructuring of old industrial areas in Europe and Asia', *Environment and Planning A*, 37 (4) 571-580.

Innovation in the context of place

We hope that this report makes a positive contribution to the debate on how to realise the potential of North East England socially and economically. The tone of the report is purposefully upbeat because the evidence shows that there are fewer reasons for the region to feel disheartened or apologetic about its achievements or potential than conventional social and economic reviews suggest.

The research raises many questions that cannot be answered with the available statistical data. We feel that more understanding is needed about people's entrepreneurial journeys in local context. Specifically, it would be useful to have a better understanding about career histories as employees before people set up in business; what skills and experiences they gained; where they got their original ideas to start a business; and, what circumstances led to the decision to get started.

We think that it would be useful to explore the creative and innovative processes surrounding the establishment of businesses; find out what local factors helped to make them sustainable; and, where entrepreneurs went for help when they needed it. Most businesses are small, but some grow. Surprisingly little is known about what factors trigger interest in business growth in local contexts. It seems to us to be a priority to learn more about this, so that support is provided appropriately to meet the needs of businesses with growth aspirations and potential.

Consequently, future research needs to be focused on micro, small and medium sized businesses, primarily in the foundation economy and be grounded in a rich understanding of local context. This would help to explore the configurations of local, regional factors and external economic and political forces that contribute to or detract from building successful businesses.

Getting a better understanding of these interactions could be helpful in policy and practice terms because it would help business support agencies to learn how to value achievement in context and then tailor future interventions that encourage entrepreneurship and creative business practice at the right level and pace.

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Appendices

Section 2, Data Tables: Industrial sectors in five English case-study areas

North East England case-study area <i>NACE industrial categories Column percentages, start-ups 2018, 2019, 2020</i>	Northumberland	County Durham	Newcastle upon Tyne	North Tyneside	South Tyneside	Sunderland	Gateshead	All areas
Agriculture, Forestry and Mining 0111 thru 0990	2.6	1.3	0.7	1.3	0.9	1.3	0.5	1.3
Food Manufacturing 1011 thru 1107	0.8	0.4	0.6	0.6	0.3	0.6	0.4	0.5
Other Manufacturing 1200 thru 3320	5.6	4.4	3.4	5.0	7.7	5.0	3.7	4.6
Electricity, Gas, Water utilities 3511 thru 3900	0.9	1.0	0.6	0.6	1.2	1.8	1.1	1.0
Construction 4110 thru 4399	13.5	15.7	8.7	14.8	17.8	14.0	11.9	14.2
Retail 4511 thru 4799	9.1	9.8	9.9	9.6	8.2	9.5	10.7	9.5
Transport 4910 thru 5320	2.5	3.5	1.2	1.8	1.9	2.1	2.3	2.4
Accommodation and food service 5510 thru 5630	9.4	7.0	9.9	7.8	8.1	10.8	7.1	8.0
Information and communication 5811 thru 6399	6.0	6.0	7.9	7.5	5.7	7.0	6.7	6.3
Financial and insurance 6411 thru 6630	2.6	2.5	3.9	3.4	1.9	2.6	3.1	2.9
Real estate 6810 thru 6832	7.1	11.7	11.7	7.9	4.7	7.4	11.5	9.0
Professional, Scientific and Technical 6910 thru 7500	16.2	14.0	13.8	16.2	13.9	13.2	13.2	15.4
Administrative and support services 7711 thru 8299	8.5	8.7	9.1	8.6	10.7	7.7	9.2	8.9
Public Administration and Defence 8411 thru 8430	0.3	0.4	0.2	0.0	0.2	0.2	0.3	0.3
Education 8510 thru 8560	2.0	2.7	2.4	2.2	1.8	2.8	1.8	2.2
Human Health and Social Work 8610 thru 8899	3.4	3.3	5.9	4.0	3.0	4.4	7.2	4.5
Arts, Entertainment and Recreation 9001 thru 9329	3.0	2.6	3.3	2.6	3.2	2.8	2.5	2.7
Other services 9411 thru 9609	5.6	4.6	6.1	5.5	8.3	6.5	5.8	5.9
Domestic service 9700 thru 9820	0.9	0.5	0.7	0.7	0.5	0.4	0.9	0.6
Total	2,550	4,199	3,368	2,060	1294	1,933	2,337	17,741

Innovation in the context of place

English North Midlands case-study area <i>NACE industrial categories Column percentages, start-ups 2018, 2019, 2020</i>	Derby	Telford and Wrekin	Stoke-on-Trent	Shropshire	Amber Valley	Derbyshire Dales	Erewash	North East Derbyshire	South Derbyshire	East Staffordshire	Newcastle-under-Lyme	Stafford	Staffordshire Moorlands	All areas
Agriculture, Forestry and Mining 0111 thru 0990	0.4	0.8	0.3	2.9	1.0	1.7	0.6	0.0	0.8	1.0	0.9	1.3	2.0	1.1
Food Manufacturing 1011 thru 1107	0.3	1.4	0.4	0.8	0.3	0.7	0.6	0.0	0.5	0.7	0.5	0.5	1.0	0.6
Other Manufacturing 1200 thru 3320	4.8	9.9	4.0	4.1	5.8	4.2	7.2	11.9	6.0	4.9	4.5	5.0	3.2	5.3
Electricity, Gas, Water utilities 3511 thru 3900	0.4	0.5	0.6	1.2	0.5	1.0	1.3	2.4	0.2	0.5	0.3	0.2	0.6	0.6
Construction 4110 thru 4399	10.6	8.3	12.1	12.7	16.3	8.5	19.4	21.4	11.5	11.5	12.1	12.4	15.0	11.9
Retail 4511 thru 4799	8.7	8.6	14.1	11.5	8.5	12.1	11.3	9.5	9.7	11.7	11.5	11.6	8.5	10.6
Transport 4910 thru 5320	6.8	9.7	9.7	2.5	3.9	3.2	4.5	7.1	6.3	9.7	4.1	2.4	2.6	6.0
Accommodation and food service 5510 thru 5630	5.4	3.7	5.5	6.0	5.7	9.2	3.6	0.0	6.4	6.3	6.0	4.8	8.1	5.6
Information and communication 5811 thru 6399	12.4	8.4	5.3	6.7	6.4	6.3	7.7	7.1	7.7	5.1	6.4	7.0	6.6	7.8
Financial and insurance 6411 thru 6630	4.7	3.0	4.8	3.5	3.5	3.1	2.8	2.4	3.5	3.5	6.5	4.2	4.5	4.1
Real estate 6810 thru 6832	7.2	7.2	8.1	7.9	10.4	9.2	8.9	9.5	6.7	6.6	7.7	8.0	7.1	7.7
Professional, Scientific and Technical 6910 thru 7500	15.5	10.9	9.8	15.2	15.0	16.7	13.4	11.9	17.1	14.7	12.9	16.2	17.3	14.2
Administrative and support services 7711 thru 8299	8.1	7.0	8.4	8.9	7.1	8.2	6.6	11.9	10.3	8.1	9.1	9.8	7.8	8.3
Public Administration and Defence 8411 thru 8430	0.2	0.1	0.2	0.2	0.1	0.3	0.4	0.0	0.2	0.1	0.1	0.2	0.1	0.2
Education 8510 thru 8560	1.8	1.4	1.9	2.1	1.8	2.6	1.5	0.0	1.3	2.2	2.6	3.0	2.6	2.0
Human Health and Social Work 8610 thru 8899	5.0	3.9	6.2	3.8	4.0	4.6	3.6	2.4	3.4	4.5	6.7	5.5	3.5	4.7
Arts, Entertainment and Recreation 9001 thru 9329	2.3	1.7	1.9	2.7	2.9	2.6	3.0	0.0	2.5	2.0	1.5	3.0	2.5	2.3
Other services 9411 thru 9609	4.8	13.3	6.5	5.3	5.5	5.6	3.2	2.4	4.7	6.4	6.0	4.7	5.2	6.2
Domestic service 9700 thru 9820	0.5	0.3	0.2	1.9	1.3	0.6	0.4	0.0	1.0	0.5	0.5	0.4	1.7	0.8
Total	3833	2035	2310	2888	1260	720	530	42	994	1473	1171	1514	692	19462

Innovation in the context of place

East of England case-study area	Peterborough	Cambridge	East Cambridgeshire	Fenland	Huntingdonshire	South Cambridgeshire	Uttlesford	Babergh	Ipswich	Mid Suffolk	East Suffolk District	West Suffolk District	All areas
<i>NACE industrial categories Column percentages, start-ups 2018, 2019, 2020</i>													
Agriculture, Forestry and Mining 0111 thru 0990	0.4	0.6	2.8	1.6	1.1	1.0	0.9	1.5	0.9	2.2	2.4	1.9	1.3
Food Manufacturing 1011 thru 1107	0.4	0.5	0.6	0.3	0.7	0.5	1.2	0.2	0.4	1.2	1.1	0.6	0.6
Other Manufacturing 1200 thru 3320	3.0	5.6	4.0	4.1	4.9	18.0	2.8	6.5	2.3	4.2	3.0	3.4	5.8
Electricity, Gas, Water utilities 3511 thru 3900	0.3	0.3	0.3	1.3	0.5	0.2	0.7	1.7	0.8	0.1	0.5	0.6	0.5
Construction 4110 thru 4399	9.5	7.6	14.4	21.3	12.8	8.7	10.4	14.1	10.4	14.5	11.3	12.5	11.4
Retail 4511 thru 4799	12.2	7.4	14.8	11.8	8.5	5.8	7.6	9.7	9.6	7.0	10.1	9.7	9.3
Transport 4910 thru 5320	16.9	1.1	3.3	10.0	6.6	1.5	1.0	3.7	12.4	3.5	10.6	4.0	7.1
Accommodation and food service 5510 thru 5630	4.7	5.7	3.3	5.2	3.7	3.1	4.3	4.8	6.3	4.1	5.1	5.2	4.6
Information and communication 5811 thru 6399	6.7	13.7	7.4	4.6	8.3	10.7	8.1	6.7	5.8	5.9	6.8	7.6	8.0
Financial and insurance 6411 thru 6630	2.8	4.2	3.7	3.1	3.7	3.0	3.1	3.0	3.0	4.5	2.9	4.2	3.4
Real estate 6810 thru 6832	8.7	9.9	7.1	6.5	7.8	6.1	11.2	5.4	8.8	13.4	7.0	6.8	8.2
Professional, Scientific and Technical 6910 thru 7500	10.4	18.6	15.9	10.4	15.9	19.5	21.8	15.4	10.0	17.0	15.2	14.7	15.1
Administrative and support services 7711 thru 8299	9.9	8.1	8.8	9.1	11.3	8.2	12.5	13.0	9.7	10.2	11.1	10.5	9.9
Public Administration and Defence 8411 thru 8430	0.2	0.2	0.2	0.3	0.3	0.1	0.1	0.6	0.2	0.0	0.1	0.2	0.2
Education 8510 thru 8560	1.4	4.5	2.0	1.1	1.1	2.6	2.2	2.4	2.2	1.8	1.3	2.5	2.1
Human Health and Social Work 8610 thru 8899	5.5	4.3	2.6	2.2	3.4	4.9	2.8	4.8	6.2	3.0	2.6	6.1	4.4
Arts, Entertainment and Recreation 9001 thru 9329	1.1	2.6	2.8	1.6	2.6	2.2	3.7	2.2	3.6	3.0	3.1	3.5	2.5
Other services 9411 thru 9609	5.4	3.5	5.2	3.7	5.9	3.5	4.3	3.9	5.2	4.1	4.5	5.0	4.6
Domestic service 9700 thru 9820	0.5	1.5	0.5	1.6	0.8	0.4	0.9	0.4	2.3	0.6	1.3	0.8	1.0
Total	3185	1899	988	998	2384	2705	670	462	1686	1348	1491	2137	19953

Innovation in the context of place

South East England case-study area <i>NACE industrial categories Column percentages, start-ups 2018, 2019, 2020</i>	Portsmouth	East Hampshire	Fareham	Gosport	Hart	Havant	Rushmoor	Guildford	Mole Valley	Reigate and Banstead	Runnymede	Surrey Heath	Tandridge	Waverley	Woking	Arun	Chichester	Crawley	Horsham	Mid Sussex	All areas
Agriculture, Forestry and Mining 0111 thru 0990	0.3	0.9	0.5	0.8	0.6	0.5	0.4	1.2	0.8	0.4	0.0	0.5	0.7	1.1	0.6	0.6	2.2	0.5	1.4	1.0	0.8
Food Manufacturing 1011 thru 1107	0.3	0.8	0.5	0.3	0.6	0.1	0.4	1.0	0.5	0.6	1.0	0.7	0.2	0.9	0.5	0.1	1.0	0.5	0.6	0.5	0.6
Other Manufacturing 1200 thru 3320	4.7	3.9	5.3	5.7	2.6	3.9	3.7	2.4	2.7	2.8	3.1	2.4	2.3	2.4	2.5	4.7	3.7	2.5	3.7	3.2	3.4
Electricity, Gas, Water utilities 3511 thru 3900	0.4	0.2	0.7	0.3	0.6	0.9	0.9	0.3	0.3	0.7	0.0	0.3	0.8	0.5	0.3	0.6	0.7	1.1	0.4	0.4	0.5
Construction 4110 thru 4399	18.7	11.1	14.0	17.0	12.3	19.0	13.2	8.9	9.0	12.3	7.2	9.7	13.0	10.4	9.2	12.3	14.2	10.4	10.7	11.2	12.7
Retail 4511 thru 4799	7.2	9.2	8.2	11.6	5.5	8.5	10.3	7.5	9.3	7.6	9.3	9.1	8.6	7.6	9.6	11.9	9.5	10.0	8.4	10.4	8.7
Transport 4910 thru 5320	3.7	2.0	2.0	3.3	1.4	3.2	3.5	1.8	1.3	2.4	3.1	2.3	1.9	1.1	3.0	3.4	2.0	6.6	1.5	2.1	2.5
Accommodation and food service 5510 thru 5630	6.8	3.4	3.6	5.9	2.8	3.6	5.4	3.2	2.8	4.7	3.1	3.2	3.0	3.3	3.3	5.9	5.8	3.7	2.1	4.9	4.2
Information and communication 5811 thru 6399	10.0	10.3	10.3	5.7	13.5	8.4	11.7	12.8	11.5	9.9	12.4	12.8	8.3	11.9	15.3	6.6	7.5	10.6	10.5	11.0	10.7
Financial and insurance 6411 thru 6630	2.8	3.8	5.0	1.7	2.9	4.4	2.2	3.2	3.1	4.1	3.1	3.7	3.8	4.0	3.2	2.7	3.9	4.4	4.5	2.9	3.6
Real estate 6810 thru 6832	7.6	8.1	6.9	11.4	7.4	9.8	6.8	9.4	7.8	7.4	13.4	7.2	11.0	9.4	7.5	6.6	8.9	5.5	6.5	6.8	8.0
Professional, Scientific and Technical 6910 thru 7500	12.8	20.3	15.0	12.9	20.5	14.3	14.5	22.2	21.0	21.5	29.9	19.8	23.6	22.1	17.4	14.1	16.8	14.5	24.7	17.3	18.2
Administrative and support services 7711 thru 8299	9.2	9.6	10.6	10.0	12.4	8.8	12.7	11.0	12.6	10.6	5.2	12.1	11.2	10.6	11.5	11.3	8.9	12.1	9.6	12.8	10.7
Public Administration and Defence 8411 thru 8430	0.4	0.5	0.3	0.3	0.5	0.1	0.2	0.2	0.4	0.1	0.0	0.2	0.4	0.1	0.2	0.3	0.1	0.2	0.3	0.3	0.2
Education 8510 thru 8560	1.0	1.8	1.5	1.3	2.4	1.2	1.0	1.8	2.5	1.8	0.0	2.0	1.2	2.1	1.9	2.0	1.9	2.1	2.4	2.3	1.8
Human Health and Social Work 8610 thru 8899	5.8	3.4	4.3	4.6	5.0	5.2	4.3	3.1	2.5	4.5	2.1	4.6	1.8	3.1	4.2	3.9	3.2	6.1	4.4	4.5	4.2
Arts, Entertainment and Recreation 9001 thru 9329	2.4	3.5	2.5	1.4	2.4	2.3	2.1	2.5	4.1	2.4	2.1	2.3	2.7	3.2	1.8	3.4	3.0	1.8	2.6	2.4	2.6
Other services 9411 thru 9609	4.8	6.4	7.1	4.5	4.6	4.9	6.0	5.9	5.2	5.5	5.2	5.7	4.2	4.7	6.4	7.0	5.1	6.2	4.2	4.7	5.4
Domestic service 9700 thru 9820	1.1	1.0	1.7	1.1	1.9	0.9	0.5	1.4	2.7	0.8	0.0	1.4	1.4	1.3	1.6	2.4	1.5	1.2	1.4	1.2	1.3
Total	3200	1965	1427	629	945	2087	1272	2079	754	1926	97	1520	912	2430	1722	697	1949	1316	1851	2054	30832

Innovation in the context of place

South West England case-study area <i>NACE industrial categories Column percentages, start-ups 2018, 2019, 2020</i>	Plymouth	Torbay	Cornwall	Isles of Scilly	East Devon	Exeter	Mid Devon	North Devon	South Hams	Teignbridge	Torridge	West Devon	Somerset West and Taunton	All areas
Agriculture, Forestry and Mining 0111 thru 0990	0.6	2.5	2.4	4.3	1.8	1.1	3.0	3.8	2.1	2.1	4.0	2.3	2.3	2.1
Food Manufacturing 1011 thru 1107	0.4	0.7	1.5	0.0	1.4	0.5	1.6	1.1	1.6	0.7	0.4	2.1	1.0	1.1
Other Manufacturing 1200 thru 3320	4.3	2.5	4.8	8.7	4.3	2.7	6.3	3.7	4.8	4.7	4.2	4.4	8.0	4.7
Electricity, Gas, Water utilities 3511 thru 3900	0.6	0.3	1.0	4.3	0.4	1.4	1.1	0.5	0.3	1.8	0.4	0.5	2.4	1.1
Construction 4110 thru 4399	17.9	15.1	15.4	8.7	14.6	12.3	15.8	15.3	13.5	16.0	13.8	9.6	12.5	14.7
Retail 4511 thru 4799	10.1	12.6	10.7	13.0	10.4	7.5	9.8	9.5	9.8	10.6	11.3	12.9	9.2	10.1
Transport 4910 thru 5320	2.2	3.2	2.0	8.7	2.6	1.8	2.3	1.5	1.4	1.8	4.0	1.4	2.7	2.2
Accommodation and food service 5510 thru 5630	7.6	10.1	8.8	21.7	5.6	6.0	5.6	10.7	8.2	7.0	10.3	6.5	4.5	7.5
Information and communication 5811 thru 6399	6.7	4.9	6.1	4.3	7.5	7.0	8.0	6.8	6.9	4.5	6.9	9.1	6.1	6.5
Financial and insurance 6411 thru 6630	3.4	3.5	3.1	0.0	3.9	6.9	1.5	3.1	7.4	4.3	3.4	1.6	3.2	3.7
Real estate 6810 thru 6832	9.1	5.5	7.4	4.3	8.1	22.7	5.9	6.8	10.7	7.9	5.5	7.2	8.0	9.3
Professional, Scientific and Technical 6910 thru 7500	11.7	11.1	12.9	8.7	14.2	10.4	16.2	13.0	12.2	12.3	11.9	16.6	15.3	13.0
Administrative and support services 7711 thru 8299	8.3	8.6	7.8	8.7	8.2	6.4	8.1	7.4	6.6	8.7	8.3	8.4	9.0	7.9
Public Administration and Defence 8411 thru 8430	0.3	0.3	0.2	0.0	0.3	0.1	0.0	0.2	0.2	0.3	0.4	0.0	0.2	0.2
Education 8510 thru 8560	2.5	2.3	2.2	0.0	2.5	2.1	1.5	1.5	2.4	1.8	2.8	3.7	1.7	2.2
Human Health and Social Work 8610 thru 8899	5.0	3.9	3.6	4.3	3.1	3.5	4.0	4.4	3.0	4.5	3.8	4.7	5.5	4.1
Arts, Entertainment and Recreation 9001 thru 9329	2.1	5.2	3.4	0.0	2.2	2.2	3.6	5.2	2.7	3.2	1.2	3.5	2.7	3.0
Other services 9411 thru 9609	4.9	6.4	4.8	0.0	6.5	3.8	4.1	3.5	4.0	6.5	5.9	4.2	4.5	4.8
Domestic service 9700 thru 9820	2.5	1.3	1.9	0.0	2.5	1.5	1.5	1.9	2.2	1.5	1.8	1.2	1.1	1.8
Total	2164	596	5164	23	1475	1876	728	839	624	682	506	428	2028	17133

Section 2 Data Tables: **Business stock, start-ups and demographics**

North East England case-study area	Number of enterprises (Nomis)	Start-ups last three years (Orbis)	Start-ups as a percentage of total business stock	Total population (ONS)	Working age population (ONS)	All enterprises per 1000 working population	Start-ups per 1000 working population
Northumberland	13,525	2,642	19.5	322,434	184,958	73.1	14.3
County Durham	17,445	4,454	25.5	530,094	318,770	54.7	14.0
Newcastle Upon Tyne	11,170	3,450	30.9	302,820	199,246	56.1	17.3
North Tyneside	6,595	2,091	31.7	207,913	124,437	53.0	16.8
South Tyneside	4,335	1,312	30.3	150,976	90,578	47.9	14.5
Gateshead	7,050	2,390	33.9	202,055	122,791	57.4	19.5
Sunderland	7,615	1,967	25.8	277,705	168,432	45.2	11.7
Total	67,735	18,306	27.0	1,993,997	1,209,212	56.0	15.1

Innovation in the context of place

English North Midlands case-study area	Number of enterprises (Nomis)	Start-ups last three years (Orbis)	Start-ups as a percentage of total business stock	Total population (ONS)	Working age population (ONS)	All enterprises per 1000 working population	Start-ups per 1000 working population
Amber Valley	5,275	1,292	24.5	116,954	69,245	76.2	18.7
Derby	9,470	3,929	41.5	257,302	154,220	61.4	25.5
Derbyshire Dales	5,325	757	14.2	72,325	40,596	131.2	18.6
East Staffordshire	5,830	1,515	26.0	108,842	63,803	91.4	23.7
Erewash	4,400	541	12.3	115,371	68,753	64.0	7.9
Newcastle-Under-Lyme	4,295	1,204	28.0	129,441	79,288	54.2	15.2
North East Derbyshire	3,780	44	1.2	101,462	58,081	65.1	0.8
Shropshire	18,025	2,996	16.6	323,136	184,215	97.8	16.3
South Derbyshire	4,205	1,012	24.1	107,261	64,977	64.7	15.6
Stafford	6,445	1,568	24.3	131,253	77,266	83.4	20.3
Staffordshire Moorlands	4,700	713	15.2	98,435	56,031	83.9	12.7
Stoke-on-Trent	8,020	2,372	29.6	256,375	154,289	52.0	15.4
Telford and Wrekin	6,815	2,095	30.7	179,854	107,540	63.4	19.5
Total	86,585	20,038	23.1	1,998,011	1,178,304	73.5	17.0

Innovation in the context of place

East of England case-study area	Number of enterprises (Nomis)	Start-ups last three years (Orbis)	Start-ups as a percentage of total business stock	Total population (ONS)	Working age population (ONS)	All enterprises per 1000 working population	Start-ups per 1000 working population
Babergh	4,700	491	10.4	86,659	47,606	98.7	10.3
Cambridge	6,730	2,115	31.4	124,798	83,645	80.5	25.3
East Cambridgeshire	4,610	1,018	22.1	89,840	51,970	88.7	19.6
East Suffolk	11,315	1,541	13.6	249,461	134,615	84.1	11.4
Fenland	4,210	1,032	24.5	87,015	49,546	85.0	20.8
Huntingdonshire	9380	2,457	26.2	177,963	105,472	88.9	23.3
Ipswich	5,440	1,742	32.0	136,913	82,947	65.6	21.0
Mid Suffolk	5,510	1,397	25.4	103,895	59,154	93.1	23.6
Peterborough	9,135	3,234	35.4	198,473	117,627	77.7	27.5
South Cambridgeshire	9,490	2,788	29.4	159,086	91,959	103.2	30.3
Uttlesford	5,965	697	11.7	91,284	52,882	112.8	13.2
West Suffolk	8,730	2,226	25.5	179,045	102,930	84.8	21.6
Total	85,215	20,738	23.8	1,684,432	980,357	91.4	21.7

Innovation in the context of place

South East England case-study area	Number of enterprises (Nomis)	Start-ups last three years (Orbis)	Start-ups as a percentage of total business stock	Total population (ONS)	Working age population (ONS)	All enterprises per 1000 working population	Start-ups per 1000 working population
Arun	6,370	708	11.1	160,758	86,109	74.0	8.2
Chichester	7,610	2,019	26.5	121,129	66,056	115.2	30.6
Crawley	4,760	1,336	28.1	112,409	69,666	68.3	19.2
East Hampshire	7,170	2,037	28.4	94,340	52,970	135.4	38.5
Fareham	5,370	1,478	27.5	116,233	66,746	80.5	22.1
Gosport	2,355	639	27.1	84,838	49,985	47.1	12.8
Guildford	8,715	2,130	24.4	148,998	94,337	92.4	22.6
Hart	5,370	974	18.1	97,073	55,953	96.0	17.4
Havant	5,095	2,158	42.4	126,220	71,667	71.1	30.1
Horsham	8,405	1,928	22.9	143,791	81,737	102.8	23.6
Mid Sussex	8,310	2,122	25.5	151,022	86,871	95.7	24.4
Mole Valley	6,065	785	12.9	87,245	49,057	123.6	16.0
Portsmouth	7,995	3,254	40.7	214,905	139,743	57.2	23.3
Reigate and Banstead	8,215	1,982	24.1	148,748	87,432	94.0	22.7
Runnymede	4,985	102	2.0	89,424	56,805	87.8	1.8
Rushmoor	4,160	1,301	31.3	94,599	59,444	70.0	21.9
Surrey Heath	5,265	1,587	30.1	89,305	52,290	100.7	30.3
Tandridge	5,485	944	17.2	82,070	46,937	116.9	20.1
Waverley	9,105	2,559	28.1	126,328	69,325	131.3	36.9
Woking	6,060	1,781	29.4	100,793	59,136	102.5	30.1
Total	126,865	31,824	25.1	2,295,629	1,402,266	90.5	22.7

Innovation in the context of place

South West England case-study area	Number of enterprises (Nomis)	Start-ups last three years (Orbis)	Start-ups as a percentage of total business stock	Total population (ONS)	Working age population (ONS)	All enterprises per 1000 working population	Start-ups per 1000 working population
Cornwall	28,850	5,333	18.5	569,578	320,345	90.1	16.6
East Devon	7,460	1,525	20.4	146,284	76,341	97.7	20.0
Exeter	5,925	1,938	32.7	131,405	87,220	67.9	22.2
Mid Devon	4,965	751	15.1	82,311	46,045	107.8	16.3
North Devon	5,735	861	15.0	97,145	54,057	106.1	15.9
Plymouth	7,910	2,227	28.2	262,100	160,404	49.3	13.9
Somerset West And Taunton	8,345	2,098	25.1	155,115	85,822	97.2	24.4
South Hams	5,815	646	11.1	87,004	47,226	123.1	13.7
Teignbridge	6,565	694	10.6	134,163	74,779	87.8	9.3
Torbay	4,920	605	12.3	136,264	74,684	65.9	8.1
Torridge	4,020	534	13.3	68,267	37,463	107.3	14.3
West Devon	3,540	442	12.5	55,796	30,480	116.1	14.5
Total	94,050	17,654	18.8	1,925,432	1,094,866	85.9	16.1

Section 3 Data Tables: **Population and social attributes by ward**

North Northumberland case-study area	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or out-of-work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion of population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking	Total Population	Working population	% working population
Alnwick	6.8	6.2	5.3	6.0	6.2	5.8	7.3	9.0	5.5	6.7	9,772	5,193	53.1
Amble	3.0	3.0	2.3	2.0	3.7	4.3	7.3	10.0	1.3	3.0	4,533	2,523	55.6
Amble West with Warkworth	7.0	7.5	6.0	7.0	7.0	7.0	5.5	8.5	5.5	7.5	4,058	2,076	51.1
Bamburgh	5.3	6.0	5.7	3.7	6.3	9.0	4.3	2.3	3.3	4.7	4,693	2,272	48.4
Bellingham	5.5	7.0	6.5	5.0	8.0	9.5	1.5	2.0	4.5	6.0	3,947	2,142	54.3
Berwick East	3.7	3.7	3.0	2.3	4.0	5.7	5.3	8.0	2.3	2.7	4,907	2,644	53.9
Berwick North	5.3	5.3	4.7	5.0	5.0	5.0	7.7	5.7	4.7	5.3	4,546	2,382	52.4
Berwick West with Ord	5.7	5.3	4.0	3.7	5.0	8.0	6.7	7.7	4.3	3.0	4,076	2,067	50.7
Longhoughton	7.5	8.0	8.5	6.5	7.5	9.5	5.0	3.5	5.5	8.0	3,256	1,812	55.6
Norham and Islandshires	3.3	6.0	4.3	5.3	6.3	9.0	1.0	1.0	4.7	6.0	4,903	2,502	51.0
Rothbury	6.0	7.0	6.7	7.7	6.7	9.3	1.7	4.0	7.3	7.7	5,244	2,606	49.7
Shilbottle	6.7	7.0	6.3	7.3	7.0	9.7	4.3	6.0	7.0	7.7	5,851	3,110	53.1
Wooler	5.5	5.5	6.5	4.5	8.0	9.0	5.0	4.5	4.0	4.0	3,823	1,993	52.1
Average rank	5.5	6.0	5.4	5.1	6.2	7.8	4.8	5.6	4.6	5.6	63,609	33,322	52.4

Innovation in the context of place

North Tyne Valley case-study area	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or out-of-work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion of population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking	Total Population	Working population	% working population
Bywell	7.7	8.3	7.7	9.3	6.7	8.0	5.7	7.0	8.7	9.7	4,488	2,328	51.9
Corbridge	8.7	8.7	7.0	9.0	7.7	9.7	4.3	7.7	8.7	8.7	5,236	2,559	48.9
Haydon	6.0	5.7	4.7	5.3	4.0	6.0	6.0	10.0	4.7	6.3	4,593	2,604	56.7
Haydon and Hadrian	6.0	7.5	6.5	6.0	7.5	9.0	4.0	1.0	5.0	6.5	4,308	2,323	53.9
Hexham Central & Acomb	6.7	6.0	5.3	7.3	5.3	7.3	5.3	8.3	7.3	7.0	5,646	3,158	55.9
Hexham East	6.0	6.0	5.0	5.5	5.5	5.5	6.5	10.0	5.5	5.5	3,941	1,995	50.6
Hexham West	9.5	8.5	9.0	10.0	8.0	9.0	4.0	9.5	10.0	10.0	3,379	1,687	49.9
Prudhoe North	8.3	7.0	6.0	6.7	6.3	9.0	7.7	10.0	5.7	7.7	4,965	2,964	59.7
Prudhoe South	5.7	4.7	4.0	4.3	4.7	6.3	8.7	10.0	3.7	5.7	5,954	3,219	54.1
Stocksfield & Broomhaugh	8.7	8.3	8.3	8.7	6.7	9.3	5.7	7.7	8.0	9.3	3,834	1,963	51.2
Average rank	7.3	7.1	6.4	7.2	6.2	7.9	5.8	8.1	6.7	7.6	46,344	24,801	53.5

Innovation in the context of place

Newcastle North case-study area	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or-out-of work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion of population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking	Total Population	Working population	% working population
Blakelaw	2.3	2.1	2.3	2.8	1.9	2.1	7.1	7.9	3.1	2.6	12,127	6,767	55.8
Castle	6.7	6.1	5.9	6.4	4.4	6.0	6.4	9.4	7.3	5.6	11,137	6,535	58.7
Dene	9.0	8.3	8.0	8.7	6.5	9.0	7.5	8.7	8.3	8.7	9,572	5,714	59.7
East Gosforth	7.8	7.2	7.2	9.4	5.8	5.8	7.4	7.2	9.0	9.8	8,544	5,247	61.4
Fawdon	2.4	2.4	2.0	3.0	1.6	3.0	6.4	7.6	3.3	2.4	9,692	5,588	57.7
Kenton	3.7	3.0	3.0	4.0	2.3	4.0	6.7	9.0	4.1	4.0	11,410	6,576	57.6
North Jesmond	9.0	9.6	9.8	8.6	4.6	6.0	7.4	6.2	7.2	10.0	9,887	8,395	84.9
Parklands	8.5	8.2	8.2	9.3	7.0	7.2	7.8	8.0	9.3	9.2	10,215	5,562	54.5
West Gosforth	8.3	7.6	7.6	9.1	5.9	6.5	8.0	8.1	9.1	8.9	11,772	7,104	49.4
Average rank	6.4	6.1	6.0	6.8	4.4	5.5	7.2	8.0	6.8	6.8	94,356	57,088	49.4

Innovation in the context of place

Coast and Tyne case-study area	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or-out-of work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion of population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking	Total Population	Working population	% working population
Beacon and Bents	2.5	2.3	1.8	4.3	1.8	2.3	8.0	10.3	5.3	3.8	7,610	4,483	58.9
Bede	1.5	1.0	1.0	2.0	1.3	3.5	5.5	9.8	2.3	1.5	5,525	3,099	56.1
Cullercoats	7.7	7.0	6.2	8.3	5.5	6.5	8.5	9.3	8.3	7.7	9,228	4,762	51.6
Harton	4.2	3.0	2.7	4.7	2.7	5.3	7.8	9.7	5.3	4.2	8,256	4,475	54.2
Horsley Hill	4.7	4.2	3.2	5.8	2.8	5.5	8.0	9.3	6.0	5.2	10,463	5,905	56.4
Monkseaton North	10.0	10.0	8.0	10.0	8.0	8.0	10.0	9.0	9.0	10.0	7,307	3,979	54.5
Monkseaton South	7.0	5.9	5.3	7.6	4.9	6.9	9.0	9.3	7.1	7.6	11,483	6,280	54.7
Primrose	2.0	2.0	1.3	3.1	1.9	3.3	7.4	9.0	3.1	3.0	9,559	5,448	57.0
Riverside	1.6	1.6	1.6	3.1	1.5	1.8	5.3	9.0	3.1	2.9	13,533	8,395	62.0
Simonside and Rekendyke	1.4	1.3	1.1	2.1	1.1	1.4	6.4	9.7	2.3	2.1	10,005	6,215	62.1
St Mary's	9.8	9.8	9.2	9.7	6.8	8.7	6.7	9.7	9.5	9.8	8,659	4,197	48.5
Tynemouth	7.3	6.5	6.5	8.8	5.5	5.5	8.7	7.7	8.5	9.0	9,305	5,342	57.4
Westoe	5.8	5.7	4.3	6.7	3.8	5.5	9.0	8.2	7.0	6.0	8,004	4,995	62.4
Whitley Bay	6.2	6.2	5.3	8.5	4.3	3.0	9.2	6.5	8.0	8.5	9,197	5,480	59.6
Average rank	5.1	4.7	4.1	6.1	3.7	4.8	7.8	9.0	6.1	5.8	128,134	73,056	57.0

Innovation in the context of place

Gateshead Central case-study area	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or-out-of work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion of population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking	Total Population	Working population	% working population
Bridges	2.4	2.6	2.6	3.0	1.6	1.4	6.2	6.2	2.8	3.8	9,489	6,645	70.0
Chowdene	4.3	4.2	4.2	5.3	2.3	4.3	5.8	8.0	6.5	4.0	8,095	4,525	55.9
Deckham	2.3	2.5	2.5	2.7	1.7	1.3	5.5	7.5	3.0	2.7	9,853	5,953	60.4
Dunston and Teams	2.8	2.6	2.6	3.2	1.4	4.4	6.0	6.8	4.2	3.0	9,341	6,118	65.5
Felling	1.4	1.4	1.4	1.8	1.2	1.4	5.8	8.0	2.2	2.0	7,639	4,434	58.0
High Fell	1.7	1.8	1.3	2.3	1.3	2.2	6.0	8.7	3.0	1.8	9,550	5,492	57.5
Lobley Hill and Bensham	3.4	3.6	3.3	3.6	1.9	3.4	6.6	5.9	3.9	3.1	12,711	8,311	65.4
Low Fell	8.0	7.3	7.0	9.3	5.2	5.2	9.3	7.0	9.8	8.7	9,590	5,478	57.1
Saltwell	2.7	3.0	2.5	3.3	1.8	1.2	8.0	3.7	2.8	4.3	10,476	6,630	63.3
Windy Nook and Whitehills	2.4	3.3	2.7	2.7	1.6	1.9	5.1	7.3	3.1	2.4	9,713	5,549	57.1
Average rank	3.1	3.2	3.0	3.7	2.0	2.7	6.4	6.9	4.1	3.6	96,457	59,135	57.1

Innovation in the context of place

Sunderland Central case-study area	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or-out-of-work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion of population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking	Total Population	Working population	% working population
Barnes	5.3	4.9	4.9	5.7	3.6	3.7	9.1	7.9	6.3	5.3	10,386	6,101	58.7
Fulwell	8.1	7.9	7.0	8.0	5.0	7.0	9.1	9.0	8.4	7.4	9,919	5,596	56.4
Hendon	1.1	1.3	1.3	2.1	3.0	2.0	1.1	1.3	1.3	2.1	12362	8121	65.7
Millfield	2.9	2.9	3.0	4.0	2.3	1.1	8.4	6.8	4.4	3.8	13,730	9,370	68.2
Pallion	2.6	2.1	1.9	2.7	1.9	3.1	8.9	8.9	3.7	2.3	10,873	6,258	57.6
Ryhope	3.9	3.1	2.7	4.3	2.4	3.6	7.9	9.7	5.3	3.6	11,650	6,840	58.7
Silksworth	3.4	3.3	2.7	3.6	2.6	3.6	7.9	9.7	4.4	3.0	10,048	5,591	55.6
Southwick	1.9	1.9	1.6	2.0	1.4	2.4	8.1	8.9	2.7	1.4	10,534	6,125	58.1
St Michael's	5.5	6.0	4.2	7.8	3.8	3.5	8.8	8.5	9.2	6.3	9,518	5,750	60.4
St Peter's	5.6	5.3	4.5	6.5	3.3	4.1	9.1	8.3	6.4	6.1	12,065	7,291	60.4
Average rank	4.3	4.1	3.6	5.0	2.9	3.6	8.6	8.6	5.6	4.4	98,723	58,921	59.7

Innovation in the context of place

Durham East Case-study	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or-out-of-work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion of population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking	Total Population	Working population	% working population
Blackhalls	2.3	2.8	1.8	3.2	1.3	1.8	8.0	9.0	3.8	2.8	8,721	4,929	56.5
Dawdon	3.3	3.0	2.0	3.2	2.0	3.3	9.3	9.5	5.0	2.2	8,619	5,108	59.3
Deneside	3.0	2.6	2.2	3.0	2.4	4.2	9.0	10.0	4.0	2.2	6,879	3,819	55.5
Easington	3.4	3.8	2.4	4.2	2.4	2.6	7.8	9.8	5.2	3.4	7,569	4,290	56.7
Horden	1.4	1.8	1.2	2.0	1.0	1.6	8.6	9.8	3.0	1.4	7,539	4,323	57.3
Murton	3.4	3.4	2.6	2.6	2.6	2.4	9.4	10.0	2.8	2.6	8,300	4,867	58.6
Passfield	5.3	6.0	3.7	6.3	3.3	6.7	5.7	10.0	7.0	5.3	4,225	2,453	56.4
Peterlee East	1.5	1.8	1.2	2.0	1.2	1.0	8.0	10.0	3.2	1.5	7,250	4,086	56.4
Peterlee West	2.3	2.1	1.7	3.1	1.7	2.3	7.7	9.6	4.7	2.4	8,572	4,879	56.9
Seaham	6.6	6.0	5.2	6.2	3.8	6.4	7.6	10.0	7.4	5.4	7,330	4,282	58.4
Shotton & South Hetton	2.2	2.3	1.5	2.7	1.3	2.2	9.3	9.7	3.3	2.3	9,593	5,569	58.1
Trimdon and Thornley	2.5	2.4	1.6	2.6	1.6	2.0	10.0	10.0	3.5	2.3	11,819	6,768	57.3
Wingate	4.0	4.0	2.5	4.0	2.5	3.0	8.5	10.0	5.5	3.5	3,453	2,034	58.9
Average rank	3.2	3.2	2.3	3.5	2.1	3	8.4	9.8	4.5	2.9	99,869	57,407	57.5

Innovation in the context of place

Durham West Case-study	Average EID score (10 = most affluent areas)	Population experiencing deprivation due to low in-work or-out-of work income	Population involuntarily excluded from the labour market	Personal educational or training assets	Proportion of population suffering health risks	Personal and material risk of crime	Barriers to housing and local service provision	Quality of the living environment	Children and young people's skills ranking	Adult skills ranking	Total Population	Working population	% working population
Aycliffe East	3.5	3.2	2.5	3.8	2.3	4.5	9.2	10.0	3.8	4.0	8,443	4,586	54.3
Aycliffe North & Middridge	5.3	5.1	4.4	6.0	3.1	6.0	5.3	9.5	5.4	6.1	11,072	6,353	57.4
Aycliffe West	2.0	2.0	1.8	2.4	1.8	2.6	6.6	9.4	2.4	2.8	7,223	3,924	54.3
Bishop Auckland Town	4.2	4.4	3.4	5.8	2.6	3.0	7.8	8.0	5.4	5.8	7,744	4,187	54.1
Chilton	3.5	3.0	2.5	3.0	2.5	4.0	9.0	10.0	3.0	3.0	4,145	2,352	56.7
Coundon	2.3	2.3	1.7	2.0	1.7	2.0	7.7	8.0	2.0	2.0	4,380	2,533	57.8
Crook	3.3	2.9	2.4	4.3	2.4	4.9	7.0	9.3	4.4	4.0	11,912	6,647	55.8
Shildon and Dene Valley	1.9	1.9	1.6	2.8	1.9	1.6	8.5	7.8	3.1	2.5	12,993	7,418	57.1
West Auckland	4.6	4.0	3.2	4.4	2.8	5.4	7.8	9.6	4.2	4.0	8,727	5,046	57.8
Woodhouse Close	1.7	1.8	1.5	2.5	1.3	2.0	7.7	9.2	2.7	2.2	8,662	4,845	55.9
Average rank	3.2	3.1	2.5	3.7	2.2	3.6	7.6	9.1	3.6	3.6	85,301	47,891	56.1

Section 2 Data Tables: Summary social attributes by population and economic vitality (business start-ups)

North Northumberland case-study area	Average EID score (1 = least affluent areas, 10 = most affluent areas)	Personal educational or training assets (1=lowest, 10= highest)	Working population in wards and case-study areas	Number of start-ups in last three years	Number of start-ups per 1,000 population
Alnwick	6.8	6.0	5193	129	24.8
Amble	3.0	2.0	2523	33	13.1
Amble West with Warkworth	7.0	7.0	2076	25	12.0
Bamburgh	5.3	3.7	2272	34	15.0
Bellingham	5.5	5.0	2142	48	22.4
Berwick East	3.7	2.3	2644	11	4.2
Berwick North	5.3	5.0	2382	134	56.3
Berwick West with Ord	5.7	3.7	2067	17	8.2
Longhoughton	7.5	6.5	1812	46	25.4
Norham and Islandshires	3.3	5.3	2502	23	9.2
Rothbury	6.0	7.7	2606	33	12.7
Shilbottle	6.7	7.3	3110	43	13.8
Wooler	5.5	4.5	1993	35	17.6
Average rank	5.5	5.1	33322	611	18.3

Innovation in the context of place

North Tyne Valley case-study area	Average EID score (1 = least affluent areas, 10 = most affluent areas)	Personal educational or training assets (1=lowest, 10= highest)	Working population in wards and case-study areas	Number of start-ups in last three years	Number of start-ups per 1,000 population
Bywell	7.7	9.3	2328	60	25.8
Corbridge	8.7	9.0	2559	64	25.0
Haydon	6.0	5.3	2604	21	8.1
Haydon and Hadrian	6.0	6.0	2323	19	8.2
Hexham Central with Acomb	6.7	7.3	3158	50	15.8
Hexham East	6.0	5.5	1996	40	20.0
Hexham West	9.5	10.0	1687	30	17.8
Prudhoe North	8.3	6.7	2965	35	11.8
Prudhoe South	5.7	4.3	3219	26	8.1
Stocksfield and Broomhaugh	8.7	8.7	1963	40	20.4
Average rank	7.3	7.2	24802	385	15.5

Innovation in the context of place

Newcastle North case-study area	Average EID score (1 = least affluent areas, 10 = most affluent areas)	Personal educational or training assets (1=lowest, 10= highest)	Working population in wards and case-study areas	Number of start-ups in last three years	Number of start-ups per 1,000 population
Blakelaw	2.3	2.8	6767		(see Fawdon)
Castle	6.7	6.4	6535	161	24.6
Dene	9.0	8.7	5714	85	14.9
East Gosforth	7.8	9.4	5247	107	20.4
Fawdon	2.4	3.0	5588	186	15.1
Kenton	3.7	4.0	6576	67	10.2
North Jesmond	9.0	8.6	8395	77	9.2
Parklands	8.5	9.3	5562	112	20.1
West Gosforth	8.3	9.1	6714		(see Fawdon)
Average rank	6.4	6.8	57098	7950	17.0

Innovation in the context of place

Coast and Tyne case-study area	Average EID score (1 = least affluent areas, 10 = most affluent areas)	Personal educational or training assets (1=lowest, 10= highest)	Working population in wards and case-study areas	Number of start-ups in last three years	Number of start-ups per 1,000 population
Beacon and Bents	2.5	4.3	4483	161	35.9
Bede	1.5	2.0	3099	72	23.2
Cullercoats	7.7	8.3	4762	45	9.4
Harton	4.2	4.7	4475	95	21.2
Horsley Hill	4.7	5.8	5905	51	8.6
Monkseaton North	10.0	10.0	3979	60	15.1
Monkseaton South	7.0	7.6	6280	71	11.3
Primrose	2.0	3.1	5448	107	19.6
Riverside	1.6	3.1	8395	158	18.8
Simonside and Rekendyke	1.4	2.1	6215	73	11.7
St Mary's	9.8	9.7	4197	39	9.3
Tynemouth	7.3	8.8	5342	260	48.7
Westoe	5.8	6.7	4995	57	11.4
Whitley Bay	6.2	8.5	5480	256	46.7
Average rank	5.1	6.1	73055	1505	20.6

Innovation in the context of place

Gateshead Central case-study area	Average EID score (1 = least affluent areas, 10 = most affluent areas)	Personal educational or training assets (1=lowest, 10= highest)	Working population in wards and case-study areas	Number of start-ups in last three years	Number of start-ups per 1,000 population
Bridges	2	3	6645	267	40.2
Chowdene	4	5	4525	35	7.7
Deckham	2	3	5953	35	5.9
Dunston and Teams	3	3	6118	380	62.1
Felling	1	2	4434	75	16.9
High Fell	2	2	5492	28	5.1
Lobley Hill and Bensham	3	4	8311	326	39.2
Low Fell	8	9	5478	123	22.5
Saltwell	3	3	6630	189	28.5
Windy Nook and Whitehills	2	3	5549	23	4.1
Average rank	3	4	59135	1481	25.0

Innovation in the context of place

Sunderland Central case-study area	Average EID score (1 = least affluent areas, 10 = most affluent areas)	Personal educational or training assets (1=lowest, 10= highest)	Working population in wards and case-study areas	Number of start-ups in last three years	Number of start-ups per 1,000 population
Barnes	5.3	5.7	6,101	87	14.3
Fulwell	8.1	8.0	5,596	76	13.6
Hendon	1.1	2.1	8,121	169	20.8
Millfield	2.9	4.0	9,370	97	10.4
Pallion	2.6	2.7	6,258	47	7.5
Ryhope	3.9	4.3	6,840	64	9.4
Silksworth	3.4	3.6	5,591	35	6.3
Southwick	1.9	2.0	6,125	129	21.1
St Michael's	5.5	7.8	5,750	166	28.9
St Peter's	5.6	6.5	7,291	106	14.5
Average rank	4.0	4.7	67,043	976	14.6

Innovation in the context of place

Durham East case-study area	Average EID score (1 = least affluent areas, 10 = most affluent areas)	Personal educational or training assets (1=lowest, 10= highest)	Working population in wards and case-study areas	Number of start-ups in last three years	Number of start-ups per 1,000 population
Blackhalls	2.3	3.2	4.929	78	15.8
Dawdon	3.3	3.2	5.108	59	11.5
Deneside	3.0	3.0	3.819	16	4.2
Easington	3.4	4.2	4.290	34	7.9
Horden	1.4	2.0	4.323	24	5.6
Murton	3.4	2.6	4.867	27	5.5
Passfield	5.3	6.3	2.453	18	7.3
Peterlee East	1.5	2.0	4.086	406	99.4
Peterlee West	2.3	3.1	4.879	22	4.5
Seaham	6.6	6.2	4.282	48	11.2
Shotton and South Hetton	2.2	2.7	5.569	77	13.8
Trimdon and Thornley	2.5	2.6	6.768	47	6.9
Wingate	4.0	4.0	2.034	15	7.4
Average rank	3.2	3.5	57.407	871	15.3

Innovation in the context of place

Durham West Case-study	Average EID score (1 = least affluent areas, 10 = most affluent areas)	Personal educational or training assets (1=lowest, 10= highest)	Working population in wards and case-study areas	Number of start-ups in last three years	Number of start-ups per 1,000 population
Aycliffe East	3.5	3.8	4586	308	67.2
Aycliffe North and Middridge	5.3	6.0	6353	47	7.4
Aycliffe West	2.0	2.4	3924	18	4.6
Bishop Auckland Town	4.2	5.8	4187	70	16.7
Chilton	3.5	3.0	2352	13	5.5
Coundon	2.3	2.0	2533	25	9.9
Crook	3.3	4.3	6647	63	9.5
Sildon and Dene Valley	1.9	2.8	7418	165	22.2
West Auckland	4.6	4.4	5046	49	9.7
Woodhouse Close	1.7	2.5	4845	87	18.0
Average rank	3.2	3.7	47891	845	17.6

Section 3 Data Tables:

Percent of start-ups in NACE industrial sectors by case-study area

Percent of start-ups in business size categories by case-study area

Number of start-ups by size of business and NACE industrial sector

Percent of start-ups in each NACE industrial category	Coast and Tyne	Durham East	Durham West	Gateshead Central	North Newcastle	North Northumberland	North Tyne	Sunderland Central
Agriculture, Forestry and Mining (0111 thru 0990)	0.9	1.3	0.9	0.6	0.3	3.0	3.2	1.8
Food Manufacturing (1011 thru 1107)	0.3	0.2	0.4	0.3	0.2	1.1	0.3	0.6
Other Manufacturing (1200 thru 3320)	4.8	3.3	4.6	3.4	3.4	4.6	4.4	3.2
Electricity, Gas, Water utilities (3511 thru 3900)	0.5	1.3	0.9	1.1	0.4	2.0	0.6	1.1
Construction (4110 thru 4399)	13.7	14.7	21.6	10.9	8.4	14.3	9.0	12.2
Retail (4511 thru 4799)	9.2	7.0	10.9	10.1	7.8	10.0	11.7	11.0
Transport (4910 thru 5320)	1.8	3.2	5.0	2.1	0.8	2.4	1.7	1.4
Accommodation and food service (5510 thru 5630)	9.4	6.5	5.5	7.6	6.4	12.8	9.0	12.5
Information and communication (5811 thru 6399)	6.7	3.8	6.6	6.2	9.1	4.8	7.6	6.3
Financial and insurance (6411 thru 6630)	2.2	0.9	3.4	3.5	3.3	2.2	2.9	2.5
Real estate (6810 thru 6832)	6.2	29.9	6.8	14.0	12.2	8.2	8.7	8.4
Professional, Scientific and Technical (6910 thru 7500)	16.4	10.0	13.6	11.3	16.3	15.8	16.6	12.8
Administrative and support services (7711 thru 8299)	10.6	6.6	8.1	9.6	9.6	6.5	9.3	8.6
Public Administration and Defence (8411 thru 8430)	0.2	0.2	0.4	0.1	0.2	0.2	0.6	0.2
Education (8510 thru 8560)	2.5	3.0	1.9	1.8	2.9	1.1	2.6	2.8
Human Health and Social Work (8610 thru 8899)	3.2	2.4	2.3	7.9	8.3	1.7	3.5	5.7
Arts, Entertainment and Recreation (9001 thru 9329)	3.5	1.4	2.7	2.4	3.7	2.8	2.6	2.9
Other services (9411 thru 9609)	6.8	4.3	3.9	6.4	5.5	4.6	4.7	5.9
Domestic service (9700 thru 9820)	1.0	0.3	0.6	0.8	1.0	2.0	0.9	0.1
Extraterritorial Organisations (9900 thru 9999)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of start ups	1485	633	823	1439	957	461	343	967

Innovation in the context of place

Number of employees in businesses starting up in last three years	1 employee	2-5 employees	6-9 employees	10 to 49 employees	Over 50 employees	Number of start-ups in last three years
North Northumberland case-study area	39.1	47.5	6.5	6.9	0.0	261
Hexham / North Tyne case-study area	40.2	43.3	10.4	5.5	0.6	164
North Newcastle case-study area	48.6	40.8	4.4	4.4	1.8	434
Coast and Tyne case-study area	52.8	38.1	4.0	4.6	0.5	782
Gateshead Central case-study area	44.1	43.6	4.9	5.7	1.8	741
Sunderland Central case-study area	42.6	43.1	6.7	6.5	1.1	462
Durham East case-study area	44.6	47.3	5.4	2.7	0.0	298
Durham West case-study area	46.8	43.8	6.4	2.8	0.2	436

Innovation in the context of place

NACE industrial categories (combined)	Micro (under 10 employees)	Small (10-49 employees)	Medium (50 to 249 employees)	Large (over 250 employees)	Total number of start-ups in last three years	Percent of start-ups in each industrial category*
Agriculture, Forestry and Mining (0111 thru 0990)	144	4	1	0	149	1.2
Food Manufacturing (1011 thru 1107)	50	2	0	0	52	0.4
Other Manufacturing (1200 thru 3320)	562	28	6	1. 1	597	5.0
Electricity, Gas, Water utilities (3511 thru 3900)	105	11	0	1	117	1.0
Construction (4110 thru 4399)	1,764	51	4	0	1,819	15.2
Retail (4511 thru 4799)	986	63	4	0	1,053	8.8
Transport (4910 thru 5320)	277	14	2	1	294	2.5
Accommodation and food service (5510 thru 5630)	798	194	5	2	999	8.3
Information and communication (5811 thru 6399)	786	11	0	1	798	6.7
Financial and insurance (6411 thru 6630)	263	7	23	11	304	2.5
Real estate (6810 thru 6832)	634	9	1	0	644	5.4
Professional, Scientific and Technical (6910 thru 7500)	2,085	30	8	2	2,125	17.7
Administrative and support services (7711 thru 8299)	1,012	59	11	5	1,087	9.1
Public Administration and Defence (8411 thru 8430)	38	1	0	1	40	0.3
Education (8510 thru 8560)	207	22	20	8	257	2.1
Human Health and Social Work (8610 thru 8899)	526	54	15	2	597	5.0
Arts, Entertainment and Recreation (9001 thru 9329)	284	22	0	1	307	2.6
Other services (9411 thru 9609)	666	26	4	1	697	5.8
Domestic service (9700 thru 9820)	36	0	0	0	36	0.3
Extraterritorial Organisations (9900 thru 9999)	1	0	0	0	1	0.0
Number of start ups	11,224	608	104	37	11,973	100.0

*operational businesses recorded in January 2021 (i.e., excludes start-ups which did not survive)

Section 3, Data Tables: **Case-study ward data by industrial sector**

North Northumberland case-study area	Agriculture, Forestry and Mining	Food Manufacturing	Other Manufacturing	Electricity, Gas, Water utilities	Construction	Retail	Transport	Accommodation and food service	Information and communication	Financial and insurance	Real estate	Professional, Scientific and Technical	Administrative and support services	Public Administration and Defence	Education	Human Health and Social Work	Arts, Entertainment and Recreation	Other services	Domestic service	Extraterritorial Organisations	All Sectors
Alnwick	1	2	6	2	11	17	3	18	9	3	6	15	9	0	1	4	5	10	1	0	123
Amble	2	0	3	0	1	2	1	6	1	0	1	4	1	0	1	4	2	1	1	0	31
Amble West with Warkworth	0	0	1	0	4	3	0	3	0	0	3	7	0	0	1	1	0	0	1	0	24
Bamburgh	0	0	2	0	1	4	2	7	2	0	2	5	7	0	0	0	0	0	1	0	33
Bellingham	1	1	3	2	6	4	2	7	2	0	3	5	4	1	0	0	1	2	1	0	45
Berwick East	0	0	0	0	3	3	0	1	0	0	0	1	1	0	1	0	0	1	0	0	11
Berwick North	8	1	4	2	19	9	3	15	6	7	15	15	7	0	0	2	5	8	2	0	128
Berwick West with Ord	0	0	0	4	6	0	1	1	0	1	0	2	1	0	0	0	0	0	0	0	16
Longhoughton	0	2	1	0	4	7	1	6	5	0	3	7	1	0	1	0	3	2	1	0	44
Norham and Islandshires	1	1	1	0	5	1	1	5	0	0	1	6	0	0	0	0	0	1	0	0	23
Rothbury	0	0	2	0	8	1	0	2	3	0	3	4	4	0	0	0	1	2	1	0	31
Shilbottle	0	0	0	1	6	4	0	4	3	0	3	15	3	0	0	1	1	2	0	0	43
Wooler	2	0	4	0	3	8	0	2	0	2	4	2	1	0	1	0	0	2	1	0	32
Total	14	5	21	9	66	46	11	59	22	10	38	73	30	1	5	8	13	21	9	0	461

Innovation in the context of place

North Tyne Valley case-study area	Agriculture, Forestry and Mining	Food Manufacturing	Other Manufacturing	Electricity, Gas, Water utilities	Construction	Retail	Transport	Accommodation and food service	Information and communication	Financial and insurance	Real estate	Professional, Scientific and Technical	Administrative and support services	Public Administration and Defence	Education	Human Health and Social Work	Arts, Entertainment and Recreation	Other services	Domestic service	Extraterritorial Organisations	All Sectors
Bywell	2	0	6	0	4	7	1	5	3	1	5	10	7	0	1	2	1	2	0	0	57
Corbridge	2	0	2	1	6	3	1	6	6	2	4	8	4	1	1	2	5	6	2	0	62
Haydon	3	0	1	1	4	4	1	0	1	0	1	3	1	0	0	0	1	0	0	0	21
Haydon and Hadrian	0	0	0	0	2	2	1	3	5	1	1	0	1	0	0	1	0	1	0	0	18
Hexham Central with Acomb	4	0	2	0	5	8	0	3	1	3	3	8	2	0	1	1	1	2	0	0	44
Hexham East	1	1	2	0	1	4	0	4	0	1	4	6	7	0	0	1	1	2	0	0	35
Hexham West	0	0	0	0	2	2	1	1	4	1	2	8	5	0	3	1	0	0	0	0	30
Prudhoe North	0	0	1	1	5	9	2	1	1	0	3	5	4	0	0	1	0	2	0	0	35
Prudhoe South	0	0	1	0	3	3	0	5	1	0	3	4	0	0	0	3	0	1	1	0	25
Stocksfield and Broomhaugh	2	0	1	0	3	2	0	3	5	1	5	8	2	1	3	0	1	0	0	0	37
Total	14	1	16	3	35	44	7	31	27	10	31	60	33	2	9	12	10	16	3	0	364

Innovation in the context of place

North Newcastle case-study area	Agriculture, Forestry and Mining	Food Manufacturing	Other Manufacturing	Electricity, Gas, Water utilities	Construction	Retail	Transport	Accommodation and food service	Information and communication	Financial and insurance	Real estate	Professional, Scientific and Technical	Administrative and support services	Public Administration and Defence	Education	Human Health and Social Work	Arts, Entertainment and Recreation	Other services	Domestic service	Extraterritorial Organisations	All Sectors
Castle	2	0	9	0	19	14	0	5	15	4	14	31	13	1	5	15	3	7	1	0	158
Dene & South Gosforth	0	1	3	0	5	8	0	1	9	2	6	18	6	0	3	9	4	8	2	0	85
Fawdon & West Gosforth	0	0	7	1	17	10	2	10	13	12	29	34	21	0	4	6	11	6	1	0	184
Gosforth	1	0	1	0	9	15	3	14	10	8	30	21	20	0	3	21	8	8	0	0	172
Kenton	0	0	3	0	8	3	1	6	10	0	4	8	7	0	1	4	2	7	2	0	66
Kingston Park South & Newbiggin Hall	0	0	5	0	15	16	2	7	7	1	8	14	11	1	3	6	2	7	1	0	106
North Jesmond	0	0	3	2	0	5	0	13	8	0	12	6	7	0	2	11	1	5	1	0	76
Parklands	0	1	2	1	7	4	0	5	15	5	14	24	7	0	7	7	4	5	2	0	110
Total	3	2	33	4	80	75	8	61	87	32	117	156	92	2	28	79	35	53	10	0	957

Coast and Tyne case-study area	Agriculture, Forestry and Mining	Food Manufacturing	Other Manufacturing	Electricity, Gas, Water utilities	Construction	Retail	Transport	Accommodation and food service	Information and communication	Financial and insurance	Real estate	Professional, Scientific and Technical	Administrative and support services	Public Administration and Defence	Education	Human Health and Social Work	Arts, Entertainment and Recreation	Other services	Domestic service	Extraterritorial Organisations	All Sectors
Beacon and Bents	1	1	7	0	23	13	1	31	8	2	9	17	24	0	2	5	3	7	2	0	156
Bede	1	0	6	1	19	5	1	3	3	1	4	14	9	0	2	0	2	1	0	0	72
Cullercoats	0	0	2	0	5	2	1	0	4	1	2	12	4	0	1	2	6	2	0	0	44
Harton	1	0	6	0	16	7	3	7	5	0	2	9	12	1	3	2	7	11	2	0	94
Horsley Hill	1	0	4	1	11	1	3	1	3	1	2	7	4	0	0	0	2	8	0	0	49
Monkseaton North	0	0	1	0	12	3	1	2	4	2	5	13	5	0	3	4	0	5	0	0	60
Monkseaton South	0	1	2	0	8	9	2	2	3	0	5	19	8	0	4	2	2	3	0	0	70
Primrose	1	0	10	3	17	13	2	10	3	3	3	11	11	1	2	3	1	13	0	0	107
Riverside	0	0	4	0	17	20	3	17	19	2	15	30	10	0	1	6	5	7	1	0	157
Simonside and Rekendyke	0	0	8	0	7	7	3	8	4	1	1	11	11	0	2	0	2	8	0	0	73
St Marys	1	0	0	0	6	2	1	1	2	2	5	7	5	0	2	2	0	3	0	0	39
Tynemouth	3	2	9	2	26	30	1	23	16	6	17	45	28	1	5	16	11	9	7	0	257
Westoe	0	0	3	0	10	2	0	1	4	1	2	15	6	0	3	1	2	6	1	0	57
Whitley Bay	5	1	9	0	27	22	5	33	22	11	20	33	21	0	7	5	9	18	2	0	250
Total	14	5	71	7	204	136	27	139	100	33	92	243	158	3	37	48	52	101	15	0	1485

Innovation in the context of place

Gateshead Central case-study area	Agriculture, Forestry and Mining	Food Manufacturing	Other Manufacturing	Electricity, Gas, Water utilities	Construction	Retail	Transport	Accommodation and food service	Information and communication	Financial and insurance	Real estate	Professional, Scientific and Technical	Administrative and support services	Public Administration and Defence	Education	Human Health and Social Work	Arts, Entertainment and Recreation	Other services	Domestic service	Extraterritorial Organisations	All Sectors
Bridges	1	2	10	2	10	24	4	15	28	9	54	30	19	0	13	22	3	16	3	0	265
Chowdene	0	0	3	1	5	1	3	4	3	0	1	5	4	0	1	1	0	1	1	0	34
Deckham	0	0	4	0	1	1	0	4	3	0	5	4	8	0	1	1	0	2	1	0	35
Dunston and Teams	2	0	8	1	41	53	8	36	17	8	45	36	12	1	4	56	6	29	1	0	364
Felling	0	0	6	4	7	7	4	4	4	6	5	8	7	0	1	4	1	4	0	0	72
High Fell	2	0	2	0	7	3	0	2	2	0	1	4	3	0	0	0	0	2	0	0	28
Lobley Hill and Bensham	3	1	7	6	34	32	8	21	13	20	31	32	49	0	2	19	15	15	5	0	313
Low Fell	0	1	3	0	18	10	1	13	6	4	16	23	8	0	0	6	2	8	1	0	120
Saltwell	0	0	6	2	31	12	0	9	13	1	42	18	28	0	3	3	6	11	0	0	185
Windy Nook and Whitehills	0	0	0	0	3	3	2	1	0	2	1	2	0	1	1	2	1	4	0	0	23
Total	8	4	49	16	157	146	30	109	89	50	201	162	138	2	26	114	34	92	12	0	1439

Innovation in the context of place

Sunderland Central case-study area	Agriculture, Forestry and Mining	Food Manufacturing	Other Manufacturing	Electricity, Gas, Water utilities	Construction	Retail	Transport	Accommodation and food service	Information and communication	Financial and insurance	Real estate	Professional, Scientific and Technical	Administrative and support services	Public Administration and Defence	Education	Human Health and Social Work	Arts, Entertainment and Recreation	Other services	Domestic service	Extraterritorial Organisations	All Sectors
Barnes	6	0	4	1	14	9	1	8	6	2	8	11	9	1	2	3	0	1	0	0	86
Fulwell	4	0	1	0	15	6	1	6	4	2	9	9	3	0	2	3	3	8	0	0	76
Hendon	2	0	6	1	14	23	0	13	14	5	12	24	16	1	9	11	10	6	0	0	167
Millfield	0	0	3	0	6	15	2	18	6	0	4	12	8	0	2	12	1	8	0	0	97
Pallion	1	2	3	0	7	3	1	7	3	0	3	1	5	0	0	4	1	5	1	0	47
Ryhope	0	0	3	0	12	5	1	5	6	1	3	8	11	0	1	4	1	3	0	0	64
St Michaels	2	1	1	0	14	23	2	51	7	1	10	14	13	0	2	4	6	14	0	0	165
St Peters	0	2	1	3	16	7	3	7	5	3	16	17	7	0	4	2	3	7	0	0	103
Silksworth	1	1	3	0	5	3	0	2	1	0	3	4	3	0	3	3	1	2	0	0	35
Southwick	1	0	6	6	15	12	3	4	9	10	13	24	8	0	2	9	2	3	0	0	127
Total	17	6	31	11	118	106	14	121	61	24	81	124	83	2	27	55	28	57	1	0	967

Innovation in the context of place

East Durham Case Study area	Agriculture, Forestry and Mining	Food Manufacturing	Other Manufacturing	Electricity, Gas, Water utilities	Construction	Retail	Transport	Accommodation and food service	Information and communication	Financial and insurance	Real estate	Professional, Scientific and Technical	Administrative and support services	Public Administration and Defence	Education	Human Health and Social Work	Arts, Entertainment and Recreation	Other services	Domestic service	Extraterritorial Organisations	All Sectors
Blackhalls	1	1	2	1	18	4	1	5	4	0	6	10	9	0	3	7	0	4	0	0	76
Dawdon	0	0	4	1	5	9	0	11	3	1	4	5	6	0	1	2	0	5	1	0	58
Deneside	0	0	1	0	3	1	1	3	1	0	0	3	1	0	0	0	1	1	0	0	16
Easington	0	0	2	1	8	5	0	2	0	2	4	5	3	0	0	0	1	1	0	0	34
Horden	1	0	1	0	1	3	2	3	0	0	3	3	1	0	2	1	2	1	0	0	24
Murton	0	0	3	0	5	7	2	0	1	0	0	4	3	0	0	0	0	2	0	0	27
Passfield	0	0	0	1	3	2	2	0	3	0	1	3	1	0	1	0	0	0	1	0	18
Peterlee East	0	0	0	2	19	1	4	5	4	2	166	22	5	1	5	3	2	9	0	0	250
Peterlee West	0	0	1	0	6	6	1	0	1	1	1	1	0	0	4	0	0	0	0	0	22
Seaham	2	0	3	0	9	4	3	5	5	0	2	2	6	0	1	0	2	3	0	0	47
Shotton and South Hetton	0	1	3	2	16	18	4	4	4	1	2	7	4	0	2	3	1	3	0	0	75
Trimdon and Thornley	3	0	1	2	12	1	3	6	2	0	1	4	7	0	1	2	1	1	0	0	47
Wingate	1	0	3	0	4	1	1	1	0	0	1	1	0	0	1	0	0	0	0	0	14
Total	8	2	24	10	109	62	24	45	28	7	191	70	46	1	21	18	10	30	2	0	708

Innovation in the context of place

West Durham case-study area	Agriculture, Forestry and Mining	Food Manufacturing	Other Manufacturing	Electricity, Gas, Water utilities	Construction	Retail	Transport	Accommodation and food service	Information and communication	Financial and insurance	Real estate	Professional, Scientific and Technical	Administrative and support services	Public Administration and Defence	Education	Human Health and Social Work	Arts, Entertainment and Recreation	Other services	Domestic service	Extraterritorial Organisations	All Sectors
Aycliffe East	0	1	26	1	83	30	11	14	22	15	17	33	29	0	1	3	7	10	1	0	304
Aycliffe North and Middridge	1	0	1	0	8	9	0	4	2	0	3	6	5	0	2	2	2	2	0	0	47
Aycliffe West	0	0	0	0	1	2	5	2	2	1	0	2	0	0	1	0	0	2	0	0	18
Bishop Auckland Town	0	1	2	0	11	11	0	6	2	1	8	12	4	0	2	1	1	4	0	0	66
Chilton	0	0	1	0	3	2	1	1	0	0	2	0	1	0	0	0	1	0	0	0	12
Coundon	2	0	0	0	7	7	2	1	2	0	0	1	1	0	1	1	0	0	0	0	25
Crook	1	0	2	1	11	5	5	10	2	1	2	12	4	0	2	0	2	2	0	0	62
Shildon and Dene Valley	2	1	5	5	40	15	9	2	18	5	9	21	7	1	3	6	4	7	3	0	163
West Auckland	0	0	1	0	8	1	3	1	1	3	8	6	9	0	2	2	3	1	0	0	49
Woodhouse Close	1	0	0	0	6	8	5	4	3	2	7	19	7	2	2	4	2	4	1	0	77
Total	7	3	38	7	178	90	41	45	54	28	56	112	67	3	16	19	22	32	5	0	823



Policy & Practice

St Chad's College, Durham University