

Fast Growth Cities Economic Research

The case for support and investment

July 2023

Contents

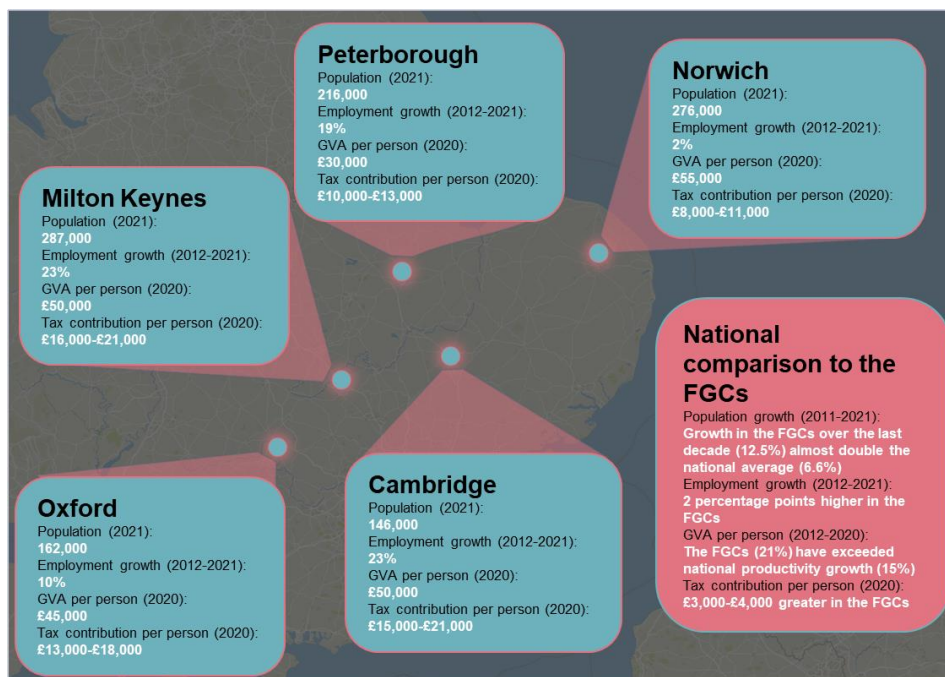
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1. Executive summary

Who are the FGCs?

The Fast Growth Cities (FGC) group consists of the cities of Oxford, Cambridge, Norwich, Peterborough and Milton Keynes. These cities are intrinsically linked through geography. This geographical link is further reinforced through their shared direct political interest in strengthening the Oxford to Cambridge pan-regional Partnership (PRP), as well as delivering East-West Rail, particularly if calls for this new line to be extended to Norwich are met.



The strengths of the FGCs

Cities play an important role in the economies of all developed countries. In Europe, cities account for just 3% of total land area but produce 42% of all gross value added (GVA - the measure of the value of goods and services produced in an area, industry or sector of an economy). While many of the other largest cities in the UK currently lag behind European counterparts on a wide range of economic indicators, such as productivity, innovation and business investment, the FGCs are, at least on some indicators, some of the most productive cities in the UK outside of London.

All FGCs, in their own ways, make a significant contribution to the national economy in terms of jobs, tax, innovation, trade and FDI. Oxford is a leader in attracting international investment to the UK, with the ITL2 region containing Oxfordshire¹ experiencing the highest levels of growth in net inward FDI of anywhere in the UK in recent years. Cambridge drives the UK's innovation and R&D on the

¹ The ITL2 region Berkshire, Buckinghamshire and Oxfordshire.

international stage, with the highest patent rates of any UK city at a rate of 308 patents per 100,000 residents (double any other city).

Norwich has experienced growth in productivity (GVA per hour worked) of 43% over the last decade, far in excess of the UK growth of 24%. Milton Keynes is also heavily contributing to the UK's productivity, with a GVA per hour worked in 2020 of £45.95 substantially above the UK's £37.73.

Peterborough's specialist cluster in machine manufacturing is creating the supply chain foundation needed to drive forward many of the UK's most innovative sectors. The city's employment density in this industry is 5 times higher than the national average, and high-tech manufacturing generates 20% of Peterborough's business turnover.

The FGCs have a number of unique strengths, and together they contribute disproportionately high levels of tax to the UK exchequer – the FGCs collectively contribute approximately £11,900-£15,900 per capita, in comparison to England's per capita average of £8,900-£11,900.

The FGCs are collectively calling for greater government engagement in their cities. Investment – whether that be through the public or private sector – is needed to unlock the economic potential of these cities.

The opportunity

The FGC group is collectively made up of cities with the fundamental clout to deliver the economic growth needed to level up the UK. The FGCs can contribute significantly to 'UK PLC', by boosting the performance of local economies through knowledge-led growth and competing on a global stage at a time where trade openness and economic growth are declining.

In attracting substantial Foreign Direct Investment (FDI) into their economies, the FGCs are helping the UK Government to maximise the benefits of international investment and trade, through assisting them in achieving three key policy goals:

- **Global Britain in a Competitive Age**, by helping the country to become a science and technology superpower;
- **The Ten Point Plan for a Green Industrial Revolution**, with ambitions across all FGCs to support green jobs and accelerate the country's path to net zero; and
- **Export Strategy: Made in the UK, Sold to the World**, by accommodating leading innovative exporting businesses that are able to respond to emerging export opportunities around the world.

All FGCs possess knowledge 'anchor institutions' within them, whether that be through the presence of world-leading universities or successful and knowledge intensive businesses, or both. These anchor institutions underpin and provide the foundation for successful economic clusters to thrive, driving the UK's competitiveness and future prosperity.

There is an opportunity to exploit new markets and supply chains in emerging new technologies and sectors within the FGCs. These cities already have access to highly skilled workforces, produce world-leading research and are supported by private investment.

The cities are national leaders on sustainability and the transition to net zero, with the cities facilitating clusters in green industries and residents within some cities leading the way on usage of sustainable

modes of transport. Growing their green energy sectors is a key means by which the FGCs can further contribute to the country's net-zero ambitions.

What is required to achieve this opportunity?

It is vital for the FGCs to obtain support and investment that allows them to build on the current infrastructure in their urban areas, budding talent pools and variety of existing innovation companies and knowledge-based institutions present in these cities.

Despite their strengths, the cities all face constraints and challenges which threaten to hold back their growth potential. The FGCs approach to attracting investment into their area is to target the underlying 'conditions' that help to underpin and create strong economies that have the potential to grow.

Constraints on growth include factors such as mismatches of labour supply, housing unaffordability, overreliance on retail, socio-economic inequality, and physical infrastructure (water, power and transport) deficiencies must be addressed.

Key priorities for the FGCs, discussed in more detail in **Chapter 4**, fall under five broad themes:

- **Devolved powers** – The role of local government is critical to improving the prosperity of areas. The FGCs and their partners are seeking a range of devolved powers, both regulatory and fiscal. In two tier areas where devolution deals are being considered, it is important that devolution follows the subsidiarity principle and includes devolution to the FGCs themselves to ensure the particular needs, challenges and opportunities of the urban centres are addressed. Enhancing the role of local government through devolved powers would enable them to retain more of their local revenue, as well as allow them to act as pilot locations for innovative interventions across their priority investment areas. Regulatory devolution, for example allowing the FGCs to implement a tourism tax, will enable them to raise funds through a variety of means. Fiscal devolution will enable the FGCs to fast-track strategically important projects (across the below investment themes), facilitating the FGCs in their continued growth and international competitiveness.
- **Physical infrastructure** – There are substantial physical infrastructure constraints that are hindering growth across the FGCs. The FGCs are seeking a collective discussion with a range of government departments, their agencies and regulatory bodies, and the UK Infrastructure Bank. Agreement is required on which proposals to improve transport, power supply, water, and sewage infrastructure must be fast-tracked for approval, to ensure the FGCs' and regions' economies can grow to their full potential. For example, East West Rail, including its proposed extension to Norwich, is a priority to connect the FGCs and turbocharge growth across their economies.
- **Inclusive growth and social mobility** – The FGCs require the devolved powers necessary to address their own respective inequalities. Engagement is sought with relevant government departments to discuss the feasibility of devolving skills funding and co-commissioning employment support. Investment into skills, education and jobs initiatives within the FGCs will provide the councils with more power to work in their local communities and ensure inclusive growth. Early years education, new universities, skills partnerships, and skills development programmes are key priorities focused on maximising social mobility for all ages.
- **Housing and planning** – Housing markets that are limited in supply and often unaffordable to residents are holding back the FGC economies. The FGCs are seeking greater autonomy over local policies to tackle issues within their housing markets and test innovative approaches to planning. Meanwhile, investment to regenerate city centres should be prioritised to better suit the needs of the future economic environment, such as creating urban innovation districts and placing a focus on placemaking. This will make the FGCs an attractive place for people to live and work.
- **Sustainability** – The FGCs are already at the forefront of tackling the UK's climate emergency, with further investment and flexibility needed to drive a sustainable and green transition. Longer-

term, secure funding is sought for sustainable infrastructure in all FGCs. This includes key priorities such as electric vehicle charging, active travel improvements and increases in green space. Support and cooperation on regional skills strategies is also required, to help the FGCs understand the important role green skills will play in the future. The drive for sustainability traverses many sectors of the economy and thus efficient intra-departmental thinking is integral both within national and local government.

This call for investment and further collective conversations with Government is not about internal competition for funding with other places in the UK, as the FGCs can help to unlock the UK 'productivity puzzle' and enhance economic potential at both the local and national levels.

But what does this mean?

As of 2021, the FGCs were home to 666,000 jobs (2.1% of the national UK workforce). This could rise to almost 900,000 by 2050 if they are to achieve their economic growth potential, which would see the FGCs accounting for a larger proportion of the national workforce. Given their track record in successful economic clusters, it is expected that much of this employment growth will be achieved in the UK's future growth sectors, helping it to not only become a science and technology superpower, but also achieve a sustainable and successful transition to a greener economy.

The FGCs contributed £42bn in GVA to the national economy in 2020. The scenarios described in this report build up to the potential for an overall economic contribution of around £102bn-£150bn per year in the range of investment scenarios. Utilising this forecast, it is estimated that the UK Government would receive at least £300m per annum in additional tax revenue by 2028 by increasing their support for the FGCs. This would rise to £1bn additional annual tax revenue to the UK exchequer by 2043. This additional tax revenue created by the Government's initial investment can help fund substantial investment in the FGCs and across the rest of the UK.

If investment and support is not obtained to overcome existing constraints in these globally competitive cities, a large portion of this potential economic growth and associated increase in government revenue would likely be lost to international competitors. Bold and decisive government interventions in support of FGC economies would ensure those city regions can maximise their contribution to a thriving UK economy driven by long-term, sustainable, and knowledge-based growth.

Next steps

The FGCs recognise that central government funding is currently constrained and that in fact partnerships are often the key to future economic successes. Therefore, the FGCs are seeking a collaborative approach with government, focused on obtaining political support for further partnerships to be developed and, where appropriate, investment to be provided. This report demonstrates the unique opportunity for additional economic growth at the UK level to occur within the FGCs. The report must be followed by a call to action, prioritising collective discussion between the Government, city and regional leaders, and the private and research sectors to ensure this opportunity is capitalised on.

The potential for devolution of powers to enable greater local investment and the piloting of innovative policy interventions will be a key topic in such conversations. Similarly, enhancement of local partnerships with the private sector, as well as central government, is another way in which the FGCs are seeking to improve prosperity and enable inclusive economic growth within their cities.

2. Study aims and methods

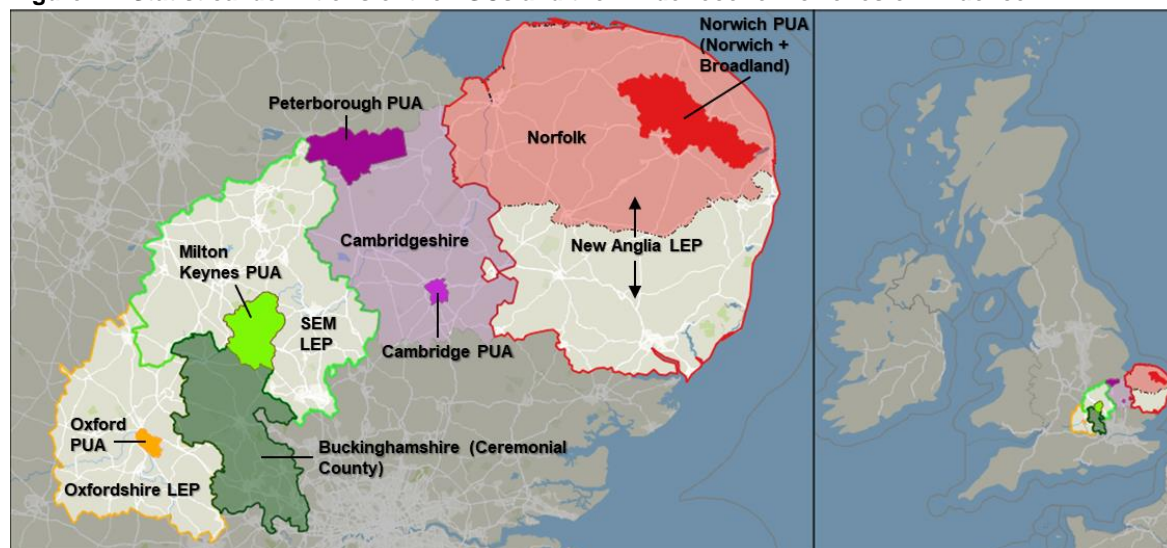
Purpose and aims of the study

- 2.1 This study, commissioned by the Fast Growth Cities (FGC) group, highlights the positive role that the FGCs play (or have historically been playing) in delivering additional economic benefits to the UK economy, and **why these important cities require future investment to ensure they maintain their positive contribution to the UK**. The FGC group currently consists of the cities of **Oxford, Cambridge, Norwich, Peterborough, Milton Keynes**.
- 2.2 The study builds on previous work undertaken by the Centre for Cities (CfC),² which outlined the opportunities and challenges for future economic growth in these cities. It updates this previous assessment to account for recent changes in the evolving economic landscape and government's policy position, whilst also making additional arguments around the case for investment in the FGCs.

Methodology and geography of study

- 2.3 This study draws on desk-based data analysis, existing economic literature, a range of unique case studies and the findings of stakeholder engagement to present its arguments. It concludes with scenario forecasting that sets out what the economic outcomes of the FGCs could be in the future.
- 2.4 **The geographical boundaries of cities' economies are difficult to define due to their wider economic zones of influence beyond their immediate urban extent.** Therefore, this study presents analysis for both the FGCs Primary Urban Areas (PUAs), and wider economic zones of influence such as their respective Local Enterprise Partnership (LEP) areas, county and unitary authorities, and ceremonial counties. **Figure 2.1** displays the variety of study areas used in this assessment.

Figure 2.1 Statistical definitions of the FGCs and their wider economic zones of influence



² CfC, 2021. Fast Growth Cities – 2021 and beyond

3. The national economic context and the FGCs place within it

Factors shaping the UK's evolving landscape

3.1

Several factors are currently shaping the UK's evolving economic and political landscape:

- **The cost of living crisis** – Since the most recent analysis on the FGCs,³ the economic position of the country has changed significantly. The twelve month rate of Inflation (Consumer Price Index) reached a recent peak of 10.7% in November 2022, up from 5.1% in November 2021. Although inflation has reduced to 8.7% in April 2023, it remains high.⁴ For many households, this level of inflation outstrips rises in wages, which were estimated to rise by only 6.5%, leading to real term cuts in income.⁵
- **Declining international trade** – The UK's trade openness – the size of its trade flows relative to its GDP – has been falling significantly in recent years.⁶ In the quarter signifying the end of the transition period for exiting the EU (Q1 of 2021), the UK's trade openness fell by 8.6%, whereas the rest of the G7's trade openness remained relatively stagnant over the same period. Despite some recovery, overall the UK has experienced a substantial decrease in trade openness since the start of Q1 of 2018.
- **Net-zero and sustainability priorities** – The UK Government is currently committed to the target of reaching net-zero greenhouse gas emissions by 2050.⁷ Whilst the Climate Change Committee (CCC) believes the UK Government now has a solid net-zero strategy in place, the latest monitoring report indicates that tangible progress is lagging behind the stated policy ambition.⁸
- **The UK Government's growth and levelling up agenda** – The levelling up agenda aims to end the geographical inequality within the UK, improving economic dynamism to drive inclusive growth across the whole country.⁹ To date, Peterborough is the only FGC to directly benefit from the Government's levelling up fund. For the first round of funding, the various bids within the FGCs had a 14% success rate, lower than the overall success rate of any UK region.¹⁰
- **Challenges for national retail** – The structure and composition of the national retail industry has been transforming over the past decade, with evolving trends in retail towards online shopping, prompting concerns about the future viability of physical retail centres within cities.¹¹
- **The emergence of urban innovation districts** – A new urban model, called innovation districts, is now emerging. Innovation districts are urban areas with networks of knowledge-producing organisations such as universities, research bodies, teaching hospitals, cultural institutions, and knowledge-intensive businesses. The Government is targeting investment in high-potential clusters with the aim of boosting national growth; many of these clusters exist in the UK's top performing cities.¹²

³ Centre for Cities, 2021. Fast Growth Cities – 2021 and beyond

⁴ ONS, 2023. Consumer price inflation, UK: April 2023.

⁵ ONS, 2023. Average weekly earnings: Whole Economy Year on Year Three Month Average Growth (%). The 6.5% growth in earnings is based on a year-on-year three-month average to April 2023.

⁶ ONS, 2022. Recent trends in the international trade flows of G7 economies

⁷ As of September 2022, the BEIS Secretary of State has commissioned an independent review of the Government's approach to delivering its net zero target, to ensure that it is pro-business and pro-growth.

⁸ CCC, 2022. Progress in reducing emissions – 2022 report to Parliament.

⁹ HM Government, 2022. Levelling Up the United Kingdom White Paper

¹⁰ Details of unsuccessful round two bids are yet to be published. It is noted that success rates could vary once round two data is published.

¹¹ ONS, 2022. Retail Sales Index time series

¹² [Levelling Up one year on: a former insider's view - Bennett Institute for Public Policy \(cam.ac.uk\)](https://www.bennettinstitute.org.uk/levelling-up-one-year-on-a-former-insider-s-view)

The position of the FGC group within this context

- 3.2 The FGC group is collectively made up of some of the most innovative urban economies in the UK. These cities **all have unique economic strengths that help to support the UK economy and allow it to flourish**. They all, in their own ways, make a significant contribution to the national economy in terms of jobs, tax, innovation, trade and FDI. Much of this contribution to national economic growth is delivered through the FGCs' **knowledge-based economies**. All FGCs possess knowledge-based anchor institutions within them, whether that be through the presence of world-leading universities or successful and knowledge intensive businesses, or both. These anchor institutions underpin and provide the foundation for successful economic clusters to thrive, driving the UK's competitiveness on the global stage at a time where trade openness and economic growth are declining. The FGCs are clearly places that have very high growth potential in the UK, as demonstrated by their above average collective historic growth.
- 3.3 The cities that comprise the group are **intrinsically linked through geography**. This geographical link is formalised through their shared direct political interest in strengthening the former Arc, now known as **the Oxford to Cambridge Pan Regional Partnership (PRP)**.¹³ These cities will become even more closely linked through the delivery of East-West Rail, particularly if calls for this line to be extended to Norwich are met. Given that these cities economies' are the engine of economic growth within the PRP, the group's focus is on ensuring investment is attracted into these cities, rather than losing out on private sector investment to international competitors.
- 3.4 The FGCs share a range of **other policy priorities**. The cities are national leaders on **sustainability and the transition to net zero**, with the cities facilitating clusters in green industries and residents within some cities leading the way on usage of sustainable modes of transport.¹⁴ Meanwhile, the cities are also actively seeking how to **strengthen and regenerate their city centres**, tackling the challenges of national retail and building on the emerging trend of urban innovation districts.
- 3.5 This group of cities have not benefitted from the UK's levelling up agenda as much as other areas across the UK. The levelling up white paper¹⁵ primarily focuses on ensuring investment goes into other areas in the UK, with the FGCs most commonly mentioned in the context of ensuring investment into knowledge and research is distributed to areas outside of the UK's Golden Triangle (Oxford, Cambridge, and London).
- 3.6 There is a shared belief amongst the FGCs that their importance to the UK economy should not be taken for granted. Their economies have the potential to enhance the UK's international competitiveness both now and in the future. **Yet the FGCs are all now facing similar challenges that are hindering economic growth in their cities**. These constraints on growth include factors such as mismatches of labour supply, housing unaffordability, overreliance on retail in some centres, rising socio-economic inequality, and physical infrastructure (water, power and transport) deficiencies.
- 3.7 As a result, **the FGCs are collectively calling for greater government engagement in their cities**. Investment – whether that be through the public or private sector – is needed in the fundamentals underpinning the FGCs productive and successful clusters. There is a shared desire amongst the FGCs to work with government to ensure that greater levels of investment are achieved across a range of thematic asks. The methods through which this could investment occur are not yet defined, but could potentially involve a blend of direct government investment, the devolution of powers to the FGCs to enable higher locally secured investment, and greater partnerships or contributions from the private sector.

¹³ [Government backs new Oxford to Cambridge Pan Regional Partnership | Oxford City Council](#)

¹⁴ As a collective, 22% of FGC commuting trips are active travel, significantly higher than the England levels of 14%; ONS, 2022. 2021 Census – Table TS061 – Method used to travel to work.

¹⁵ HM Government, 2022. Levelling Up the United Kingdom

4. What is required to achieve growth in the FGCs?

Figure 4.1 This figure summarises the FGCs five thematic investment asks



Overview

- 4.1 This chapter outlines the priority areas where the FGCs require political and monetary support to achieve their economic potential. **Chapter 5** then justifies why this political support and investment should occur within the FGCs, before outlining in **Chapter 6** what the potential future return on investment would be for the UK economy.
- 4.2 The FGCs approach to attracting investment into their area is to target the underlying ‘conditions’ that help to underpin and create strong economies that have the potential to grow. The FGCs investment priorities are not focused on ‘picking winners’ – i.e., focusing on specific sectors that are currently thought to be key to driving long term economic growth in the future. Rather, the FGCs investment priorities are more strategic and focus on a wider range of areas, including the foundational elements of the economy. A prioritisation on investing in and improving the underlying conditions is more likely to ensure sustainable and inclusive growth can be achieved in the FGCs. These underlying conditions provide the foundations to support successful clusters both now and in the future. In essence, **the highly productive and innovative sectors that already attract substantial investment into the FGCs are unable to reach their full potential and impact on the national economy if they are constrained by underlying factors.**
- 4.3 In today’s fiscally constrained environment, low cost but high impact interventions should be implemented where possible. Low cost but highly symbolic interventions from government can act as a signal to the private sector that can encourage investment from other sources. Within government, now is the time to build capacity in both central and local government, to enable more to be delivered at a lower cost.
- 4.4 This subsection sets out the key priorities across the FGCs. These themes have been identified through a combination of:
- reviewing the baseline analysis on relative socio-economic metrics, presented throughout previous sections of this report;
 - feedback received during consultation with FGC stakeholders; and
 - a review of both local and national policy priorities.

A collaborative approach is sought by the FGCs in terms of obtaining political support and investment. The FGCs recognise that central government funding is currently constrained and that in fact, partnerships are the key to future economic success. Reflecting this, they are seeking to prioritise collective discussions with government departments on what can be done to accelerate progress on the FGCs priority areas. Central government investment is not the only way in which the FGCs can achieve their true economic potential. Devolution of powers to enable greater local investment and the piloting of innovative policy interventions would represent a real opportunity for the FGCs. Similarly, enhancement of local partnerships with the private sector, as well as central government, is another way in which the FGCs are seeking to improve prosperity and enable inclusive economic growth within their cities.

Priority areas

Devolution of powers

Why is this a priority?

- 4.5 The role of local government is critical to improving the prosperity of areas. **Local authorities are the leaders and conveners of place, so a strong and financially sustainable local government is crucial**

to the achievement of ambitions. The FGCs and their partners are seeking a range of devolved powers, both regulatory and fiscal. Enhancing the role of local government through devolved powers would enable them to retain more of their local revenue, as well as allow them to act as pilot locations for innovative interventions across their priority investment areas. Regulatory devolution, for example allowing the FGCs to implement a tourism tax, will enable them to raise funds through a variety of means. Fiscal devolution will enable the FGCs to fast-track strategically important projects (across the below investment themes), facilitating the FGCs in their continued growth and international competitiveness.

- 4.6 Devolving powers can aid local governments in their ability to tailor funding, policy, and regulations in such a way that enables them to create bespoke solutions which meets the specific needs of their area. **The devolution of powers to local authorities is a thematic ask which underpins all of the following four priority themes.** In an environment where central government funding is currently constrained, the devolution of powers to empower local government can help the FGCs to unlock their economic potential.
- 4.7 The right type of devolved powers can help signal that government (both local and national) is willing to take action to unlock investment from the private sector. Examples of this in the past that have demonstrated success has been through the establishment of local bodies and boards, such as development organisations. Whilst this specific example may not necessarily be appropriate in the FGCs, the principle of taking symbolic action such as this is what is key to ensuring private sector investment is unlocked.

Example interventions

Regulatory – introducing local policies to allow greater retainment of local revenue

- 4.8 Devolving powers that allow the FGCs to introduce pilot regulatory interventions represents an opportunity for the cities to raise and retain higher levels of local revenue. Examples of the types of policies that regulatory devolution would allow the FGCs to explore and potentially introduce include:
- An **overnight tourism tax**, allowing the cities to retain revenue that would help to fund additional services, public infrastructure and civic infrastructure required to meet the needs of tourists visiting their areas.
 - Exploration of **alternative methods of financing**, such as tax increment financing (TIFs), a public financing method used as a subsidy for redevelopment, infrastructure and community-improvement projects. Allows local governments to invest in public infrastructure and other improvements up-front. Local governments can then pay later for those investments.
 - **Increased flexibility around planning** fees and developer contributions, particularly for larger developments. A track record of successes in this area already exists in the FGCs. In the past, Milton Keynes City Council has been utilising tariff to ensure that Developers make a fair contribution towards the needs of the city.
 - Greater flexibility over **right to buy receipts**, which would create a revenue stream that the city councils can use to finance the construction of new social rented homes.
 - Greater power to register and **regulate short term lets**, as well as the ability to introduce stronger regulations on the private rented sector.

Fiscal – providing long term funding settlements to the FGCs

- 4.9 The National Infrastructure Commission (NIC) has previously recommended that major city regions should be given **flexible, long-term funding settlements**, particularly in key areas such as transport. Some FGCs are currently in the midst of preparing pitches for potential devolution deal funding opportunities, following the recent ‘trailblazer’ deals agreed with both Greater Manchester and the West Midlands.
- 4.10 Agreeing long term funding settlements with the FGCs would allow local government in the cities to possess the power to ensure investment within their areas is targeted effectively. Fiscal devolution will enable the FGCs to fast-track strategically important projects (across the below investment themes), facilitating the

FGCs in their continued growth and international competitiveness. In two tier areas where devolution deals are being considered, **it is important that devolution follows the subsidiarity principle and includes devolution to the FGCs themselves to ensure the particular needs, challenges and opportunities of the urban centres are addressed.**

- 4.1 A gainshare model is an example of a fiscal policy that could be utilised within the FGCs, where the FGCs local revenue benefits and grows directly as a result of economic success within their respective cities. The Government should engage with the city councils and work with them to develop gainshare packages, given there is a strong argument that the FGCs create additional economic value to the UK economy through their internationally competitive clusters. A gainshare model would allow the FGCs to reinvest in infrastructure and development within their city, creating a virtuous cycle of economic growth.

Key asks

1. A collective discussion with government on the nature of long-term funding settlements that could potentially be provided to the FGCs, including both continued funding of current city deals and any further deals that could potentially be provided in the future.

2. Support from government on the devolution of regulatory powers, allowing the FGCs to act as testbeds for revenue retention, investment and growth opportunities.

Physical infrastructure

Why is this a priority?

- 4.2 There are substantial physical infrastructure constraints that are hindering growth across the FGCs. East West Rail, including its proposed extension to Norwich, is a priority to connect the FGCs and turbocharge growth across their economies. **The FGCs are seeking a collective discussion on physical infrastructure constraints with a range of government departments, and the UK Infrastructure Bank.** Agreement is required on which proposals to improve transport, power supply, water, and sewage infrastructure should be fast-tracked for approval, to ensure the FGCs and regions' economies can grow to their full potential.
- 4.3 Sufficient and resilient physical infrastructure are essential to successfully growing city economies. Sufficient and high quality physical infrastructure is a condition that is required to bring forward further commercial partnerships and private sector investment within the FGCs.
- 4.4 As population and employment increases, naturally, the supply of the transport network must increase across all modes. The FGCs are fully aware of the problems associated with growing congestion and are keen to invest in their transport networks. Similarly, increased residential and commercial development, particularly in energy intensive innovative sectors such as life sciences or tech & digital, will require an adequate and reliable supply of power. Feedback from engagement with stakeholders suggest that access to an adequate power supply is already constraining the economic growth of the most productive sectors in the FGCs, with Oxford in particular being highlighted as an example of where power represents a limitation on economic growth. These supply issues are even more pressing in the context of decarbonising private transport, which will be dependent upon strong electric vehicle charging infrastructure. Finally, water supply is becoming increasingly constrained within the FGCs and impacting the viability of growth sites, with funding and regulatory support required to ensure an adequate and sustainable supply into the future.

Example interventions

4.5

The priority interventions within the physical infrastructure theme fall into the following broad categories:

- **Public transport:** Facilitate investment in developing world class public transport networks within the FGCs, by both obtaining funding for public transport improvements from the Government, but also by working collaboratively with the bus, rail and micromobility industries to support improved and better integrated transport systems. The DfT's commitment to East West Rail (EWR), recently strengthened by the announcement of a preferred route alignment,¹⁶ is welcomed by the FGCs. It is a shared belief that EWR can catalyse and underpin substantial economic growth within the PRP region, of which the FGCs form the main economic hubs. Extending the line to Norwich can unlock further critical mass and connect the city to the rest of the cities within the PRP, helping to accelerate the growth of knowledge economies within the FGCs. This would demonstrate the Government's belief in the key role that the FGCs have to play in ensuring the UK becomes a science and technology superpower. Aside from EWR, more localised transport priorities include the likes of the Cowley Branch line extension in Oxford, bus service improvements across a range of FGCs, and a longer term ambition to introduce Mass Rapid Transport in Milton Keynes (MK Futures 2050 project).
- **Road infrastructure:** Investment in programmes that reduce road traffic congestion in the FGCs, to create a better urban environment in the FGCs for both residents and businesses alike. Access improvements are sought in Peterborough to the new university, whilst investment in infrastructure is required to unlock the East Norwich Masterplan, a mixed-used development proposing to deliver 4,000 homes and 6,000 jobs.
- **Active travel:** Investment in schemes focused on delivering better active travel (cycling and walking) infrastructure, providing better links into the FGCs urban and business centres.
- **Power and energy:** Deliver digital and energy (power) projects that unlock economic opportunities for innovation in identified growth areas of the FGCs, which will help to grow the distinctiveness of their economies. Forward planning is needed with respect to utilities provision across the FGCs. An 'Arc Utilities Alliance' has been proposed, that would seek to develop a unified and collaborative environment that supports the growth of key business clusters across the PRP. Expansion of this alliance to Norwich would help to capture all the priorities and needs of the FGCs.
- **Water supply:** Secure funding to improve the resilience of water supply for the FGCs. Significant infrastructure investment is needed to enable a sustainable water supply to be provided to meet the needs of the FGC areas. This is a particularly important issue for the Cambridge area, where abstraction reductions are needed to protect the chalk streams south of the City. Major water supply interventions are identified (Fens Reservoir, and connections between Cambridge water supply area and surrounding areas), alongside water efficiency measures (e.g., smart metering). Alongside the securing of funding, greater local flexibility over some aspects of national planning policy would help the FGCs improve their water supply resilience. For example, Cambridge would like the power to set lower water allowance limits, to enable them to better regulate water supply.
- **Sewage and waterways:** In addition to water supply issues, there has been a historic lack of investment in flood mitigation, waterway quality and sewage infrastructure in and around the FGCs. This infrastructure is now struggling to keep pace with developments; in Norwich, for example, this issue has resulted in Natural England issuing guidance that nutrient in waterways is effectively halting development until a solution can be found.

¹⁶ Railway News, 2023. UK: Department for Transport Advances Plan for East West Rail Line. Retrieved from <https://railway-news.com/uk-department-for-transport-advances-plan-for-east-west-rail-line/> accessed June 2023

Key asks

1. Continued government engagement and support is required to deliver effective physical infrastructure solutions within the FGCs, including the fast-tracking of projects that will address the most immediate priorities.
2. Long term, stable funding settlements should be provided to the FGCs, allowing them to tackle that most pressing physical infrastructure constraints that are currently hindering economic growth within the cities.
3. Collective discussions with other key stakeholders in physical infrastructure, such as the UK Infrastructure Bank and private transport / utility providers, to establish a future-proofing strategy that ensures physical infrastructure in the FGCs is resilient to future changes.

Inclusive growth and social mobility

Why is this a priority?

- 4.6 Most FGCs have been continuously strengthening their labour markets over time, with employment growth accompanied by increases in the skill levels of both their workforces and residents. However, the residents of some FGCs still possess below average skill levels, which risks constraining growth. **Innovative companies may be discouraged from relocating their companies to these cities if they are not perceived as having the required labour market quality** or access to research institutions.
- 4.7 Inclusive growth means that all residents have equal opportunities to upskill, enter in, or stay within, the labour market, and have a share in the benefits of the economic growth. Inclusive growth in the context of economies driven by the knowledge-based sectors means ensuring high levels of economic participation amongst all residents; achieving an appropriate mix of skills levels across the workforce; providing good quality educational institutions for all ages; and safeguarding opportunities for lower skills residents, particularly to ensure there is an available labour supply for the foundational economy to function.¹⁷ Investment in skills, education, and jobs services will help to ensure inclusive growth and maximise the chances of social mobility.
- 4.8 The FGCs require support to address their own respective inequalities. Continued engagement and investment into skills, education and jobs initiatives within the FGCs will provide the councils with more power to work in their local communities and ensure inclusive growth. Early years education, new universities, skills partnerships, adult education initiatives, and skills development programmes are key priorities that focus on maximising social mobility for all ages.

Example interventions

- 4.9 There are a number of skills and social mobility focused interventions that the FGCs are currently seeking to prioritise, including:
- **Support for long term skills development programmes** that have sustainable partnerships at their core and provide a better alignment to employer needs. The Government should promote “skills

¹⁷ The foundational economy is broadly considered to be the elements and activities that are necessary to support all other economic and social activity, usually focused on healthcare, education, housing, utilities and food supply. Andy Haldane defined the foundational economy as “local jobs in local communities supporting local spending” and notes it is stuck in a “low skills-low productivity-low wage equilibrium.”

devolution” to allow opportunities for greater local oversight of skills funding and coordination across local partnerships. The local Skills Advisory Panels (SAPs) which bring together employers, skills providers, local authorities and key local stakeholders to better understand and resolve skills mismatches at a local level will be at the centre of this. Cambridge and Peterborough, for example, have created the ‘region of learning’ employment and skills platform.

- Funding to **help open or expand universities in some of the FGCs**. The proposals for additional universities in Milton Keynes and Peterborough will enrich the existing higher education offer in the FGCs. The proposed MK:U has an alternative delivery model to traditional university institutions, which can help to future proof the higher education offer in the FGCs. The model at MK:U integrates business needs with a traditional skills offer, evidenced through MK:U’s partnership with Santander that seeks to offer business led qualifications. In the case of Peterborough, Anglia Ruskin University opened in 2022 and is continuously looking to expand. Expanding the presence of these research anchor institutions into other FGCs can help to increase the number of productive knowledge collaborations occurring within the FGC economies. They will also act as knowledge ‘anchors’ which are attractive to highly productive firms looking to locate in the UK, bringing with them well paid job opportunities for local residents.
- Targeted investment is needed to enable employers to improve skills provision and participation and address skills shortages through **work-based learning programmes**. This includes funding for programmes that provide much greater in-work education provision and participation in further education and skills training for adults. An example of this happening is when DfE piloted new employer-led Local Skills Improvement Plans (LSIPs) in 2021-22 and supported providers with Strategic Development Funding (SDF) to help shape technical skills provision to better meet local labour market needs.
- There is a shared view among the FGCs that the Government should consider **reforming the apprenticeship levy** to enable major employers greater flexibility to utilise funds received from the levy to support supply chain partners as well as the upskilling of existing staff.

Key asks

1. The Government should support the FGCs in having more autonomy over the development of their skills programmes. Collective discussion with government and local leaders is needed around devolving skills funding to the FGCs, or co-commissioning employment support programmes.

2. Both Peterborough and Milton Keynes, require some level of additional funding to successfully implement a new (or expanded) university in their respective cities.

3. Greater collaboration between the Government, local businesses (employers), education providers and other local community groups to develop programmes that benefit local residents, as well understand employer-led skills requirements. Skills partnerships with private sector businesses can help to ensure the skills pipeline meets their needs and attract global firms to locate within the FGCs, rather than elsewhere in the world.

Housing and planning

Why is this a priority?

4.10

Poor access to good quality and affordable housing, education services, health services, and environment can all cause high levels of deprivation. High levels of housing unaffordability is a particular issue in the FGCs, particularly in Oxford and Cambridge where the house price to residents earnings ratio is 13.0 and

11.6 respectively, compared to a national average of 8.7.¹⁸ This ratio worsens when analysing house prices compared to worker earnings in the FGCs, with Oxford ranked the least affordable city nationally with a ratio of 15.1 in 2022.¹⁹

- 4.11 Housing markets that are limited in supply and often unaffordable to residents are holding back the FGC economies. Securing an adequate housing supply is often not the only issue. The FGCs, as planning authorities, sometimes find themselves providing permissions for housing where developers then buildout at insufficient rates to meet demand. This shows that a constrained housing market can sometimes be as a result of delivery issues, and not solely supply issues.
- 4.12 Set within the global markets that the FGC economies operate, potential firms who are put off locating in the FGCs by knock-on effects of a struggling housing market may choose to locate abroad, rather than elsewhere in the UK, to the detriment of the national economy. **The FGCs are seeking greater autonomy over local policies to tackle issues within their housing markets and test innovative approaches to planning.** An example of this would be a desire for developer obligation regulations to be devolved to local planning authorities so that increased funds can be raised.
- 4.13 Creating urban areas with integrated residential and employment land is a key ingredient to successful and internationally competitive urban innovation districts. Investment is sought to regenerate city centres in the FGCs to better suit future needs, such as creating urban innovation districts and placing a focus on placemaking. This will make the FGCs an attractive place for people to live and work.

Example interventions

- 4.14 Many of the housing and planning asks relate to a request for devolved regulatory powers, with specific interventions set out in **para 4.6**. Other priority interventions within the housing and planning theme fall into the following broad categories:
- Whilst some housing will be delivered by the private sector, investment needs to be secured **to support estate renewal and brownfield regeneration programmes** to complement this. Stakeholders such as DLUHC and Homes England will therefore be key in securing this investment. An example of this is Milton Keynes aspiration to deliver a number of community-led regeneration and estate renewal programmes, namely Lakes Estate, Fullers Slade and Bradville. Meanwhile, Norwich are seeking investment to bring forward their eastern village proposal, a large housing-led masterplan requiring £100m-£250m in infrastructure investment to assist with delivery of this regeneration project. The FGCs should be considered by Homes England when seeking to identify opportunities to deliver major regeneration projects in the future.
 - The FGCs have a shared priority to try and improve the attractiveness of their city centres to both businesses and residents alike, and are seeking **government support to help them accelerate progress on their city centre ambitions**. Norwich, for example, have ambitions to do this by obtaining funding to deliver improvements to the city centre's public realm and experiential offer for residents. Meanwhile, substantial funding is required in supporting infrastructure if Oxford's West End is to be delivered successfully and create another globally competitive urban cluster.
 - Bidwells, on behalf of the Oxford Cambridge Supercluster partnership, are proposing that the Government **introduces a new innovation use class within the planning system**. This call is echoed by some of the FGCs, particularly Oxford City Council. This proposed new use class should comprise of principal laboratory space and space for knowledge-intensive research & development (R&D). It is also proposed that through utilising this new use class order, the Government could define any development over 20,000 sqm as a Nationally Significant Infrastructure Project (NSIP) covered by the NSIP process.

¹⁸ ONS, 2022. Median house prices for administrative geographies: HPSSA dataset 9 2021; ONS, 2022. Annual Survey of hours and earnings – resident analysis 2021

¹⁹ Centre for Cities, 2023. Cities Outlook 2023

This regulatory change would provide a faster route through the planning process for innovation and enterprise proposals that are fundamental to the knowledge-led growth of the UK economy.

Key asks

1. *Government engagement and regulatory support to allow the FGCs greater flexibility in housing and planning matters. Government investment and engagement within the FGCs has already begun through the relatively recent announcement backing the PRP, which will unlock access to an initial £2.5m of government funding for the partnership to support its priorities in delivering sustainable growth and environmental enhancements for the region.*

2. *Support and collaboration to help the FGCs bring forward urban innovation districts. Business confidence and investment is likely to be strengthened in areas that are explicitly supported by government. The private sector will be attracted to these types of urban clusters where their geographical boundaries receive formal backing from government.*

3. *The Government should establish a capital grants scheme to support priority R&D in the UK. Highly innovative firms within the FGCs would be expected to be beneficiaries of this scheme, which would help to drive international competitiveness. Essentially, the Government should maintain and expand R&D funding commitments in the FGCs, investing in places where the return on this investment is maximised and which are already acting as the engine room for levelling up the UK.*

Sustainability

Why is this a priority?

- 4.15 The FGCs are already at the forefront of tackling the UK's climate emergency. Every FGC city local authority has declared a climate emergency and sustainability has become a key priority within local policy. With respect to net-zero ambitions, the FGCs are generally performing well. Active travel take-up is high, particularly in Oxford and Cambridge,²⁰ and other than Peterborough, all FGCs have lower per capita emissions than the national average.²¹
- 4.16 Achieving economic growth can no longer be looked at in isolation. Any growth needs to be targeted through a sustainable lens, considering the impact that this growth could have on the long term health of the planet. **Investment in projects and programmes that both deliver sustainable economic growth and align with net-zero policy ambitions therefore form a key priority for the FGCs.**
- 4.17 Further investment is needed to drive a sustainable and green transition. **Funding is sought for sustainable infrastructure in all FGCs.** This includes key priorities such as electric vehicle charging, active travel improvements and increases in green space. Support and cooperation on regional skills strategies is also required, to help the FGCs understand the important role green skills will play in the future.
- 4.18 Investment in sustainability initiatives and projects can complement economic growth ambitions by delivering a variety of economic, social and environmental benefits:

²⁰ As a collective, 22% of FGC commuting trips are active travel, significantly higher than the England levels of 14%; ONS, 2022. 2021 Census – Table TS061 – Method used to travel to work.

²¹ BEIS, 2022. UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2020

- A transition to a zero carbon economy will result in the creation of new highly skilled and highly paid green job opportunities;
- Investment in sustainability projects can help to create desirable places to live, work and visit, to the benefit of local communities within the FGCs; and
- Environmental improvements can lead to health and wellbeing benefits for local people, which in turn can result in fiscal savings for the UK exchequer (such as a lower burden placed on the NHS).

4.19 The drive for sustainability traverses many sectors of the economy and thus efficient intra-departmental thinking is integral both within national and local government.

Example interventions

4.20 Key priorities related to sustainability within the FGCs include (but are not limited to):

- Investment in **sustainable transport initiatives**, such as increasing the supply of public transport, physical infrastructure and soft measures to facilitate active travel, and expanded EV charging infrastructure. Investment into electric vehicle charging infrastructure is sought in Peterborough, as well as investment into improving active travel access to the city's Station Quarter, the city's recycling infrastructure and the city's bus depot to allow zero emissions buses to operate in the city. Meanwhile, funding is sought to bring forward on street residential electric vehicle charging infrastructure in Milton Keynes. The Greater Cambridge Partnership has developed a programme of sustainable transport interventions for the city region under the terms of the Greater Cambridge City Deal, but has seen inflation erode the spending power of that deal. Additional investment would allow the full programme to be implemented, facilitating the housing and economic growth envisaged in the local plans.
- Investment in **green energy infrastructure** such as wind and solar power. Peterborough's Local Area Energy Plan sets out the £8.8bn worth of investment required in housing and energy to meet a target of net-zero by 2040.²²
- **Sustainable strategic development practices**, such as development through intensification, to make use of existing physical infrastructure and services. Funding is sought for green space improvements in North Cambridge, with strategic scale green space in this part of the city unlikely to be fully funded by development and the private sector.
- Introducing **programmes and measures which proactively and directly target net-zero ambitions** such as recycling and urban greening.

Key asks

1. *A collective discussion with government on regulatory devolution within the FGCs that can encourage sustainable strategic development practices.*
2. *Support from government for the FGCs to act as 'testbeds' in rolling out innovative programmes and measures which directly target net-zero ambitions.*
3. *Funding for sustainable infrastructure, focused on both transport and greener energy.*

²² UK Research and Innovation, 2022. Peterborough Local Area Energy Plan

Asks that align with economic priorities

- 4.21 The FGCs are seeking cross-party political support for their cities. This report demonstrates that regardless of political alignment, providing greater support and encouraging investment into the FGCs can help to drive the UK's economic success and deliver on stated priority missions.

UK Government

- 4.22 The Government's chancellor has this year set out the **four Es** as his priority pillars for the UK economy. These are **enterprise, education, employment and everywhere**. The asks set out by the FGCs above can help the Government to deliver on these four priorities:
- **Enterprise:** If the UK is to be Europe's most prosperous economy, its needs to attract the most dynamic and productive companies. The FGCs already attract some of the most successful global companies in fast growing sectors. Investment that overcomes physical infrastructure constraints that are preventing further innovative companies from locating in the FGCs, as well as a discussion about a capital grants scheme in R&D sectors, can help the Government to deliver on this mission.
 - **Education:** The inclusive growth and social mobility sets out the FGCs priorities for improving education within their cities, helping them to enhance the quality of their available labour force. The FGCs want support in developing long term skills programmes that addresses education priorities.
 - **Employment:** As demonstrated throughout this report, the FGCs already possess productive and skilled workforces, and are cities where global talent are attracted to live. Further support from government is needed to improve the provision of infrastructure and the quality of life in the FGCs, allowing the cities to continue to attract a sufficient workforce to meet the needs of companies.
 - **Everywhere:** The FGCs already act as an engine for levelling up the UK, with economic activity occurring in these cities that would have gone abroad otherwise. Investment to help the FGC economies thrive and achieve their true potential would likely have spin out effects for the rest of the UK economy.

Opposition proposals

- 4.23 The Labour Party's '**A New Business Model for Britain**' vision document sets out a roadmap for the UK economy in the future. This vision focuses on modern supply side economics, as well as greater devolution, with a focus on: "supporting the development of new industries in different parts of the country, catalysing private investment in capital and skills." Within this vision the Labour document sets out there five key missions, which investment in and engagement with the FGCs could help to achieve:
- **Certainty and stability:** This mission recognises that for an economy to be successful, investment from both the public and private sector should be high, with long term ambitions. The FGCs are seeking investment from the public sector, in the likes of physical infrastructure and sustainability, to help them unlock higher levels of private sector investment in the future.
 - **Seizing new opportunities:** The FGCs are at the forefront of the UK's new opportunities, both in terms of world leading sectors such as life sciences and tech & digital, and in tackling the climate emergency. The FGCs also recognise the Labour Party's aim to make it easier to build in Britain, through their requests for regulatory devolution that can help to free up their housing and development sectors, and test pilot interventions that could potentially be rolled out across the UK.
 - **Everyone, everywhere:** This mission recognises that greater devolution is required to enable economic development in every UK region. The FGCs are calling for a collective discussion on greater devolution in their cities and regions reinforces this aim.
 - **The chance to thrive:** This mission recognises that the UK economy does not currently possess an adequate workforce to meet the needs of tomorrow's world. It recognises that new skills (particularly green skills) will be required in our workforce to be able to continue to attract the world's most

productive companies, many of which choose to locate in the FGCs. It also calls for a reform to the apprenticeship levy, an aim that is echoed by the FGCs.

- **A resilient, trading economy:** This mission focuses on ensuring that the UK is open to trade with other countries, whilst also being resilient, by reducing our dependence on fragile international supply chains. It is clear from the analysis throughout this report that for UK to retain and enhance its position on the global stage, the FGC economies need to be at the forefront. The type of economic activity attracted to the FGCs would likely go abroad otherwise. Support for these economies is required if the UK is to become a resilient, trading economy.

5. Justifying the asks

- 5.1 This chapter outlines the strengths of the FGC economies, which help to demonstrate and justify why further investment is required within these cities. There are several avenues through which the FGCs warrant and investment. However, these avenues all largely fall under the same central theme. That is, **the distinctive and internationally renowned economies of the FGCs, underpinned by specialised industrial business clusters, have the ability to translate any future investment into additional economic benefits for the UK economy.**

The FGCs existing strong contribution to the UK economy

*There are several means by which the FGCs currently contribute disproportionately to the UK economy. These are through highly productive economies, highly innovative sectors, or disproportionately high tax contributions for their size. This disproportionate contribution to the UK economy evidences the need for why they should continue to be supported by central government. **There is a track record for showing that such investment and support benefits the economy at a UK level.***

Key statistics

- 5.2 **Table 5.1** outlines the key employment and GVA statistics, summarising the FGCs current contribution to the UK economy. **Together the FGCs (their PUAs only)²³ support a workforce of 666,000 and a total GVA contribution of £42bn.** This comprises a 2.4% share and 2.5% share of England's total employment and total GVA respectively. These statistics, as well as historic growth rates, form the basis of the forecasting presented in **Chapter 6.**

Table 5.1 In employment and GVA terms, Milton Keynes is the greatest FGC contributor to the UK economy (when considering PUA geographies)

Employment and GVA contribution of the FGCs

Geography	2021 employment levels	2021 employment % of England	2020 GVA (£m)	2020 GVA % of England	2020 GVA per hour worked
Oxford	118,500	0.4%	£6,820	0.4%	£34.01

²³ CfC have defined the PUAs of all major cities in the UK, with all of the FGCs PUAs defined as their own local authority boundaries, with the exception of Norwich's PUA which is defined as the local authorities of Norwich and Broadland combined. It is noted that these PUAs do not always provide a perfect definition, particularly where the boundary extends beyond the urban extent of cities. This is the case for Norwich, where Broadland does include some of Norwich's urban extent, but at the same time also includes a large national park which by its very nature is relatively "unproductive" in purely economic terms. The advantages of defining cities by PUAs is high levels of data availability, and the ease of like-for-like comparisons between locations. The main disadvantage of the PUA approach is that the local authority boundaries of many of the FGCs are geographically restrictive, and may not capture important economic activity – e.g., Cambridge Science Park which lies within the urban extend of Cambridge, but within in South Cambridgeshire local authority (and hence outside of Cambridge's PUA. Similarly, the Norwich Science Park is mostly excluded from the PUA definition.

Geography	2021 employment levels	2021 employment % of England	2020 GVA (£m)	2020 GVA % of England	2020 GVA per hour worked
Cambridge	112,500	0.4%	£6,430	0.4%	£34.82
Norwich	136,000	0.5%	£7,720	0.5%	£36.72
Peterborough	118,000	0.4%	£6,540	0.4%	£35.66
Milton Keynes	181,000	0.7%	£14,030	0.8%	£45.95
FGCs	666,000	2.4%	£41,540	2.5%	£38.24
England	27,407,000	-	£1,682,750	-	£37.73

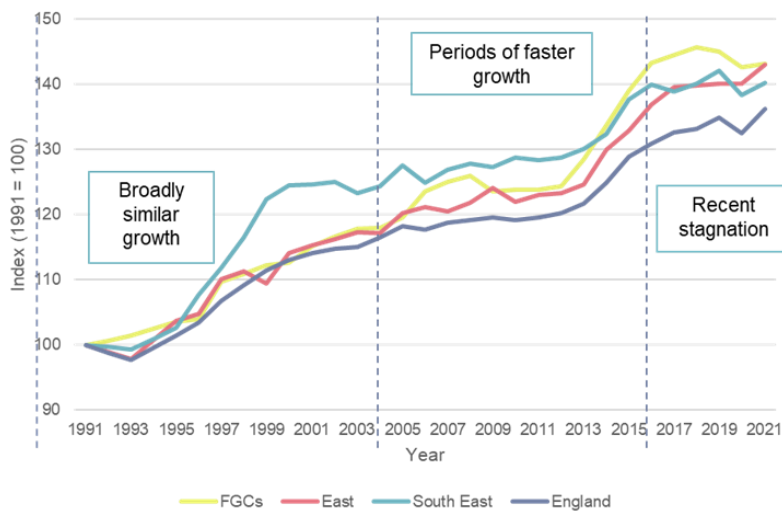
Source: ONS, 2022. BRES 2021-2020; ONS, 2022. Regional gross value added (balanced) by industry: all ITL regions; ONS, 2022. Subregional productivity: labour productivity indices by local authority district

5.3 **Figure 5.1** displays the long-term historic employment growth in the FGCs against regional and national comparators. As a group, the FGCs have exceeded national employment growth rates and either exceeded or matched regional growth rates when looking at medium to longer term time periods. **However, this trend of above average employment growth in the FGCs appears to be slowing, with constraints on growth (such as limited housing supply or underperforming physical transport) starting to take hold.** Looking over a 30-year period, employment in the FGCs grew 43% relative to national growth of 36%. Over the last decade this margin has narrowed with the FGCs growing 16% relative to a national rate of 14%.

5.4 More recently still, over the five years to 2021, whilst national employment has grown 4%, the FGCs have stagnated, experiencing almost no growth in their workforces overall. In fact, all of the FGCs except Cambridge have experienced drops in employment within the last five years. **This highlights the risk that constraints on growth are starting to prevent the FGCs from realising their full economic potential.**

Figure 5.1 After experiencing above average employment growth earlier this century, employment growth in the FGCs has stagnated in recent years

Employment growth over time (index 1991 = 100)



Source: ONS, 2022. BRES 2021

5.5 Even more recently, however, there have been some green shoots in the recovery of the FGCs' employment markets. Research undertaken in February by ciph²⁴ analyses the best UK cities for job opportunities and finds that:

- Milton Keynes, Oxford, York, St Albans, Norwich and Cambridge are the top six cities for job opportunities, with high average salaries, good business density, and strong employment rate growth;
- Milton Keynes scored consistently well on multiple criteria, possessing a high average median wage, significant salary growth and a relatively low unemployment rate;
- Oxford is the best UK city for employment rate growth, up 16.4% from 2021 to 2022; and
- Analysis of data from Indeed suggests Cambridge is the city with the highest number of job vacancies, within around 396 job postings per 10,000 working-age residents, whilst Norwich also possesses a high rate at 286 postings per 10,000 working-age residents.

5.6 The combination of strong historic employment growth, as well as more recent analysis that suggests the FGCs are amongst the top UK cities for job opportunities, highlights the potential that these economies have to drive the UK's economic growth in the future.

Highly productive economies

5.7 All FGCs have the potential to contribute disproportionate economic activity to the UK economy through their strong productivity performance. This productivity performance is achieved through different levers in the FGCs.

Strong GVA per hour worked

5.8 The average GVA per hour worker for a worker in Milton Keynes is £45.95, significantly higher than the England average of £37.73 (**Table 5.1**). Whilst Norwich's current productivity (GVA per hour worked) is below average, it has increased by 43% over the last decade – far in excess of UK growth of 24%.²⁵ This above average level of growth shows that Norwich has clear potential to join Milton Keynes and become a highly productive city in the future.

Contribution of universities

5.9 The lower productivity rates of Oxford and Cambridge (in pure GVA per hour worked terms – see **Table 5.1**) should not be mistaken as evidence that these economies do not contribute productively to the UK economy. Lower productivity rates in these cities are primarily driven by the high employment share in education, which in pure direct GVA terms is typically a low productivity industry. The high employment share in education within these cities is driven by the presence of Oxford University, Oxford Brookes University, Cambridge University, and Anglia Ruskin University.

5.10 Despite these universities accounting for reduced productivity in pure GVA terms, this certainly does not mean that these universities make unproductive contributions to the UK economy. On the contrary, these internationally renowned research institutions make significant productive contributions to the UK economy through the following means:

- **University spinouts** – companies which are started and developed by individuals or institutions from within the university. The University of Oxford and University of Cambridge are the country's leaders in spinouts, respectively producing 193 and 137 spinout companies since 2011 – first and second in the

²⁴ Available at: [Best UK cities for job opportunities - Ciph](#)

²⁵ ONS, 2022. Subregional productivity: labour productivity indices by local authority district

country and comfortably ahead of Imperial College London in third place on 106.²⁶ Spinouts occur from other universities as well; the forthcoming Oxford Brookes Enterprise Centre, for example, will aim to support the start-up and incubation of 15 companies supporting around 70 jobs.²⁷

- **Innovations** – these university spinouts tend to be innovative companies and can make discoveries which greatly benefit the UK economy and population. For example, in just three years, Anglia Ruskin University's NHS Clinical Entrepreneur Programme has helped create 246 start-ups which developed 347 innovations. Furthermore, Astex Pharmaceuticals, originally founded by University of Cambridge Chemists, developed techniques to accelerate the discovery of treatments, and successfully developed two cancer treatments – Kisgali for treating advanced breast cancer and Balversa for advanced bladder cancer.
- **International status** – the high international status of the Oxford and Cambridge universities (first and third internationally as per the Times Higher Education 2023 overall rank)²⁸ enhances the reputation of the UK on the international stage.
- **Student population** – Once international and domestic students arrive at the universities, they are educated by the world's most talented academics, and leave the universities significantly upskilled. Graduates of Oxford and Cambridge do not, however, tend to remain within these cities. Data from CfC shows that in 2014, Oxford's and Cambridge's graduation retention rate was 18% and 17%, respectively.²⁹ Out of the 43 UK cities included in this data set, Oxford and Cambridge have the 36th and 38th lowest levels of graduate retention. These low levels of student retention indicate that Oxford and Cambridge train some of the most productive graduates in the UK, before they mostly leave to work, and benefit the productivity of the country, elsewhere in the UK (or, in some cases, abroad).

New economy cities

5.11

Recent analysis by CfC, which defined the 'new economy' as 47 technologically advanced sectors, found that **Cambridge (1st), Milton Keynes (3rd), Oxford (7th) rank in the UK's top 10 new economy cities**. The new economy encompasses knowledge-intensive sectors that are at the forefront of innovation. **Cambridge's 40 new economy firms per 10,000 working age population saw the city finish in first place nationally, significantly above the UK average of 21**.³⁰ Norwich performed slightly better than the national average, and Peterborough slightly worse, representing an opportunity to grow the new economies in these two cities in the future.

Milton Keynes – a testbed for innovative technologies

Milton Keynes has a unique reputation for being a testbed location for new technologies, allowing organisations to trial their innovations and roll them out using Milton Keynes as a blueprint. For example, Starship Robots (delivery robots) were first trialled in Milton Keynes, with the city used as a blueprint for how the technology should be rolled out to other cities. Similarly, the MK:5G

²⁶ Beauhurst, 2022. Spotlight on Spinouts

²⁷ Oxford Brookes University, 2022. Newly opened Oxford Brookes Enterprise Centre will boost biotech, digital and business innovation. Retrieved from <https://www.brookes.ac.uk/about-brookes/news/2022/09/newly-opened-oxford-brookes-enterprise-centre-will/> Accessed January 2023

²⁸ Times Higher Education, 2023. World University Rankings 2023. Retrieved from <https://www.timeshighereducation.com/world-university-rankings/2023/world-ranking> Accessed January 2023.

²⁹ CfC, 2016. The Great British Brain Drain

³⁰ Centre for Cities, 2023. Cities Outlook 2023.

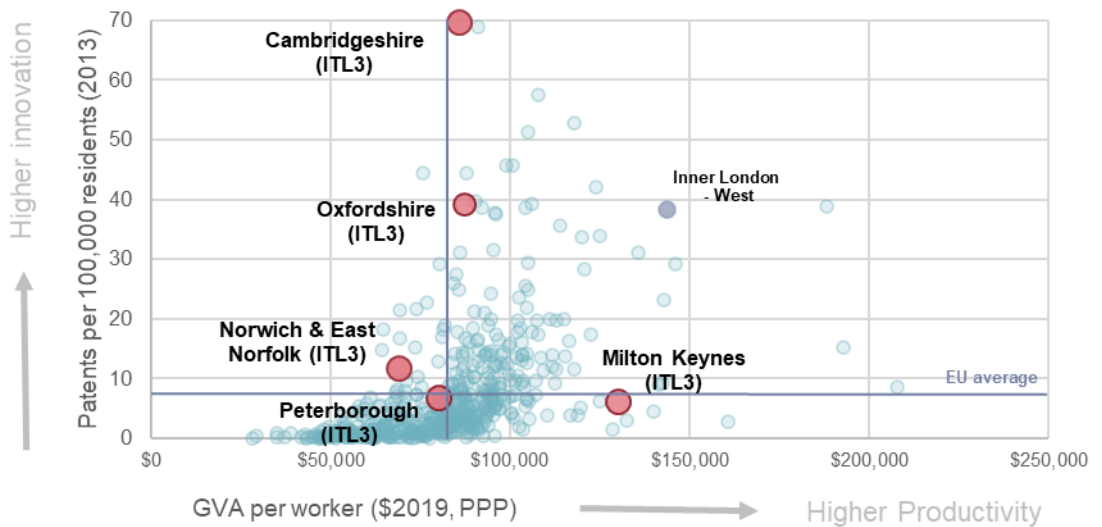
project is using Milton Keynes as a testbed to trial the use of dedicated 5G infrastructure throughout the city.

International standing

- 5.12 The FGCs highly productive economies are not only impressive within the UK, but also on the European stage. **Figure 5.2** shows the level of productivity and the rate of patent applications across all European cities that are at least as large as Peterborough (the FGC with the fewest residents). It is clear that Milton Keynes' productivity (in pure GVA terms) is on par with London and other major European cities, and far in excess of the EU average.
- 5.13 Meanwhile, Cambridgeshire and Oxfordshire (representing the lowest geography for which data are available for the cities) each have a productivity rate that is only in line with the EU average, but do support one of the highest rates of patent applications across Europe. The county of **Cambridgeshire has the highest rate of patent applications per resident of all ITL3 regions** (a statistical geography used by the OECD) **in Europe** of an equivalent or larger size than the FGCs. Both Peterborough and Norwich have both a productivity and patent application rate broadly in line with the European average.

Figure 5.2 Cambridge and Oxford support one of the highest rates of patent applications of all cities in Europe, whilst Milton Keynes is one the most directly productive cities in Europe.

Graph showing 2019 GVA per worker (2019 \$ per worker, in PPP terms) and the 2013 rate of patent applications (patent applications per 100,000 residents) in European cities at least as large as Peterborough



Source: OECD, 2022. Regional Statistics Database.
 Note definitions of geographical areas are limited by OECD's ITL3 statistical boundary definitions, hence why Milton Keynes, Peterborough and Norwich (cities) are compared to Oxfordshire and Cambridgeshire (counties).

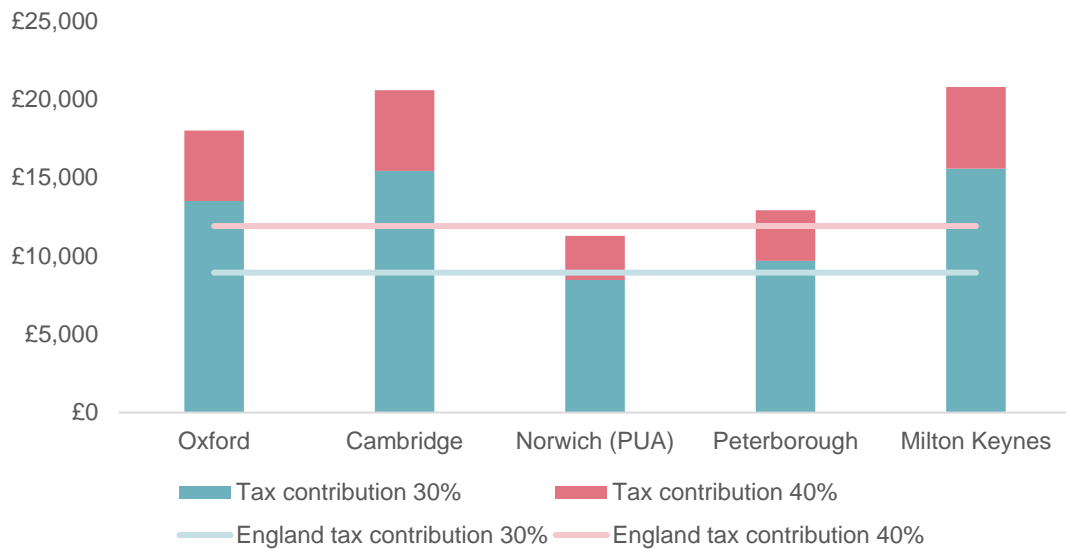
Disproportionate tax contribution

5.14

When considering the size of the FGCs by population, it is clear that they contribute disproportionately high levels of tax to the UK exchequer (Figure 5.3).³¹ On average, it is estimated that **the per population tax contribution of the FGCs (£12,180-£16,230) is greater than that of England-wide levels (£8,930-£11,900)**. This is most heavily driven by Cambridge and Milton Keynes, with Norwich (PUA) being the only FGC which falls below national levels. Assuming this trend continues with future support, **this demonstrates that investment in the FGCs will result in a positive return to the UK economy.**

Figure 5.3 The FGCs contribute disproportionate levels of tax to the exchequer

Tax contribution estimates of the FGCs (2020)



Source: ONS, 2022. Regional gross value added (balanced) by industry: all ITL regions; ONS, 2022. Estimates of the population for the UK, England, Wales, Scotland and Northern Ireland 2020

Specialised, and distinctive FGC economies

5.15

Distinctive and specialised economies have the potential of bringing additional economic benefits to the UK. This is because their unique specialities have the ability to attract international investment whilst also creating the conditions where innovative start-up companies can be born, evolve, and contribute to the economy. It is therefore essential that the FGCs have the required investment to create the underlying infrastructure and conditions where these sectors can flourish.

³¹ The contribution of the FGC economies to central government through taxation is estimated through a combination of publicly available data, and industry standard benchmark estimates. By comparing national statistics on GVA in the years 1997 to 2017 with public sector receipts in each year, it can be shown that **tax revenues will typically account for between 30% and 40% of GVA, through business rates, VAT, corporate and income tax (among other smaller taxes)**. These benchmarks of 30% and 40% are applied to the FGCs GVA statistics, to estimate their overall tax contribution.

The importance of having a distinctive economy

- 5.16 Distinctive economies regularly lead to economic success because of their ability to compete on the global stage, both through successes in exporting and in attracting international inward investment. In the modern, globalised economy, the theories of comparative and competitive advantages have become increasingly unclear. Knowledge and technology are often universally accessible, with it becoming more and more affordable to replicate ideas. The idea of an economy having distinctive advantages has been borne out of this; economies (and the firms that drive them) need to be known for having a point of difference. At the macroeconomic level, increasing the complexity of an economy can help to drive distinctiveness. From an international trade and exporting perspective, complex economies possess a high diversity of exported products, as well as sophisticated and unique export products (that few other countries can produce).
- 5.17 Not all export products are created equal. Some are more complex to produce, such as aircrafts, whilst other products have greater connectedness to other products in the global economy, such as chemicals. In some cases, products are both complex and connected, like advanced machinery. The more important these complex products are within an economy, the more likely the economy is to be distinct. **On the global stage, the UK's complexity ranking has been declining since the financial crisis in 2008. Prior to this, in 2002, the UK ranked 5th in the world for economic complexity, yet has since fallen to 14th in 2017.** Reversing this trend in economic distinctiveness can help to stimulate growth at the national level, and allow the UK economy to be more competitive on the global stage.
- 5.18 **Yet 'distinctiveness' should be the by-product of a successful economy strategy, rather than the overarching goal.** Jobs and business activity in local economies – particularly urban ones such as the FGCs – tend to be spread across a range of different sectors (as demonstrated in subsection **The distinctive economic clusters of the FGCs** below), and it's often difficult to demonstrate a true comparative advantage in a specific sector. Even where we are able to demonstrate that an economy has a particular sectoral strength – such as tech & digital in Milton Keynes for example – it tells us relatively little about the case for intervention. Instead, focusing on creating favourable conditions for distinctive businesses to thrive in an economy, as opposed to becoming focused on specific clusters, is more likely to support diversification of the economy and therefore economic growth in the long run.

The distinctive economic clusters of the FGCs

- 5.19 This subsection outlines the sectoral strengths of each FGC utilising the data presented in **Figure 5.4**. This data presents analysis on the specialised industrial clusters of the FGCs. Clusters are geographic concentrations of interconnected companies and institutions in a particular field.³² **Clustering is a well-recognised model for success in innovative and highly tradable sectors.**
- 5.20 The x-axes of **Figure 5.4** display the Location Quotient (LQ) for a selection of industries within each FGC. LQs are the ratio between a city's percentage employment share in a given industry and the equivalent national percentage. An LQ of over 1 demonstrates an above average concentration of employment in a given industry. The higher the LQ, the more concentrated and specialised the cluster of business activity. The y-axis shows the prevalence of industries which support the growth of clusters in a given industry, based on how likely industrial clusters are to co-locate. The closer towards the top of the chart, the greater the prevalence of specialist clusters in that industry. The closer towards the right of the chart, the more sustainable the cluster is, due to the greater presence of supporting industries.

³² Harvard Business Review, 1998. Clusters and the New Economics of Competition.

Oxford

- 5.21 The Oxford Economic Strategy (2022) identifies four specific sectors in which the city holds competitive advantages and can become a leader on the global stage, these are: health and life sciences, tech & digital, creative production, and green and low carbon energy.³³ Analysis of data indicates that Oxford is most specialised in the automotive manufacturing industry, with an employment share over five times the national average, whilst Oxford has other specialisms in the education, creative and life sciences³⁴ industries.
- 5.22 **Oxford is a prime example of how the presence of successful higher education institutions provide many clustering opportunities in other knowledge-intensive sectors**, which has been the case for the city's prominent life sciences cluster. The creation of the BioEscalator – University of Oxford's Biotech incubator - is a case study example of how firms can benefit from clustering near education institutions. The universities themselves (both Oxford and Oxford Brookes) create spinout companies which further strengthen the cluster. For example, Oxford Science Enterprises is an independent investment company created to found, fund and build transformational businesses based on research within Oxford. Investment in university spinouts has increased more than tenfold over a decade – from £125m per year (2011-2015) to £1.4bn in 2021.
- 5.23 **Across the wider geography of Oxfordshire, the specialisms in both life sciences and creative industries are even stronger.** In the case of life sciences, this demonstrated by the importance of out-of-centre employment sites in the form of Oxfordshire's world-renowned business and innovation parks. The life sciences sector is unique in its ability to export both the services and goods it produces, with scientific research and development being the UK's ninth and tenth highest industry for exporting services and goods respectively.³⁵ Meanwhile, there are around 3,000 creative and digital sector businesses generating £1.4bn annually. Oxford is home to one of Europe's largest independent game developers – Rebellion. The city has an identified NESTA creative cluster - an area with higher rates of innovation and economic growth in the Creative Industries. This is significant on a national level given the Creative Industries Manifesto, which recognises that the UK creative industry is often under-capitalised and suffers from skills shortages that can impede growth.³⁶

Cambridge

- 5.24 **Figure 5.4** highlights the scale of the life sciences and R&D specialism in Cambridge. Life sciences employment in Cambridge supports a share of total employment that is eight times larger than the national average. The city also possesses a strong presence of industries commonly found within the tech & digital sector, such as computer programming, and a specialism in some industries related to the academic activity such as software and media publishing activities, and library and cultural activities. **Cambridge has seen its employment in tech & digital grow by 55% since 2009 and, at 8%, its employment share is double the national average.** Cambridge benefits from the presence of global tech giants such as Amazon, Apple, Samsung and Huawei. Many successful tech companies have also grown out of the University of Cambridge including Arm, Acorn, Ubisense, Jagex and the educational tech charity Raspberry Pi Foundation.
- 5.25 Cambridge is a clear example of the issues with defining study areas described briefly in **Chapter 2**. It is acknowledged that the local authority (PUA) boundary definition of Cambridge often does not adequately

³³ Oxford City Council, 2022. Oxford's Economic Strategy.

³⁴ The definition of the life sciences sector used in this report matches the definition from DBEIS, 2022. Life Science Sector Data, but also includes the industry with SIC code 72190 (Other research and experimental development on natural sciences and engineering), which is deemed to be within the R&D sub-sector of life sciences.

³⁵ Out of a possible 79 categorised industries; ONS, 2022. UK trade in services by industry, country and service type

³⁶ Creative industries Federation, no date. Creative Industries Manifesto.

capture the true economic activity of the city, given the importance of parts of South Cambridgeshire to the city's economy. Cambridge Econometrics have defined a wider Functional Economic Modelled Area definition of the city (Cambridge FEMA) which considers areas on the periphery of the city in addition to the city itself.³⁷ **The economic prowess of the Cambridge FEMA is apparent in its historic employment growth, which greater than both Cambridge and England** (see the line chart in **Figure 5.4**). The FEMA is estimated to support a workforce 161,875 (as of 2021), which is 44% higher than the city's workforce size.

- 5.26 At the wider geography of Cambridgeshire, some of the specialisms within Cambridge city can still be seen. Shares of employment in life sciences are similar to that of the city itself. However it is geographically defined, Cambridge continues to be one of the most significant hubs for life sciences within the UK. The city has a higher employment share in life sciences (almost 6% of total employment) than both the combined FGCs average (almost 2%) and almost all other local authorities in England (across which the average is 1%).³⁸ Cambridge Biomedical Campus – located on the southern edge of Cambridge – lies at the heart of Cambridge's world-leading life sciences cluster. The campus is home to large international businesses including AstraZeneca, Eisai (a Japanese pharmaceutical company), Glaxo Smith Kline and Abcam.
- 5.27 The wider Cambridgeshire area also has specialisms in certain types of industrial activity such as engineering. Advanced manufacturing – which typically requires larger floorplates and hence would often seek to locate outside of an urban area – represents a rapidly growing sector for Cambridgeshire. The county has employment in a large number of sectors commonly found alongside advanced manufacturing, such as research and development activities.

Norwich

- 5.28 Norwich is a highly distinctive and instantly recognisable city. It is home to the world-renowned Tyndall Centre for climatic change research and has growing clusters in health and life science, digital creative and fin tech industries. It's a contemporary city with a medieval heart, that is home to two universities, a large FE/HE college and has an impressive cultural offer. The data suggests that Norwich has one very clear industrial specialism of insurance – indeed its employment share in this industry is over 11 times the national average. Insurance services is the UK's fourth highest exporting UK service industry.³⁹ In 2018 in Norwich,⁴⁰ this industry produced a GVA per head £105,000 – significantly above the England average across all industries of £62,000.⁴¹ This combination of distinctiveness with Norwich, high productivity, and high exportability, demonstrates the UK-level benefits that Norwich's insurance industry can produce.
- 5.29 **Norwich is the FGC with the highest employment shares in supporting industries to green energy** (such as specialised construction activities), which is then demonstrated further when analysing the presence of supporting industries across the city's wider functional economic area. Norfolk alongside Suffolk is a global leader in offshore wind, a key driver of growth in the renewable energy sector within the UK, and a sector with plenty of opportunities for further investment in the future.
- 5.30 **Figure 5.4** shows that the sectoral profile of Norfolk is considerably different to that of Norwich. The wider area of Norfolk contains a number of additional industries such as food manufacturing and agri-tech, that are highly specialised relative to the national average. Agri-tech is any technological or science-based innovation utilised to improve the productivity and sustainability of agriculture, horticulture, aquaculture. Agri-tech will play an important role in the UK's push towards net zero, as the move to 'net-zero farming' relies on renewable energy sources. In recent years, both Norwich and Norfolk have experienced significant growth

³⁷ Cambridge Econometrics, 2023. Cambridge City Portrait: Proposed Approach to Spatial Definitions

³⁹ Out of a possible 79 categorised industries; ONS, 2022. UK trade in services by industry, country and service type

³⁹ Out of a possible 79 categorised industries; ONS, 2022. UK trade in services by industry, country and service type

⁴⁰ GVA data for Norwich not available past 2018.

⁴¹ Source: ONS, 2019. Regional gross value added (balanced) by local authority in the UK 2018

in its agri-tech cluster, with Norfolk's employment share in agri-tech almost four times the national average.⁴²

- 5.31 The Department for Business and Trade (DBT)'s High Potential Opportunities (HPO) programme selects focused investment opportunities to promote foreign investors. The new HPO for Norfolk and Suffolk will be promoted by DBT's global network focused on attracting businesses to use the region's globally renowned plant science expertise to develop nutritious food products. Core to the HPO is Norwich Research Park – Europe's largest single-site hub of research, training, education and enterprise focused on plant science, food and health. Agri-tech has a strong presence in Norwich Research Park. Tropic Biosciences is an example of company within the research park developing agri-tech products with a global impact. **This demonstrates Norwich's commitment to growing this nationally important industry.**

Peterborough

- 5.32 **Figure 5.4** displays Peterborough's clear industrial strength in logistics and manufacturing industries, with these industries having employment shares 2.8 times and 5.2 times the national average respectively. Peterborough has always had a strong history in manufacturing activity. Machinery and equipment manufacturing is the UK's fifth highest industry for goods exported, demonstrating the UK-level trade benefits of Peterborough's speciality in this industry.⁴³
- 5.33 Large firms such as Caterpillar have engineering bases on the outskirts of the city, and there are a number of smaller research intensive firms within industrial parks surrounding the city. Indeed, 20% of business turnover generated in Peterborough comes from high-tech manufacturing (with a further 6% stemming from other manufacturing).
- 5.34 The city benefits from good levels of connectivity, both in a physical sense through its location on the East Coast Main Line and links to the road network, and digitally, with almost 100% of the city benefitting from superfast broadband access.⁴⁴ As a result, a number of key players in the logistics industry have chosen to have a presence in Peterborough. For example, Amazon have developed a distribution and fulfilment centre to the south of Peterborough, which is larger than 500,000 sqft and employs 1,000 people. The centre plays a significant part in supporting UK-based SMEs, achieving total export sales of more than £2bn in 2018.
- 5.35 Similarly, in 2020 Danish medical tech company Coloplast (which has a heritage in the city of over 40 years) opened a new distribution centre costing £9 million pounds, focused on the distribution of medical devices. **This new centre will mean that there will be an increased capacity to meet the orders of its 250,000 NHS patients, including meeting same-day orders.** The centre includes a special stoma bag cutting facility which enables Coloplast to supply personalised and individually sized stoma bags. In fact, Coloplast has 10 specialist laser machines on site, of which there are only 50 in the world.

Milton Keynes

- 5.36 Milton Keynes has a large proportion of office floorspace in its city centre, amounting to 51% of space, compared to the England average of 10%.⁴⁵ This is the highest share of any FGC. This translates into employment data, with a large share of employment in office-based industries, most of which are likely located in and around the city centre. Finance, as well as tech & digital, are key industries which comprise Milton Keynes' office-based economy.

⁴² ONS, 2022. Business Register and Employment Survey 2021

⁴³ Out of a possible 79 categorised industries; ONS, 2022. UK trade in services by industry, country and service type

⁴⁴ Cambridgeshire and Peterborough Combined Authority, 2022. Local Transport and Connectivity Plan.

⁴⁵ VOA, 2022. Non-domestic rating: stock of properties including business floorspace, 2022.

- 5.37 Milton Keynes has one of the highest shares of direct employment in tech & digital of the FGCs, with their percentage share being around double the national average. Tech & digital is an emerging specialism for the city, with sectors such as information services and computer programming similar to the industries in which Milton Keynes already has significant economic activity. Today, it is estimated that Milton Keynes has an estimated 45,000 employed in the tech cluster, contributing £3.4bn in GVA among 2,400 tech enterprises. There is a conscious effort to continue growing the cluster sustainably through ensuring a strong labour pipeline. For example, The South Central Institute of Technology is a project led by Milton Keynes College. It collaborates with a range of world-leading brands including Microsoft, KPMG, Activate Learning and part of the national Institutes of Technology.⁴⁶
- 5.38 **Milton Keynes is an epicentre for developing and testing sustainable transport solutions.** For example, Milton Keynes City Council and Connected Place Catapult set up a UK Testbed Initiative with the Korean International Trade Association for four south Korean start-up companies to trial specialised sustainable transport in Milton Keynes.⁴⁷ Furthermore, Milton Keynes will see the delivery of a European Centre of Excellence for high voltage EV propulsion systems.⁴⁸

⁴⁶ Whitecap consulting, 2022. Milton Keynes Tech Ecosystem Report.

⁴⁷ <https://www.mkfm.com/news/local-news/international-businesses-to-trial-sustainable-transport-technologies-in-milton-keynes/>

⁴⁸ <http://www.intertek.com/automotive/miltonkeynes/>

Figure 5.4 Sectoral strengths of the FGCs



Source: ONS, 2022. BRES 2021. Volterra modelling, 2023.

A history of attracting Foreign Direct Investment

The FGCs have a strong history in attracting Foreign Direct Investment (FDI) to the UK. This is an additional benefit to the UK, as it is investment which might have otherwise gone elsewhere internationally had it not been for the attractive FGC economies.

Innovation attracts international firms and investment to the FGCs

- 5.39 There are a range of key factors that help to attract FDI into the UK. The FGCs are already thriving on many of the underlying conditions that tend to attract foreign investment, such as:
- Existing innovative firms locating within the FGC economies, as demonstrated by the high levels of patents secured within some FGCs (see **Figure 5.2**);
 - Access to a highly skilled labour pool (see **Figure 5.6**);
 - Proximity to world-leading knowledge institutions – the FGCs combined possess these in abundance, with universities such as the University of Oxford, University of Cambridge, Anglia Ruskin University, Cranfield University, Oxford Brookes University, University of East Anglia and the Open University all located within the FGCs economic areas;
 - Proximity to global transport hubs, allowing for connectivity with the rest of the world; and
 - Organisations such as LEPs, Cambridge& and Advanced Oxford that can help to bridge the gap between the public sector and private sector, and use their positioning to compel international companies to locate within, and invest in, the FGCs.

- 5.40 The fundamental economic strengths of the FGCs provide ideal locations for international firms to locate. It is **vital for the FGCs to obtain funding that allows them to build on the current infrastructure in their urban areas, budding talent pools and variety of existing innovation companies and knowledge-based institutions to provide the necessary space that will enable the formation of more successful and productive economies**. Companies tend to prioritise urban science and city district locations which are amenity rich and provide strong public transport links and sustainability credentials – investment that focuses on improving the public transport and sustainability offering of the FGCs will likely only help to attract more innovative global economies into the UK in the future.

FGC universities attract firms and investment

“In a highly and increasingly competitive world, these five FGCs and the universities, businesses, public authorities and communities that they comprise provide much needed sustainable inclusive growth to the UK. We must seize the opportunity to become vibrant, flourishing cities of relevance on the world stage.”
Anglia Ruskin University, 2022

Recent research by the Higher Education Policy Institute has highlighted the positive role that UK universities have in attracting FDI.⁴⁹ One of its many case studies highlights the Oxford to Cambridge PRP, and the recent £2.5m of government investment to assist the region’s brand in “*compete for investment on*

⁴⁹ Higher Education Policy Institute, 2023. The role of universities in driving overseas investment into UK Research and Development

the global stage.⁵⁰ A recent example of Oxford's University's ability to attract FDI has been in the recent purchase of university spin-out company MiroBio by US pharmaceutical giant Gilead Sciences for £332m.⁵¹

The amount of investment attracted into the FGCs

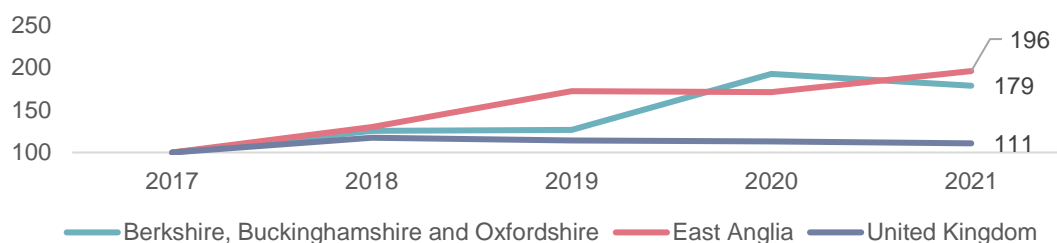
5.41 Publicly available data on levels of FDI supports the assertion that the FGCs have the ability to attract substantial international investment. **Figure 5.5** shows the growth in net inward FDI earnings for international companies for the International Territorial Level 2 (ITL2) geographical boundaries which include the FGCs. That is, the growth in profits for multinational enterprises resulting from their investment positions in the FGCs respective ITL2 regions. This is a useful measure as it is indicative of both the quantum of international firms' FDI investment positions, and how successful those positions have been (thus indicating their likelihood to continue investing).

5.42 **The ITL2 regions including the FGCs have displayed growth in net FDI earnings significantly above the UK average.** Out of the 40 ITL2 regions, the region containing Oxford and Milton Keynes has the fourth highest FDI earnings per worker – £2,700. This demonstrates that the region is among the most attractive places for foreign entities to invest in the UK, enhancing the area's global appeal.

5.43 In fact, the success of Oxfordshire's FDI potential is well evidenced. According to information provided by OxLEP, **Oxfordshire alone has delivered over 250 foreign direct investments into Oxfordshire at a value of over £2.3bn over the past five years, safeguarding and creating over 4,500 jobs** – many in high value sectors that underpin Oxfordshire's science and technology superpower credentials.

Figure 5.5 Net inwards FDI earnings in Berkshire, Buckinghamshire and Oxfordshire has taken off in recent years, far outstripping national rates of growth in FDI.

Growth in total net earnings from foreign direct investment in the UK (inward), 2017-2021 three-year rolling average (2017=100).



Area (ITL2)	FDI (inward) earnings per worker	Rank of growth (out of 40)
Berkshire, Buckinghamshire and Oxfordshire	£2,700	4
East Anglia	£2,000	6

Source: ONS, 2022. Foreign direct investment involving UK companies by UK country and region, (directional): inward

⁵⁰ Financial times, 2023. Oxford-Cambridge Arc revived via new British regional partnership. Retrieved from <https://www.ft.com/content/07de1a5b-f8ab-4661-9614-189cdcf5720f?sharetype=blocked> accessed June 2023

⁵¹ Laboratory News, 2022. Oxford spin-out MiroBio bought by biopharma leader for £0.3 billion. Retrieved from <https://www.labnews.co.uk/article/2091846/oxford-spin-out-mirobio-bought-by-biopharma-leader-for-0-3-billion> accessed June 2023

- 5.44 The story in East Anglia, which contains the other three FGCs, is more mixed. Whilst it ranks above the median for growth in inward FDI over the last five years (16th fastest growth out of 40 regions), rates of growth have been slightly below the national average, given the national average (mean) is inflated by a small selection of very high performing areas (London, Oxfordshire etc.). Yet the story at the East Anglia level masks FDI successes that have been achieved at the Cambridgeshire and Peterborough Combined Authority level specifically. Data at this level suggests that the area has recorded 98% growth in inward FDI over the period 2015-2020, 11 percentage points above the national growth rate. On a per worker basis, the combined authority attracts £53,100 of inward FDI per worker, substantially above the East Anglia average. **It is clear from this data, as well as the examples of success stories presented earlier on, that almost all of the FGCs represent hotbeds for inward FDI into the UK economy.**
- 5.45 More recent and disaggregated data on FDI is available through EY's annual UK attractiveness survey, which examines the performance and perceptions of the UK (and cities within the UK) as a destination for FDI.⁵² The survey found that although the UK's FDI levels are up since the pandemic, recovery has lagged behind European volumes. However, the UK Government's focus on more impactful investment appears to be materialising, with the UK averaging 68 jobs per FDI project, significantly higher than Germany's average of 45 jobs per project, and 38 jobs per project in France. The survey demonstrates Cambridge's and Peterborough's strong contribution to the UK's FDI, with **Cambridge ranked by survey respondents as the tenth most attractive city for foreign investment in the 2022, and Peterborough ranked at the 11th most attractive city in 2021.**⁵³
- 5.46 In attracting substantial FDI into their economies, the FGCs are helping the UK Government to maximise the benefits of international investment and trade, through assisting them in achieving three key policy goals:
- **Global Britain in a Competitive Age,**⁵⁴ by helping the country to become a science and technology superpower;
 - **The Ten Point Plan for a Green Industrial Revolution,**⁵⁵ with ambitions across all FGCs to help the country build back better, support green jobs and accelerate the country's path to net zero; and
 - **Export Strategy: Made in the UK, Sold to the World,**⁵⁶ by accommodating leading innovative exporting businesses that are able to respond to emerging export opportunities around the world.

Skill levels encourage sustainable growth

*High resident skill levels are required to ensure cities can capitalise from the investment they receive to deliver sustainable growth. Its needs to be ensured that there is a sufficiently skilled population to fill the jobs that will arise from economic growth. **All FGCs either have strong resident skill levels, or a strong potential to grow their resident skill levels if they were to receive the right support.***

- 5.47 As might be expected given the presence of their world renowned research institutions, the residents of Oxford and Cambridge have exceptionally high qualification levels in comparison to the other FGCs, as well as national comparators (**Figure 5.6**). Further, at the slightly wider level of geography for which data is

⁵² EY, 2022. Adapting to a changed world – EY Attractiveness Survey UK

⁵³ EY, 2021. A window of opportunity – EY Attractiveness Survey UK; Note the 2022 survey only presents the top 10 cities, therefore it is unable to be ascertained how Peterborough has moved since 2021.

⁵⁴ Cabinet Office, 2021. Global Britain in a Competitive Age: the integrated review of security, defence, development and foreign policy.

⁵⁵ Department for Business, Energy and Industrial Strategy, 2020. The Ten Point Plan for a Green Industrial Revolution

⁵⁶ Department for International Trade, 2021. Export Strategy: Made in the UK, Sold to the World.

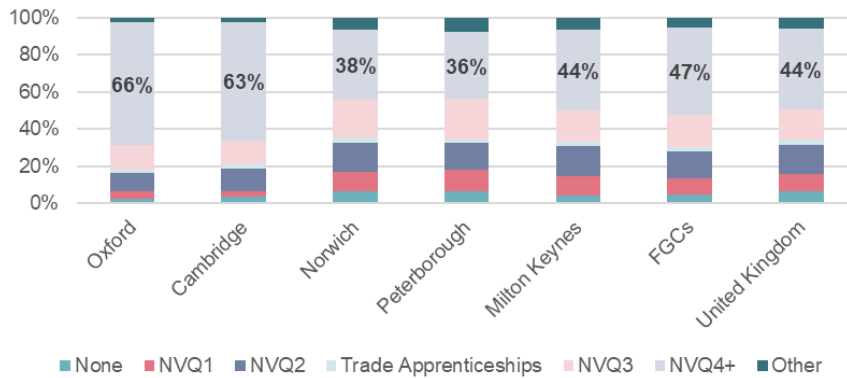
available, Berkshire, Buckinghamshire, and Oxfordshire (containing Oxford and Milton Keynes), resident skill levels are impressive at the European level (Figure 5.7).

5.48

This trend continues when observing the qualification levels of the workforce (as opposed to the analysis above which is resident based). Approximately 40% of Oxford and Cambridge’s employment is in the UK’s top 10 industries⁵⁷ for prevalence of employees with higher degree level qualifications – around 20 percentage points higher than the England average. This is mainly driven by high levels of employment share in education and scientific research, which together make up 23% of Oxford’s employment, and 18% of Cambridge’s employment.

Figure 5.6 The strong performance of the FGCs are driven primarily by Oxford and Cambridge

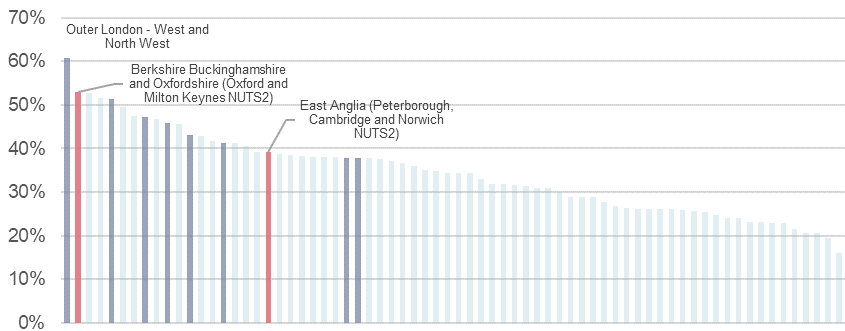
Skill levels of the FGCs (2021)⁵⁸



Source: ONS, 2022. Annual Population Survey 2021

Figure 5.7 The FGCs stand out as highly skilled populations in Europe

Share of workforce with degree-level qualifications in European NUTS2 regions over 1 million residents (%)



Source: OECD, 2022. Regional Statistics Database. Note definitions of geographical areas are limited by OECD’s statistical boundary definitions. OECD data taken from Eurostat, which presents this data at a NUTS2 geography.

⁵⁷ Out of a possible 75 industries.

⁵⁸ The below data presents Norwich PUA – Norwich and Broadland local authorities. Broadland, whilst covering some of the urban extent of Norwich, also covers large rural areas surrounding Norwich. This in part explains the different skill levels between the two local authorities, where Norwich’s percentage of 16-64 year old residents with an NVQ4+ qualification is closer to the national average, with 41% in comparison to Broadland’s which is 34%.

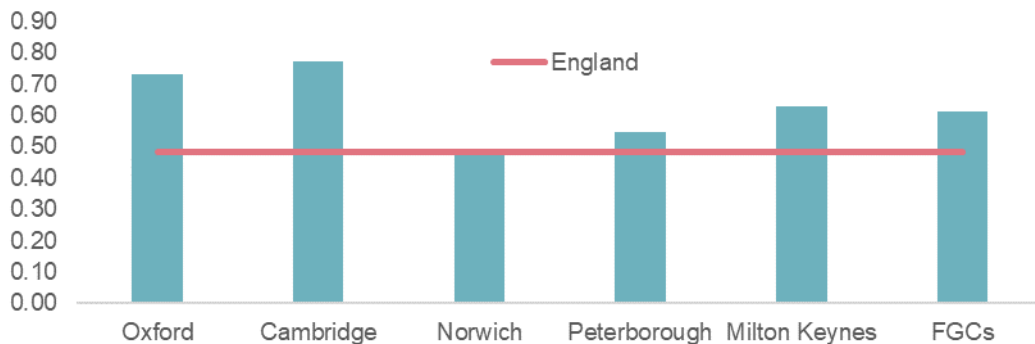
Requirement for transport supply which meets the demands of high in-commuting

*The attractive employment opportunities within the FGCs form the bedrock of their economies. However, this means that many people commute in to the FGCs to access these jobs. This naturally puts strain on the transport network, as during the day, more people are accessing the FGCs than is meant for the relative size of the cities. If the FGC companies are to continue to deliver benefits to the UK economy, **then the high-levels of in-commuting undertaken by their workers must be facilitated through adequate infrastructure investment.***

- 5.49 Previous analysis by CfC identified the increasing pressure on transport and other related infrastructure as a key constraint on growth for the FGCs.⁵⁹ Data confirms that high quality job opportunities result in high levels of in-commuting. **For example, 2011 Census shows that 40% of the FGCs⁶⁰ workers live outside the city boundary and commute in – significantly higher than the national city average of 26%.⁶¹**
- 5.50 Commuting data from the 2021 census is not available at time of writing. However, the above average worker to residents ratio of the FGCs would imply they are employment dense locations that are still experiencing high levels of in-commuting (**Figure 5.8**). In-commuting into the FGCs is not the only factor placing pressure on their transport networks. The growing population levels of the FGCs described below add further impetus to the requirement of a resilient transport network.

Figure 5.8 The FGCs have high workers to residents ratio, implying high levels of in-commuting

Workers to residents (2021 employment to population) ratio



Source: ONS, 2022. BRES 2021; ONS, 2022. 2021 Census – Table TS011 – Number of usual residents in households and communal establishments

Population growth

The FGCs are experiencing above average levels of population growth. In the cases of Cambridge, Peterborough, and Milton Keynes, population growth has been significant – over twice the England levels over the past decade. This above average population growth, in combination with the high levels of in-commuting demonstrated above, will continue to put strain

⁵⁹ Centre for Cities, 2016. Fast Growth Cities – The opportunities and challenges ahead

⁶⁰ In previous analysis, Swindon was a member of the FGCs.

⁶¹ Centre for Cities, 2021. Fast Growth Cities – 2021 and beyond

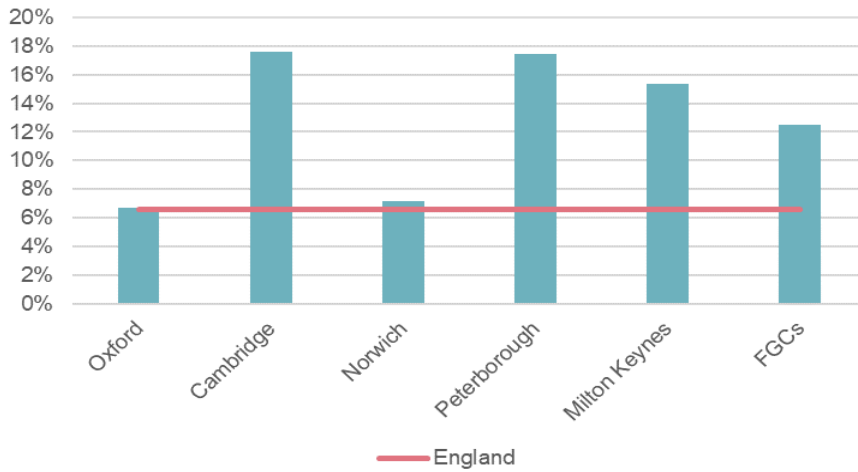
on local services. Adequate investment, such as investment in transport, social infrastructure, power, sewage and housing in underlying infrastructure, is required to accommodate this population growth.

5.51

All FGCs are experiencing on or above average levels of population growth (Figure 5.9). In fact, Cambridge had the 5th highest rate of population growth (17.6%) of local authorities in England between 2011 and 2021, whilst Peterborough was the 6th fastest growing (17.4%) and Milton Keynes 10th (15.3%). In contrast to other FGCs, Oxford’s population growth has been slower. This might in part be explained by its very high levels of housing unaffordability in the city.

Figure 5.9 Cambridge, Peterborough and Milton Keynes are driving above average rates of population growth within the FGCs, compared to the national average

Percentage change in population 2011-2021



Source: ONS, 2022. 2021 Census – Table TS011 – Number of usual residents in households and communal establishments; ONS, 2022.2011 Census – Table KS101EW – Usual resident population

Contributions to the levelling up agenda

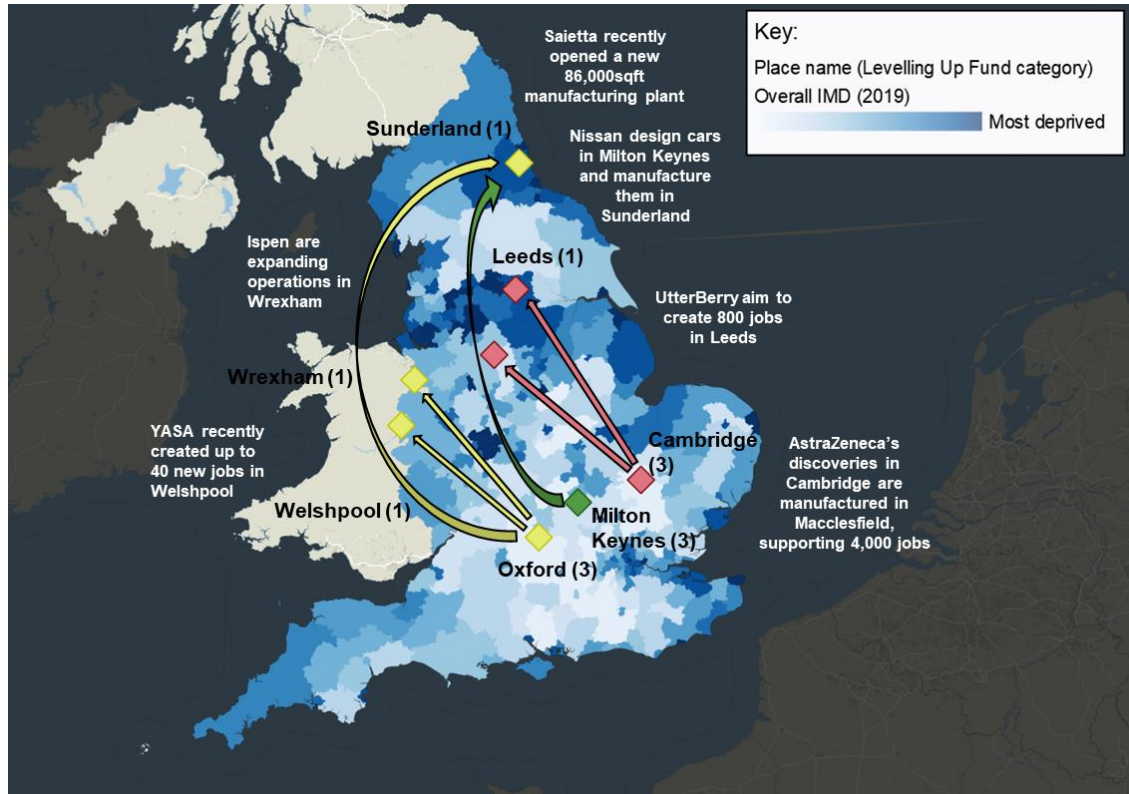
Companies within the FGCs have a proven track record for expanding their operations from the FGCs to some of the most deprived parts of the UK. This results in the economic benefits these companies yield being spread throughout the UK. Investing in the underlying conditions that enable these economies to thrive will ensure that they can continue to level-up the UK.

5.52

A number of FGC companies and developments have been shown to generate jobs and economic activity in some of the most deprived areas of the UK (Figure 5.10). The FGC-based companies utilised as case studies here, have supported further economic activity (and hence jobs) in Welshpool, Wrexham, Sunderland, Leeds, and Macclesfield respectively, typically through expanded operations and manufacturing requirements. All of these places (other than Macclesfield) were recognised by the Government as being the highest priority (priority category one) for levelling up. It is demonstrated by this small selection of case studies that the knowledge intensive industries within the FGCs often serve as a gateway for other UK regions.

Figure 5.10 FGCs generating jobs and economic activity throughout the UK

A selection of where FGC companies have generated economic activity



Source: MHCLG, 2019. English indices of deprivation 2019; DLUHC, 2022. Levelling Up Fund Round 2: updates to the Index of Priority Places
 Note: 'Rank of average score' has been used for local authority deprivation. Deprivation for Wales is not presented as this is a distinct data set.

5.53

The PRP's 'Supercluster' of innovative companies present clear opportunities to level up the rest of the UK through supply chain linkages and expansion of their activities. This is evidenced in the quote below. Oxford Space Centre is a prime example of this, with operations expanded to other regions in the UK, including the Northwest, Scotland, and the East Midlands.

*The knowledge intensive nature of the Oxford-Cambridge Supercluster presents an opportunity to leverage its position in and across supply chains both within and beyond the cluster. Significantly, it is the global linkages of the Supercluster that provide an important source of competitive advantage to the wider UK economy through its connections into both global value chains and international markets. In this respect the Oxford-Cambridge Supercluster can serve as a gateway for other UK regions.*⁶²

Oxford-Cambridge Supercluster

⁶² Oxford-Cambridge Supercluster, no date. East West Rail as a Catalyst for Turbocharged Economic Growth.

Attracting and retaining a global workforce

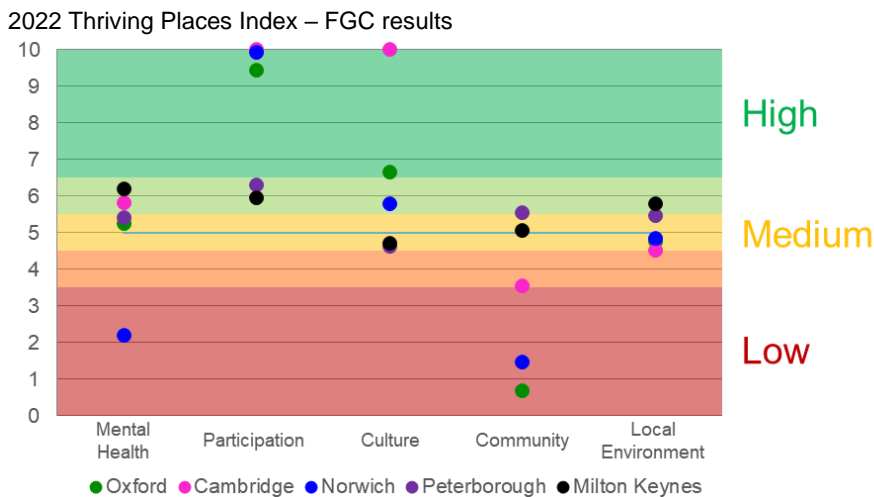
*The FGCs are cities where the residents have high levels of pride in where they live. This is reflected in high levels of community participation, relatively strong wellbeing, and a developed cultural offer. In addition to the attractive employment opportunities referenced throughout this report, people are attracted to the FGCs because they are great places to live, **meaning the economic growth facilitated through investment is sustainable.***

5.54 **Figure 5.11** displays results from the Thriving Places Index (TPI), outlining how the FGCs rank on a number of ‘softer’ measures of wellbeing. The FGCs generally perform strongly on these measures. In particular, every FGC scores highly in community participation which covers levels of volunteering, memberships in clubs, societies and organisations, and general election turn out.

5.55 Another key reason making the FGCs an attractive place to live is their size. They are large enough to ensure residents have the amenities, services, and cultural offer (see **Figure 5.11**) they would expect from a city, whilst being small enough such that residents can leave their urban extent to access nearby countryside in relatively small travel times. Being great places to live allows the FGCs to attract and retaining a global workforce.

5.56 This unique balance of employment, culture, access to services, and access to countryside means that residents have a high sense of pride in where they live. Sense of pride is inevitably difficult to measure,⁶³ however Legal and General’s index of parliamentary constituencies’ place satisfaction is one possible measure.⁶⁴ **Under this index, the majority for FGC parliamentary constituencies’ residents report above average levels of place satisfaction, with Oxford East, Cambridge, and Norwich South being in the top 15% nationally.** The parliamentary constituencies covering the urban extents of Milton Keynes and Peterborough average as being in the 50th and 70th percentile respectively.

Figure 5.11 The FGCs perform strongly on the whole against a range of ‘softer’ measures



Source: Centre for Thriving Place, 2022. *The Thriving Places Index*

⁶³ Jack Shaw, Owen Garling and Michael Kenny, 2022. Townscapes – Pride in Place

⁶⁴ Legal and General, 2021. Place Satisfaction Index. Retrieved from <https://places.demos.co.uk/most-urgent> accessed June 2023

6. The future of the FGCs and the potential return on investment

6.1 If the FGCs receive investment (public & private) and government support to grow, then there is a real opportunity to make the future even brighter than the past. Various studies have modelled the economic potential of delivering East West Rail, this geographical area's ability to attract globally competitive firms, and the importance of future growth in high value sectors. These are consistent factors which mean that investing in the FGCs would deliver growth which would be high value and predominantly additional at the national level. For this reason, **supporting growth here should be a government priority**.

6.2 **Scenario planning is used to explore uncertainty about the future; this is particularly pertinent given the current political and economic uncertainty that exists in the globalised world.** It starts with the idea that we are not sure what the future will look like, so instead considers several different states of the future. It then aims to future proof decision making and improve resilience of economic forecasting.

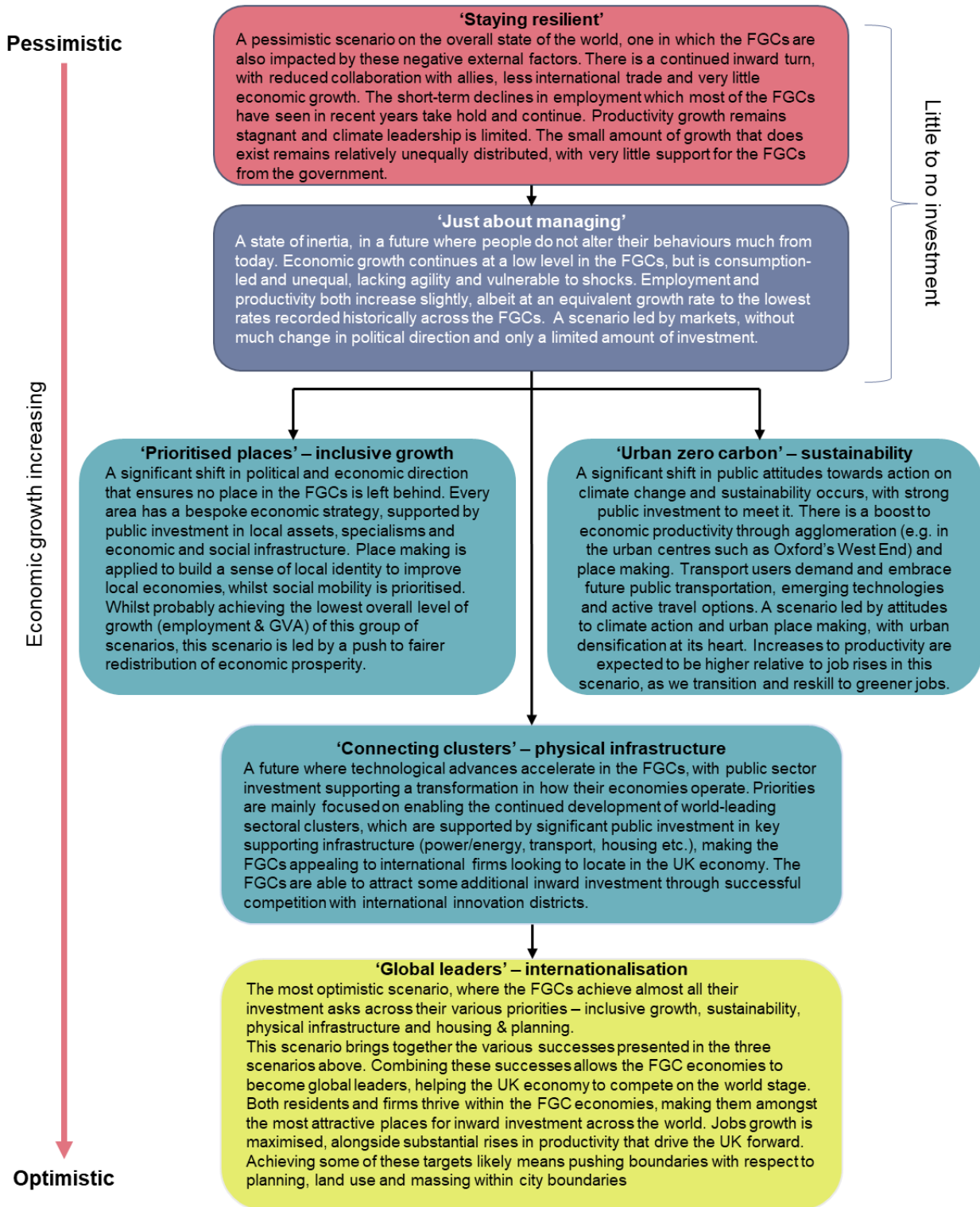
6.3 This report sets out some potential future scenarios, or 'states of the world', in which the FGCs could find themselves. Some quantitative forecasts estimating broad levels of economic growth that the FGCs could collectively achieve in these different scenarios are also provided. **The scenarios outlined below represent uncertainty across the following external strategic factors:**

- Growth in the population and the economy;
- National policy on the level of fiscal commitments, environment and sustainability;
- Spatial planning policy and economic distribution, at both a national and local (the extent of focus on urban densification) level;
- Developments in international policy and globalisation (such as trade agreements), including appetite and support for driving foreign direct investment;
- Technological advancement and uptake; and
- Social and behavioural change.

Future states of the world

6.4 Descriptions of the future economic growth scenarios in the FGCs are provided in **Figure 6.1**, qualitatively outlining how we would expect economic growth indicators (employment, GVA and productivity) to perform in each of these future states of the world. These scenarios range from a declining economic prosperity scenario, through to a transformational economic growth scenario where the FGCs are able to secure the investment they require to make their economies more productive and ensure sustainable long term economic growth.

Figure 6.1 Future economic growth scenarios in the FGCs



What are the challenges and opportunities?

- 6.5 As set out throughout this report, **there are many things to be very optimistic about for the FGCs**. They are all home to successful and growing clusters, with specialisms in sectors expected to grow considerably and productively in the future. These specialisms are such that the cities compete on a global scale, with a plethora of examples of international investment, ground-breaking new products, and impressive export statistics. However, there are also a number of factors already constraining growth in the FGCs.
- 6.6 The investment priorities and asks detailed in **Chapter 4** are focused on these key constraints. A lack of sufficient housing that is affordable to workers within sustainable commuting distances is making it hard for the labour markets to expand; physical infrastructure is needed to facilitate areas of growth to make them sustainable locations which are attractive to investors; and a lack of appropriate commercial floorspace is hampering businesses' ability to grow and locate within these cities, **meaning that pressure is being placed on their wider FEMAs to accommodate growth. These factors are increasing the price of doing business, as well as the cost of living, which in turn means that these cities experience significant inequality**. As well as economic growth in productive highly skilled jobs, there is a need to narrow the divide prevalent across society and generate inclusive growth which benefits the whole community.

What does this mean for jobs, economic output and tax revenues?

- 6.7 All scenarios are projected forward to 2036 at consistent rates of growth each year, after which growth is reduced to 2050, reflecting longer term challenges and uncertainties around the automation of economic activities. Future productivity growth is expected in all scenarios, to differing degrees, and is benchmarked against the OECD's forecasts for real increases in GDP per capita, which project continued growth in productivity at the national level in the period to 2050.⁶⁵

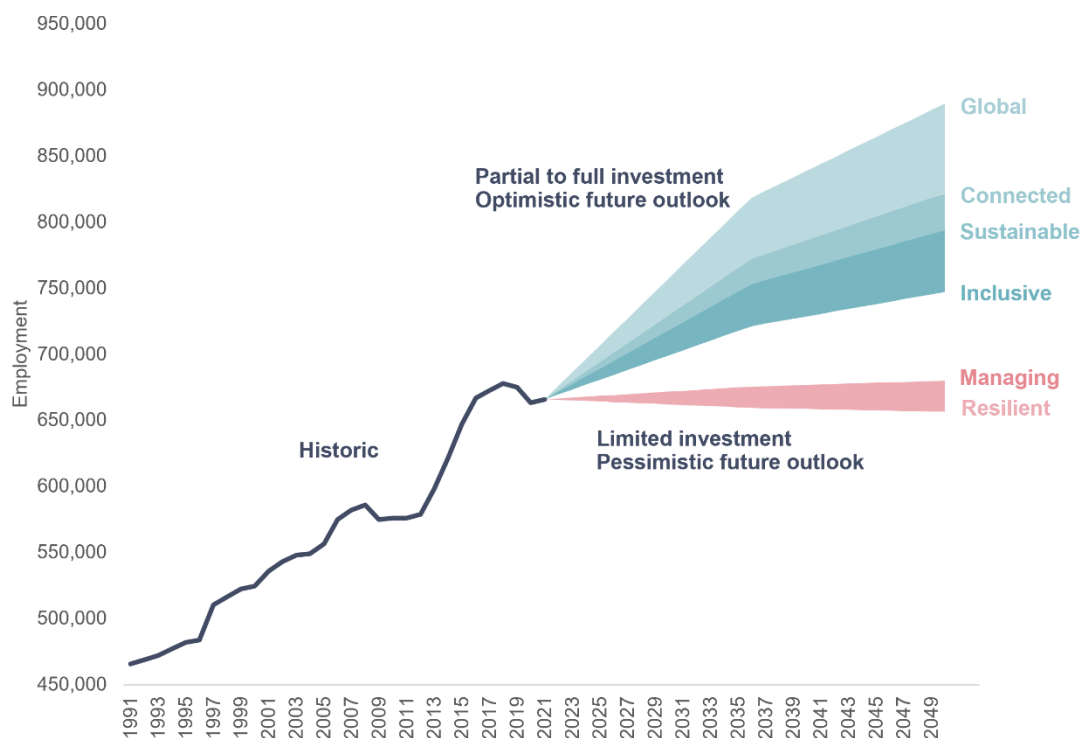
Employment

- 6.8 As of 2021, the FGCs were home to 666,000 jobs. **This could rise to a workforce of almost 890,000 by 2050, in the most bullish scenario**. As **Figure 6.2** shows, the resilient scenario sees a long term loss of almost 10,000 jobs across the FGCs. The loss of these jobs are felt predominantly in Norwich. In the **middle scenarios - which start to factor in increasing levels of public investment into the FGCs - employment growth ranges from 81,000 to 156,000 new jobs being created across the FGCs by 2050**. Placing this in context, each of the FGCs have their own business as usual scenarios ranging from 17,000 to 28,000 new jobs over approximately a 20-year period. These are broadly consistent with the annual rates of new jobs across these middle scenarios.
- 6.9 **The global leader scenario sees all FGCs achieving their visions for international competitiveness, supported by substantial public sector investment, and would result in an estimated 224,000 new jobs by 2050**. Placing this in context, the highest scenarios in the latest Oxford and Milton Keynes local plans have them each achieving 32,000 – 33,000 new jobs over a 20-year period. Similarly, both Norwich and Cambridge have more bullish targets, although they crucially include wider geographic areas. Jobs in the FGCs in 2050 range from 656,000 to 890,000 depending on the level of investment, wider economic climate and rates of growth achieved.

⁶⁵ [The Long Game: Fiscal Outlooks to 2060 Underline Need for Structural Reform - OECD](#)

Figure 6.2 The FGC workforce could grow to up to 890,000 by 2050 if they are able to become global leaders and establish urban innovation districts

Projected employment growth over time under different future scenarios⁶⁶



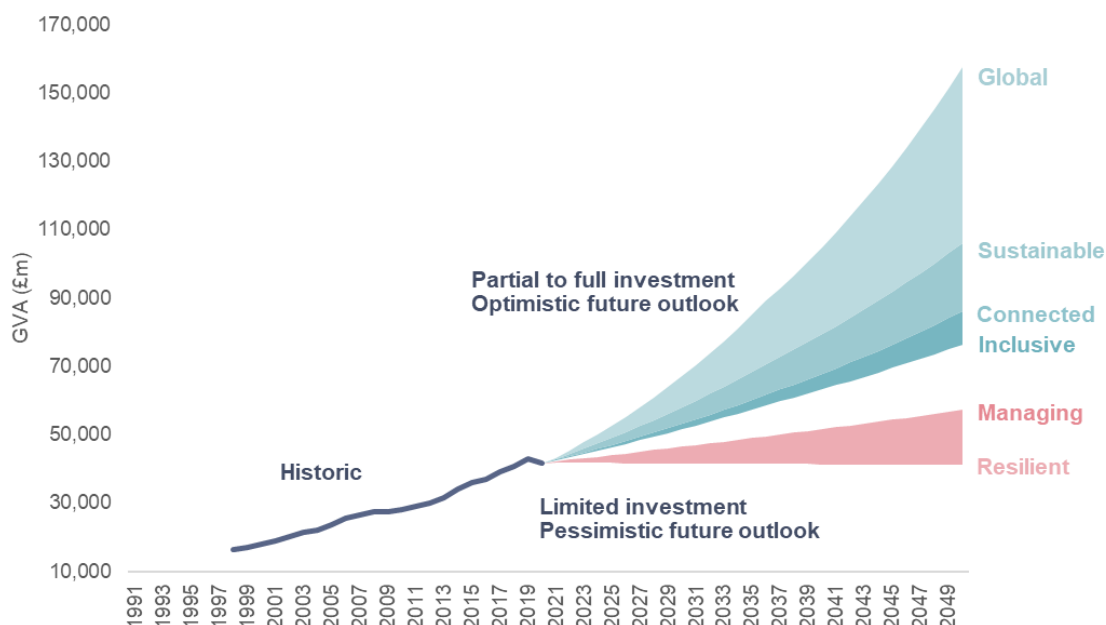
Economic output (GVA)

- 6.10 The FGCs together contributed an estimated £42bn to the national economy in 2020, equating to estimated tax revenues of £12bn-£17bn. **The scenarios build up to the potential for an overall economic contribution of approximately £158bn per year in the global leader scenario.** Within the partial investment scenarios, GVA increases to between £76bn-£106bn per year in the long term. The size of the prize naturally rises the more ambitious and successful the scenario that is assessed – with the biggest potential gains arising through the global leader scenario.
- 6.11 The opportunity to increase tax revenues and overall economic value is highest in the global success scenario. The total economic contribution of the FGCs more than trebling in this global scenario to around £158bn each year, would in turn see annual tax contributions to the UK exchequer rise to £47bn - £63bn. The Inclusive, Connected and Sustainable scenarios also see overall tax contributions to the UK exchequer rising to £23bn - £42bn each year.

⁶⁶ There is naturally some potential that employment growth could fall within the white area of the graph, given significant uncertainty about the future state of the world. This is considered, at the time of writing, unlikely, as it would most probably involve a scenario which either combines investment increases with a sharp global downturn, or a positive global outlook with very little investment, both of which are deemed relatively unlikely. The same reasoning applies for productivity and GVA projections.

Figure 6.3 GVA is projected to rise significantly, if investment is secured into the FGC economies

Projected GVA growth to 2050



But what does this mean?

Placing the forecasts into context

6.12

Projections of future economic growth mean little without context. The forecasts presented alongside these future scenarios outlined in this report amount to the following:

- The forecast **growth in jobs in the highest (global) scenario is equivalent to more than the size of the whole of Milton Keynes' current workforce**, or approximately 25% higher than the total number of jobs currently supported in the Canary Wharf cluster (179,000).⁶⁷
- In 2017 a study found that the globally successful Kings Cross redevelopment was home to 10,000 jobs, generating output worth £600m each year.⁶⁸ Not investing in the FGCs (the most pessimistic scenario) could see the economy lose the value equivalent to nearly the whole of the Kings Cross redevelopment. Conversely, **investing in the FGCs economies could deliver an employment uplift worth between eight and twenty two times the uplift created at Kings Cross, which forms part of another thriving UK urban innovation district in London.**
- The **difference between the global scenario and the highest other scenario** (sustainable) in terms of total economic contribution (£52bn) **is equivalent to more than the current size of the FGC economies** – demonstrating the potential scale of new additional value which could be realised by investing in global competitiveness. **If we don't invest in these globally competitive places, a large portion of this value would likely be lost to international competitors.**

⁶⁷ Canary Wharf Group, 2021. Canary Wharf Group Fact Sheet

⁶⁸ Regeneris Consulting, 2017. The Economic and Social Story of King's Cross, A Final Report

The potential return for the UK Government

Undiscounted

- 6.13 Compared to existing public sector receipts (£3.1tn in 2022), the undiscounted uplift in tax revenues to the UK exchequer achieved by the FGCs in the investment scenarios by 2050 amounts to:
- 0.2% to 0.6% increase on 2022 levels of public receipts in the middle investment scenarios (inclusive, sustainable and connected); and
 - 1.0% to 1.3% increase on 2022 levels of public receipts in the global leader scenario.
- 6.14 Not all of this uplift in tax revenues, however, will be additional at the UK economy level. It is likely that some economic activity could be displaced from elsewhere in the UK (e.g., knowledge economies in London), albeit given the FGCs role in driving the UK's international competitiveness it is expected that a sizeable chunk of this uplift will be displaced from competitors abroad. For the purpose of this analysis, an additionality rate of 25% is conservatively assumed at the national level, in line with Green Book (and DLUHC) guidance. Applying this factor, this uplift in (undiscounted) tax revenues is expected to amount to an additional 0.1% to 0.2% in the middle investment scenarios and 0.2% to 0.3% in the global leader scenario, compared to 2022 levels of receipts.

Discounted (NPV)

- 6.15 Taking the difference between the forecast GVA in the increased investment scenarios and the projected low investment scenarios allows for an estimation of additional economic growth created within the FGC economies. Applying a conservative 25% additionality factor to this growth at the national level and converting GVA into tax revenues generated, it is estimated that **the UK Government would receive at least £300m per annum in additional tax revenue by 2028 by increasing their support for the FGCs. This would rise to £1bn additional annual tax revenue to the UK exchequer by 2043.**
- 6.16 This additional tax revenue created by the initial investment in the FGCs can help fund substantial investment in the FGCs and across the rest of the UK. For example, **it is estimated that the total cost of East-West Rail (approximately £5bn) would be paid back in 8 to 18 years through the economic growth delivered.** This is a substantially faster timeframe than a transport scheme's usual life, assumed to be 60 years in government guidance. Dependent on the investment scenario realised, there would also be a further £6bn to £28bn (NPV) in additional tax revenues for the UK Government to invest in other projects up to 2050.
- 6.17 If investment is not obtained to overcome existing constraints in these globally competitive cities, a large portion of this potential economic growth and associated increase in government revenue would likely be lost to international competitors. **Bold and decisive government interventions in support of FGC economies would ensure those city regions can maximise their contribution to a thriving UK economy driven by long-term, sustainable, and knowledge-based growth.**

A stylized map of the United Kingdom and Ireland, rendered in a dark grey color. Five glowing yellow dots are placed in the southeast of England, indicating specific locations. The map is set against a light blue background that transitions into a dark blue gradient at the bottom.

Contact Us

volterra.co.uk

info@volterra.co.uk

020 4529 1739

Chester House
1-3 Brixton Road
London
SW9 6DE

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