

# UNIVERSITIES AND 'ECONOMIC PLACEMAKING'

ASSESSING THE CURRENT AND  
POTENTIAL ECONOMIC IMPACT  
OF UNIVERSITIES ON THEIR  
PLACES

DESK-BASED EVIDENCE REVIEW  
BY JESSICA REDMOND AND JACOB  
COBURN



**National Civic**  
Impact Accelerator

# EXECUTIVE SUMMARY

This evidence review explores the ways in which universities impact on the economy of their places.

Evidence on economic impacts is often focused on the national level, and therefore there is limited place-based evidence. However, numerous theories of economic 'placemaking' propose a key role for universities to shape both local and national ecosystems, and a rich evidence base also speaks to ways in which universities may contribute to existing economic inequalities both locally and nationally. This highlights a demand for new research to address gaps in the evidence for effective placemaking approaches for civic universities.



# INTRODUCTION

In a 'knowledge-based' economy, the role of universities in shaping the supply, demand and infrastructure in their local places is increasingly important. Under this paradigm, the university often focuses on two areas: inventing new and more productive technologies through research; and improving the skills of the workforce ('human capital'). However, after the success of regionally-focused entrepreneurial universities such as Stanford and MIT in the United States, the university is now recognised as a broader actor. Rather than bestowing indirect benefits to the economy through existing core activities of teaching and research, universities are reimagined; regionally-engaged, and supporting local entrepreneurship, regional innovation strategy, and structural economic change.

With this reimagining comes high ambition. Universities are now placed at the heart of numerous policy initiatives to address regional inequality, the transition to high-tech manufacturing, and to improve intergenerational social mobility. Achieving all these objectives at once (or at all) poses challenges and tensions, particularly with limited funding and opportunities. For example, the Institute for the Future of Work has highlighted that funds for hi-tech innovation in England have mostly concentrated in the 'Golden Triangle' of Oxford, Cambridge and London, and more generally in the South and East of England (Rohenkohl et al., 2024). In addition, not all the economic impacts of a university in their place are positive, and increasingly, models of development that focus on GDP growth have come under criticism.

This evidence review explores the role of universities in the economic development of their places. It raises the challenge that the relentless pursuit of economic growth may not be sustainable or equitable overall, and draws attention to alternative paradigms that universities have proposed. Under these alternative paradigms, universities still have a strong role in economic 'placemaking', which here refers to transforming places in ways that catalyse opportunities for people to work together.

Evidence of the economic impact of universities' place-based impacts is highly limited. Most economic impact assessments for universities, and economic theory about the potential impact of universities, is focused on the national level. Further work is needed to properly evidence and support university decision-making in engaging with civic responsibilities to enhance the wellbeing of their local places.

## OVERVIEW OF EXISTING EVIDENCE

The changing perspective on the role of universities in the economy can be traced to emerging thought on the ‘knowledge economy’ in the latter half of the 20th century (see Stiglitz, 1999). The knowledge economy is an economic system where innovation and experimentation (‘knowledge-intensive activities’) becomes principle in production and therefore in driving economic growth (Unger, 2019). For example, firms such as Apple focus on the rapid creation of new products and ideas rather than simply scaling their current production with greater capital or labour investment. Pursuing this model of growth became a policy focus in the UK under Blair (1997 – 2007), envisioning the cultivation of workers’ skills through education, investment in research, and competition through low ‘laissez-faire’ market regulation (O’Donovan, 2020).

In the 2020s, researchers have criticised this model for driving unprecedented economic inequality. According to the World Inequality Database (2023), the share of national income going to the top 1% and top 10% of earners in the UK has been steadily rising since the 1980s, reaching 12.7% total share for the top 1% and 35.8% of the total share for the top 10% in 2021. Regional economic inequality has also been increasing, characterised by large differences in productivity between London and the South-east, versus the rest of the country (Stansbury et al., 2023).

The economic gains from knowledge-based activities appear to be isolated to a vanguard of companies and places – for example Silicon Valley in California, and in London and the South-east of England. Moreover, the economic growth driven by the knowledge economy has seen some knowledge workers experience enormous wage growth, whilst rising automation and globalisation narrow the availability of high paying jobs for others (Acemoglu, 2019).

Recognising these challenges, what role could universities play in addressing this imbalance? Universities can affect their local places and the national economy in a wide range of ways, helping the UK achieve ‘inclusive growth’ - economic growth that combines increased prosperity with reduced inequality - or move to a different paradigm of prosperity altogether.

This evidence review considers the priorities laid out by three key documents that call for universities to play a pivotal role in economic placemaking to capture the most common and pressing challenges across the higher education sector.

Key Documents	<p align="center"><b>'Putting Universities in their Place'</b></p> <p align="center">Kempton, L., Rego, M.C., Alves, L.R., Vallance, P., Serra, M.A., Tewdwr-Jones, M. (2021)</p>	<p align="center"><b>'Investment Zones: technical document'</b></p> <p align="center">Department for Levelling Up, Housing and Communities (2023)</p>	<p align="center"><b>'EECOLE Roundtable' OECD (2022)</b></p>
<p><b>Areas of challenge or strategic aims</b></p>	<ol style="list-style-type: none"> <li>1. Anchoring local employment and expenditure in place through the direct economic impacts of HEI activities (eg, student population, staff employment).</li> <li>2. Supplying graduates and skilled workers for regional labour markets.</li> <li>3. Enabling local innovation through research, knowledge transfer and supporting wider regional innovation strategy processes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Establishing Investment Zones with 'high-potential clusters' through partnerships between central and local government, research institutions such as universities, and the private sector.</li> <li>2. Universities acting as 'Knowledge Anchors', providing business, research, and development support.</li> <li>3. Universities establishing skills programmes and generating 'future skills pipelines' within Investment Zones.</li> </ol>	<ol style="list-style-type: none"> <li>1. Entrepreneurial Ecosystems (EEs) contributing to the success of businesses, entrepreneurs, and thus economic development.</li> <li>2. Universities having a key role to influencing systems that support entrepreneurship in their place.</li> <li>3. Universities supporting EEs as leaders, by cooperating with communities and stakeholders, and coordinating innovation and development policy.</li> </ol>

Key Documents	<p align="center"><b>'Putting Universities in their Place'</b></p> <p align="center">Kempton, L., Rego, M.C., Alves, L.R., Vallance, P., Serra, M.A., Tewdwr-Jones, M. (2021)</p>	<p align="center"><b>'Investment Zones: technical document'</b></p> <p align="center">Department for Levelling Up, Housing and Communities (2023)</p>	<p align="center"><b>'EECOLE Roundtable' OECD (2022)</b></p>
	<p>4. Aligning universities' activities closely to the needs of their regions regarding human capital investment, industrial diversification, and innovation.</p>	<p>4. Building knowledge networks to support scaleup and adoption of innovations to raise local productivity.</p>	<p>4. Universities creating networks of places to connect ecosystems.</p>
<p><b>Additional notes</b></p>	<p>This Regional Studies Policy Impact Book proposes the 'ORPHIC' framework for evaluating universities and regional relationships: The <b>O</b>rientation of higher education policy; governance of <b>R</b>egional development; characteristics of the <b>P</b>lace; type of <b>H</b>EI; Institutional characteristics and <b>C</b>ontribution of the HEI.</p>	<p>The cluster model put forward in the prospectus closely mirrors the partnership model set forth in the Levelling Up White Paper (2022).</p>	<p>This document reflects the proceedings of the first EECOLE roundtable. EECOLE is a OECD policy community which seeks to connect places, businesses and people to understand the enablers of innovation and entrepreneurship.</p>

This evidence review focuses on the following strategic aims emerging from the key sources above:

- Economic impacts of university operations
- Supporting social mobility in place
- Investing in the local workforce
- ‘Placemaking’ and local innovation
- Alternative economic paradigms

Each section consists of an overview, providing the current evidence that underpins the need for action, guidance of practice and strategic plans that are in place to enact action, and evidence of the progress that universities have (or have not) achieved.

### **1. Economic impacts of university operations**

As centres for higher education and research, universities already have a significant direct impact on the economy. This impact is created through the students they attract to the local place, both within the UK and internationally, the staff they employ, creating jobs in their places, and through their procurement of local services. Although much of the evidence in this area is focused on national impact, we theorise how this might translate to impact on place.

From their operational and capital expenditure, universities had a direct Gross Value Added (ie, the contribution to economic output net of inputs from other businesses) of £40.8bn across the UK in 2021-2022 (London Economics, 2023). This reflects significant contributions across different regions of the UK, with an £8.6bn contribution to the West Midlands and a £9.4bn contribution to the East of England (Frontier Economics, 2021), although activity remains focused in London and the South-east.

Analysis by Citi-REDI at the University of Birmingham suggests that when universities assess their economic impact, they focus on the following nine themes:



Research & innovation



Teaching & learning



Employment



Educational exports



Expenditure



Social, Cultural  
Health and  
Environmental  
Impacts



Partnerships and  
collaborations



Estates and land



Business support

9 themes common in university Economic Impact Assessments.  
Data provided from City-REDI (2023)



Universities' contribution to national employment is also sizeable; across the UK universities employed 385,000 FTE jobs in 2021-2022 (London Economics, 2023a).<sup>[1]</sup> In the North-east, universities support 33,500 jobs, with an additional 60,100 in the South-west (London Economics, 2023a). The share of employment opportunities that universities hold varies by region, representing 1% of direct employment nationwide, but almost 3% of all FTE employee hours in the North-east.

The quality and distribution of this employment is questioned in the evidence. Evidence on the spatial distribution of HEI employment was focused on the current location of staff, but further evidence, using UK survey data could evaluate whether universities recruit primarily from more affluent areas.

Changes to pension funding, contract conditions and employment security have been the source of employee discontent and led to repeated strike action particularly in 2018 - 2023. Through enacting better employment practices, universities have an opportunity to resolve some of these tensions and show local leadership, for example paying the Living Wage, hiring local residents, and supporting staff to have a positive work-life balance and participate in local volunteering (UPP Foundation, 2019). To date, only 38% of all universities (73) have committed to paying the Living Wage (Heery et al., 2023). This translates to an additional £211m paid to primarily low paid and part-time workers. 'Cold spots' exist in the South-east, South-west, East and West Midlands, where less than a third of universities are Living Wage employers (Heery et al., 2023).

Recruitment practices also raise questions about whether universities promote 'inclusive' growth via their employment practices. Data from the Higher Education Staff Survey (HESA, 2022) shows that 17% of academic staff were from Black and Minority Ethnic communities in 2020-21, an increase of one percentage point year on year since 2018-19. However, in higher academic posts, this fell further with only 11% of professors from Black and Minority Ethnic communities, compared to 18% of the England and Wales population in the 2021 Census (Garlick, 2022). Furthermore, only 6.3 % of academic staff in 2020-21 had a known Disability (HESA, 2022), compared with 17.8% of the England and Wales population in 2021 (Waddington, 2023). The data also shows a gender divide, as male and female staff in administrative or other roles are split relatively equally, yet there are more than twice as many male professors then female professors (HESA, 2022). These show that although universities generate economic benefits through employment, these benefits are not distributed evenly across the population.

Universities' spending also has significant direct and indirect effects through the

---

[1] This figure aggregates both full-time and part time staff hours, meaning the total number of staff employed is higher than this number.

wider economy. Firstly, as procurers, universities can use their purchasing power to directly support businesses and employment in the local area. This spending, as well as the indirect impact of induced spending from employees and suppliers using income from the university for further spending, was estimated to add an additional £40.9bn to the Gross Value Add of universities, creating an estimated overall impact of £71.3bn in 2021-22 (London Economics, 2023a).

Attracting students both within the UK and internationally has significant positive financial impacts on universities' places, with students spending contributing to the local economy. International students spending alone was estimated to have an £18.6bn benefit to the UK economy in 2021-2022 (London Economics, 2023b). In addition, friends and family visiting these international students in 2018-19 generated an estimated amount of more than £450m (Frontier Economics, 2021). It is crucial to reference that this analysis focuses on the UK, rather than place-based impacts, and greater research is required to recognise student's regional impact.

Large influxes of students from outside the local area can also have disruptive economic effects. Universities are often posed as 'urban gentrifiers' shaping places to meet the needs of students over locals and pushing up rent to the detriment of existing residents (McNeill et al., 2021). This 'studentification' includes the rapid development of exclusive, purpose-built student accommodation, growth of 'new student areas' with a greater population density and a high proportion of Houses of Multiple Occupancy (HMOs) that suit short term rental accommodation.

Overall, universities have increasingly begun to conduct detailed assessments of their economic impact. However, many of these are focused on national impacts to GDP, rather than place-based impacts. Another limitation of these assessments is an underlying motivation to present the university in a positive light. Questions regarding the distribution of economic impacts and potential negative economic disruption caused by the university model are therefore rarely discussed as part of these assessments, forming a separate part of the evidence base. More integrated and localised assessments of the distributional effects of universities could be useful to support university-community economic partnerships.

# SPOTLIGHT ON PLACE

## ECONOMIC IMPACT OF OXFORD UNIVERSITY

A study carried out by London Economics measured Oxford University's impact on the UK economy in 2018-19. It considers the impact of a range of university activities, including:

- Research and knowledge transfer activities (£7.9bn)
- Teaching and learning activities (£422m)
- Educational exports (£732m)
- Spending of the university and its colleges (£6bn)
- Contribution to tourism (£611m)

This simple example provides one approach for how to measure and demonstrate universities' economic impact across a range of activities and sectors. Further work should consider the value of different approaches to economic impact measurement for guiding civic activity.

## 2. Supporting social mobility in place

There is a wealth of evidence that higher education is a key driver of social mobility in the UK (The Sutton Trust, 2021; Pickett, 2018). Universities have the potential to support local community members with opportunities to excel, contributing to the social mobility of local people. University education, whilst providing life enrichment through studying and becoming part of a learning community, also has economic benefits reflected in the 'graduate premium', meaning the higher wages students are expected to attract following study. Working age graduates are also more likely to be employed – seeing an employment rate of 87.3% compared to 69.6% for non-graduates in 2022 (Department of Education, 2023b).

The power of the graduate premium does appear to be fading in the UK. Estimates by the Higher Education Statistics Agency (HESA) suggest that for students born in 1990, this graduate premium by age 26 was around 10%, falling from an estimated 17% for the cohort born in 1970 (Boero et al., 2021). Yet these average numbers mask the potential to make a sizeable difference in an individual person's life. The Sutton Trust has found that young people from lower socioeconomic backgrounds who pursue higher education 'are more likely to become socially mobile into higher income brackets', with higher income gaps between graduates from disadvantaged backgrounds and their non-graduate peers (2021). The Office

of Students (OfS) has published guidance on how social mobility can be attained through teaching excellence (OfS, 2023). It urges institutions to build a culture where teaching has equal status as research, with both activities recognised as mutually reinforcing. Furthermore, the framework promotes collaboration with employers to identify and recruit graduates.

Young people's experiences are far from universal, particularly along lines of race and class. University education can support social mobility through two focuses: by increasing the intake of university graduates of working-class or other economically marginalised backgrounds (eg, the D/disabled community), and by ensuring the outcomes for those students are on par with other students. On both fronts, there appear to be significant challenges.

Regarding intake, a 2023 briefing by Lewis and Bolton for the House of Commons detailed the demographic characteristics of university students in England. They found that students who were eligible for free school meals are much less likely than others to go into higher education and were twice as likely to drop out within the first year (Lewis and Bolton, 2023). Black Caribbean pupils have particularly low entry rates to prestigious universities, and Black students generally are the most likely to drop out from higher education. Students with a reported disability are also more likely to drop out (Lewis and Bolton, 2023).

Discrepancies in intake also plays out spatially, with only one in six students from the most disadvantaged areas entering 'High Tariff' universities with strong entry requirements, compared with one in three students from the most advantaged areas (Department of Education, 2023a). Lewis and Bolton (2023) also found that students from areas with higher levels of deprivation are more likely to drop out of university, and identified evidence that long-term strategies for widening participation could work as places where local people have participated in higher education in the past display almost twice the entry rate of current local people than places with lower historic participation (Lewis and Bolton, 2023).

Once students have graduated, outcomes remain worse for lower-income and ethnic minority students. Descriptive analysis of student outcomes data below suggests universities and subject areas that admit a higher rate of students from POLAR 1 areas<sup>[2]</sup> tend to have lower graduate earnings, even when controlling for UCAS points (see below). Low-income students graduating from the same UK university earn on average 10% less (controlling for subjects and demographics) than their high-income peers who graduate from the same institution - and this is a gap that appears to increase with age (Britton et al, 2019). Lessard-Phillips et al (2018) shows that even controlling for educational and social backgrounds, ethnic

---

[2] POLAR classifies local areas into five quintiles based on the proportion of young people who enter higher education aged 18-19. POLAR1 is the first quintile - in the lowest 20% of rates of participation.

minority graduates of Russell Group universities are less likely than white graduates to experience success in the job market and are more inclined to pursue postgraduate education as a strategy to prevent short-term unemployment or underemployment. The Institute for Fiscal Studies also shows that for second generation Indian, Pakistani, Bangladeshi and Black Caribbean graduates, employment disadvantage in the labour market strongly persists compared to white peers (Platt and Zuccotti, 2021).

In the face of these figures, widening participation in education and equalising outcomes for low-income and racialised students should be among the civic universities' key goals. Past strategies for widening participation have focused on local schools and further education settings, as well as higher education. Torgerson et al (2014) evaluates interventions to improve access to higher education, identifying a series of successful strategies: financial incentives, mentoring, financial aid, role models, an emphasis on new skills with tangible outcomes, and early interventions that involve teachers and parents. They point out that the most effective initiatives are 'black box' interventions that combine multiple strategies at different points (Torgerson et al., 2014). However, this limits evidence on which strategies are working within a cluster of activities.

## SPOTLIGHT ON PURPOSE

### SOCIAL MOBILITY INDEX

London South Bank University (LSBU) established the English Social Mobility Index, which combines measures of access, continuation, and outcomes for undergraduates (excluding apprenticeships) to measure the 'social distance' travelled by graduates from each institution as well as the proportion of graduates who experience social mobility following their education.

Based on the 2023 Index (published by Higher Education Policy Institute):

- Top social mobility universities tend to be either post-1992 universities in former industrial places (Bradford, Aston, Wolverhampton, Huddersfield, Salford, Bolton), or universities in London.
- Bottom social mobility universities are post-1992 universities in already relatively wealthy places (Winchester, Falmouth, Bedfordshire, Chichester, Oxford Brookes, Gloucestershire).

### 3. Investing in the local workforce

#### 3.1 Graduate retention in place

The distribution of graduates and training throughout the country is not equal, creating inequalities in how the economic impact of skills education is distributed.

This economic impact is not simply that a higher-paid skilled worker pushes up average incomes in the region – higher skills in the local workforce improve the productivity and competitiveness of the organisations they work for, as well as the wider area through ‘knowledge spillovers’ between people in the same place. Centre for Cities notes a lack of skilled workers is a major issue for UK cities, resulting in an ‘output gap’ of lost economic potential of around £69.9bn (Swinney and Enekel, 2020). Graduates and skilled workers retained in place also spend their income locally and graduates pay local council tax, lifting the fortunes of local businesses and people through a multiplier effect.

Graduates are largely concentrated in the South-east of England, especially around London. Although there are pockets of high educational attainment elsewhere in the country, coastal and northern regions have a lower proportion of graduates, a pattern that has remained constant for the last 20 years (Overman and Xu, 2022). This disparity may reflect differences in educational attainment across and in different regions, but also patterns of mobility after graduation (Overman and Xu, 2022). Many students move to different regions to study, but then return home or move elsewhere following graduation. For students who study locally, labour market pressures often push them to move elsewhere after graduation.

About 51% of graduates in the UK remain in their place of study (The Bridge Group, 2021). Graduate mobility both reflects and reinforces inequalities in labour markets around the country. Highly educated individuals tend to concentrate in places that offer higher wages, and their presence strengthens the labour market in these places (Overman and Xu, 2022). There is a self-reinforcing interaction between the demand and supply of skilled labour, creating graduate migration and pronounced pockets of high wage areas in London and a handful of other areas.

Universities have a potential role to play here but face a tension between seeking the best outcomes for students and for their places. Graduate retention in their places of study has been found to benefit local economies and communities (The Bridge Group, 2021). Providing students and local community members with local vocational opportunities also leads to broader social impact and skills-sharing with local organisations. Yet questions remain about the availability of local jobs, and whether graduates find relevant employment opportunities when they remain in their place of study. The Bridge Group has found some evidence that graduates who remain local to their university after graduation have similar outcomes to those who move away, in terms of being in paid employment and on their desired career path

(2021). The Covid-19 pandemic and the increase in remote working also creates possibilities for job opportunities and salaries from companies in prosperous parts of the UK to be available throughout the country (OfS, 2023).

Universities can support graduate retention by providing advice on local employment, facilitating networking opportunities between students and local alumni or employers, and leveraging relationships with local businesses. To promote good outcomes for students who stay in place, the university could provide education that aligns with the needs of their places, meaning that students and businesses are prepared for opportunities locally. That said, this process can take years between the identification of new skills needs and the design of new courses or areas of focus.

### **3.2 Investments in local human capital**

Universities can also take a more holistic approach to improving the supply of skilled workers in a place, focusing not just on a 'pipeline' of new graduate students but supporting the capabilities of the existing workforce. The evidence identifies several routes to this, though there is limited evidence of impact: supporting mature learner entry into university degree programmes, vocational education for workforce development, the provision of apprenticeships that combine work and study, and organising local vocational opportunities through internships and placements to encourage greater knowledge transfer between the student body and workforce.

One of these routes, vocational education typically refers to training focused on preparing a learner (in many cases an adult learner who may be upskilling or re-skilling) for a specific job or sector of the workforce. It remains a controversial pathway, with learners facing stigma around vocational training as 'dead-end' (Markowitsch and Hefler, 2019), paired with genuine discrimination where evidence shows career advisors and teachers push racialised people and low-income students to 'low-status' educational pathways (Chadderton, 2018). Other objections to vocational routes include the narrowing of education to focusing on economic productivity following graduation, rather than enriching the lives and critical faculties of students through learning.

Analysing the impact of vocational programmes in general is difficult because the alternative route a student may have taken (eg, following an academic track, or no further education) is hard to identify. For adult workers, Bratsberg and Nyen (2020) found some evidence of positive impacts on earnings for vocational training. Research focused on vocational routes for younger people still in education finds little evidence of impact, and potentially negative returns (Matthewes and Ventura, 2022).



Yet given a rapidly changing economy, vocational education to reskill or upskill adult workers is seen as vital to avoid or mitigate regional structural economic decline. Providing 'lifelong learning' opportunities can support workers towards reskilling and move towards higher-growth and higher-paying sectors (Li, 2022). Often, this reskilling and vocational education is delivered by technical further education (FE) colleges or independent training providers. However, many universities also provide vocational education and training, both directly and supporting other institutions to deliver training. For example, Institutes of Technology (IoTs) are collaborations between FE institutions, universities and employers that specialise in higher technical education usually focused on science, technology, engineering and maths (STEM).

There is limited evidence around the marginal impact of university participation in vocational training programmes, with most nationwide studies focusing not on the provider but on other aspects of program delivery (eg, Choi et al., 2019). Evaluations of specific vocational programmes often focus on the impact of the whole programme, of which the university is part. It can therefore be difficult to disentangle the specific contribution of universities. For example, the Leeds City Region Employment Hub evaluation highlights the contribution of Leeds Beckett University to the hub based in Calderdale but does not explore how a university partnership in this area created different results than in areas without a university partnership (West Yorkshire Combined Authority et al., 2022).



# SPOTLIGHT ON PEOPLE

## UNIVERSITY PROVISION OF APPRENTICESHIPS

Apprenticeships in England are programmes where learners undertake paid part-time work, including workplace assessments, while also pursuing training in parallel at an education provider.<sup>[3]</sup> For Degree Apprenticeships, the education provider is often a higher education institution (HEI), leading to a qualification equivalent in value to a university degree. Apprenticeships may appeal to mature workers who can continue to work whilst upskilling or reskilling – around 47% of all apprenticeships started in 2021-2022 were by people aged 25 and over (Powell, 2023). A similar pattern is clear for degree apprenticeships – with 62% of starters in 2018-19 aged 25 and over (Bolton and Hubble, 2023).

Yet degree apprenticeship programmes for existing workers have been heavily criticised for using taxpayer money to fund workplace development for the already well-paid, citing the high prevalence of managerial apprenticeships funded (Cohen, 2023).

### 4. 'Placemaking' and local innovation

#### 4.1 The 'triple helix' model

Economic 'placemaking' transforms places in ways that catalyse opportunities for people to work together. Numerous theories for placemaking have been developed in which universities play a key role. The 'triple helix' model proposes that a driving force of economic development in the post-industrial economy is the production and dissemination of knowledge between universities ('science'), industry ('business') and government ('governance') (Vaivode, 2015). The interactions between these three actors foster entrepreneurship, innovation, and economic growth in knowledge-based economies. This model has been extended to also include an additional matrix, civil society, which shapes the interactions that occur between the three key actors (Kempton et al., 2021a).

Universities can take their own initiative to develop triple-helix networks in their places. For example, many UK universities actively collaborate with industry

---

[3] The cost of training is borne by the firm (where the firm is above a certain size) or the government (for smaller firms), with tax incentives introduced to encourage apprenticeship hiring.

partners to foster innovation. These collaborations can take the form of joint research projects, industry-sponsored research, international collaborations, and strategic partnerships. They allow universities to actively engage in knowledge transfer and technology commercialisation to ensure research outcomes are translated into economic impact at a local and national level. However, from an evidence perspective, the wide range in the nature and scale of collaborations, and knowledge transfer across universities, complicates the ways in which economic impact of these partnerships can be assessed (Ishizaka et al., 2020).

## **4.2 The Entrepreneurial Ecosystem model**

The Entrepreneurial Ecosystem (EE) model of placemaking goes beyond the knowledge capabilities focus of the triple helix model to capture the wider types of impact universities can have in their places. EE takes a broad view of entrepreneurship that goes beyond individuals within businesses to look at place-based systems that support entrepreneurship, and 'create conditions for long-term entrepreneurial success' (Cavallo et al., 2019). EE assumes that the community and culture of a place can impact entrepreneurship. In turn, a rich EE 'enables entrepreneurship and the subsequent creation of value at regional level' (Cavallo et al., 2018).

The EE framing invites expansive thinking on the role of universities, beyond supporting individual businesses to create conditions where a range of businesses can thrive. For example, UK universities play a vital role in shaping policies through evidence-based recommendations, and engagement with government bodies and think tanks. Place-responsive universities can play a role in the governance of EEs, providing leadership and a 'safe environment' to coordinate policies and agree on cooperative action towards 'innovation, regional development, employment and skills' (OECD, 2022).

Universities can also support local entrepreneurship by establishing incubators, accelerators, and entrepreneurship programmes that offer mentoring, funding, and networking opportunities to students, alumni, and the wider community. In-kind support, such as low-cost premises, guidance on how to file patents, and information on how to access growth financing, can also be invaluable for entrepreneurs (UPP Foundation, 2019). In the past, UK universities have provided a channel between local businesses and non-university research centres to research funds and finance, especially EU funds (UPP Foundation, 2019, p14). After Brexit, universities face both challenges and an opportunity to map what alternate sources of funding they can leverage, to continue supporting local actors.

That said, the demographics of entrepreneurs largely mirror existing privilege, with most entrepreneurs in the UK being 'white males, in their forties, who live in the South-east' (Startups, 2022). Evidence suggests the benefits and downsides of

entrepreneurship on individuals is not distributed equally across the population. Some reasons for this are racial and gender barriers to entrepreneurship, including relative access to finance, market selection, and access to applied managerial experience and training (Carter et al., 2015). Research conducted in the US by Kroeger and Wright (2021) also shows that Black-owned businesses are less likely to remain open after four years, creating a higher risk of downward economic mobility compared to White peers. There is an opportunity to conduct further research into the role of universities in coordinating their entrepreneurial ecosystem and widening participation in entrepreneurship.

### **4.3 Other initiatives in university economic placemaking**

Universities can also choose to make use of their estate management and financial resources to set up Business Improvement Districts (BIDs) in their locality. BIDs are private organisations, set up to improve an area through investment in local business. For instance, London South Bank University is a partner in the WeAreWaterloo business improvement district, with the aim of enhancing links between the university and the local business community. In 2022 there were 332 active BIDs across the country, with eight new BIDS established from 2021 (Turner, 2022).

BIDs can play a role in improving places by investing in areas, raising their profile, and improving safety. A 2016 annual survey of town centre BIDs found that they increased the income into their communities by 48% above the levy payments (Arts Council England et al, 2017). Furthermore, BIDs provide services to the community, such as regeneration, planning, place-shaping and employment opportunities, which amount to around 150 employees per BID (Arts Council England et al., 2017). Whose interests are reflected in BIDs and whether the benefits that arise from them are distributed fairly, has yet to be evaluated. This is crucial, as highlighted above, as 'studentification' plays a known role in the displacement of lower and income tenants from places. Furthermore, limited evidence exists on the economic impact of BIDs and their wider benefit for place-based communities.

Finally, universities are well placed to connect the local business community with the rest of the world, drawing on existing cross-place relationships and networks (UPP Foundation, 2019). Through their international graduates and academic relations, universities tend to have networks throughout the world, which they can leverage to attract foreign investment into local businesses, or to support international businesses to set up operations locally. Universities play a role in investment security and export promotion by driving the reputation of an area, for instance through their international graduates or by using international campuses as bridging points for local businesses (UPP Foundation, 2019).

## SPOTLIGHT ON PLACE

### NORTHERN GRITSTONE

Universities can leverage funding into the development of science and technology. The universities of Leeds, Sheffield and Manchester have partnered to establish Northern Gritstone, an investment fund dedicated to the commercialisation of science and technology emerging from within universities and other actors in the North of England (Grant and Westwood, 2022).

The fund raised £312m, showing the potential of universities to leverage their fundraising capabilities in a way that benefits the university, other local actors, and arguably all of society through the promotion of new science and technology. There is an opportunity to consider what other areas of investment might strike a similar balance between different actors' interests.

#### 5. Alternative economic paradigms

In recent years, there has been a growing recognition that the pursuit of economic growth as the sole measure of progress may not be sustainable or equitable in the long run. As societies grapple with pressing environmental challenges and widening social inequalities, alternative frameworks and paradigms have emerged to reshape our understanding of prosperity.

Several alternate concepts have gained traction, such as de-growth and Doughnut Economics. Economic de-growth challenges the prevailing growth-centric model, advocating for a deliberate reduction in resource consumption and redefining success beyond GDP growth (Büchs and Koch, 2019). Doughnut Economics, on the other hand, proposes a regenerative and inclusive economic model that seeks to balance human needs within the ecological limits of the planet (Raworth, 2017). By critically examining the limitations of the growth paradigm and exploring alternative visions, we open a space for envisioning new pathways towards prosperity that prioritise wellbeing, ecological integrity, and social justice.

Community Wealth Building is another progressive approach to economic development that has gained prominence in the US and UK (Lacey-Barnacle et al., 2023). It focuses on wealth development and retention in place by local people, by redirecting the procurement power of 'anchor institutions' such as local councils, universities, and the NHS. This means moving them away from extractive

practices, such as speculative property investment, and supporting them to become part of place-based networks beholden to local decision-making. Democratising local development will then better enable the retention of wealth and wellbeing generated locally (Redwood et al., 2022). Universities play a role in this paradigm both as anchor institutions, and as proponents of research and critical voices regarding the applications of community wealth building frameworks.

Universities are well placed to explore and promote alternative paradigms and measures of progress in line with a more sustainable future. The Diverse Economies research programme, for example, seeks to rethink what constitutes the economy' to include non-monetary economic activity, such as the informal economy (Gibson-Graham and Dombroski, 2020). In addition, given their spending power and their overall impact on the economy, universities both create new models of prosperity and test these applications through their own spending and economic activity.

## CONCLUSION

The higher education system in the UK has shifted towards the 'neoliberal', where universities compete for resources and increasingly justify their existence with reference to 'real world' economic impacts (Troiani and Dutson, 2021). Emerging economic theories about the 'knowledge economy', in which knowledge-intensive activities are identified as principal drivers of economic growth, have opened the opportunity for policymakers to place universities at the centre of plans to address regional inequality and poor productivity.

This evidence review finds evidence describing not just the direct economic impact of universities in their places, but also how universities can deliver ecosystem benefits to the knowledge economy. One challenge for the civic university, however, is that the evidence base mostly speaks to national economic impact, limiting the usefulness of evidence for universities, who may wish to tailor initiatives to their local contexts.

In addition, an equally rich body of evidence demonstrates how universities entrench existing economic inequalities through 'studentification' (gentrification-like cost-of-living pressures); barriers to entry for students, staff, and entrepreneurs; and graduate regional hypermobility. Demonstrating positive economic impact has become an existential activity for universities, creating barriers to more integrated analyses of the complex impact they have in their local areas.

Though experiencing the pressures of modern capitalism, universities can also challenge increases in the productive capacity of the economy (measured through Gross Domestic Product) as the priority for economic development. Examining universities' economic impact through new conceptual frameworks, such as community wealth building or Doughnut Economics, could open new ways for universities and communities to catalyse opportunities for people to work together and improve their places.

## BIBLIOGRAPHY

Acemoglu, D. (2019). It's Good Jobs, Stupid (pp. 1–9) [Research Brief]. Economics for Inclusive Prosperity.

Anna Stansbury, Dan Turner, and Ed Balls. (2023). How to tackle the UK's regional economic inequality: Focus on STEM, transport, and innovation. CEPR. Available at: <https://cepr.org/voxeu/columns/how-tackle-uks-regional-economic-inequality-focus-stem-transport-and-innovation>

Arts Council England, Mayor of London, and Kings College London. (2017). Improving Places: Culture and Business Improvement District partnerships | London City Hall. Available at: <https://www.london.gov.uk/programmes-strategies/arts-and-culture/arts-and-culture-publications/improving-places-culture-business>

Boero, G., Nathwani, T., Naylor, R., and Smith, J. (2021). GRADUATE EARNINGS PREMIA IN THE UK: DECLINE AND FALL? (pp. 1–75). Higher Education Statistics Agency. Available at: <https://www.hesa.ac.uk/files/Graduate-Earnings-Premia-UK-20211123.pdf>

Bolton, P., and Hubble, S. (2023). Degree apprenticeships. <https://commonslibrary.parliament.uk/research-briefings/cbp-8741/>

Bratsberg, B., Nyen, T., and Raaum, O. (2020). Economic returns to adult vocational qualifications. *Journal of Education and Work*, 33(2), 99–114. <https://doi.org/10.1080/13639080.2020.1722988>

Britton, J., Drayton, E. and Van der Erve, L. (2021). Which university degrees are best for intergenerational mobility? Institute for Fiscal Studies. Available at: <https://ifs.org.uk/publications/which-university-degrees-are-best-intergenerational-mobility>

Britton, J., Dearden, L., Shephard, N., and Vignoles, A. (2019). Is Improving Access to University Enough? Socio-Economic Gaps in the Earnings of English Graduates. *Oxford Bulletin of Economics and Statistics*, 81(2), 328–368. <https://doi.org/10.1111/obes.12261>

Büchs, M., and Koch, M. (2019). Challenges for the degrowth transition: The debate about wellbeing. *Futures*, 105, 155–165. <https://doi.org/10.1016/j.futures.2018.09.002>

Cai, Y., and Amaral, M. (2021). The Triple Helix Model and the Future of Innovation: A Reflection on the Triple Helix Research Agenda. *Triple Helix*, 8(2), 217–229. <https://doi.org/10.1163/21971927-12340004>

Cannings, J., Halterbeck, M. and Conlon, G. (2023). The benefits and costs of international higher education students to the UK economy. London Economics. Available at: <https://londoneconomics.co.uk/wp-content/uploads/2023/05/LE-Benefits-and-costs-of-international-HE-students-Full-Report-2.pdf>

Carter, S., Mwaura, S., Ram, M., Trehan, K., and Jones, T. (2015). Barriers to ethnic minority and women's enterprise: Existing evidence, policy tensions and unsettled questions. *International Small Business Journal*, 33(1), 49–69. <https://doi.org/10.1177/0266242614556823>

Cavallo, A., Ghezzi, A., and Balocco, R. (2019). Entrepreneurial ecosystem research: Present debates and future directions. *International Entrepreneurship and Management Journal*, 15(4), 1291–1321. <https://doi.org/10.1007/s11365-018-0526-3>

Chadderton, C. (2018). Career Education and Guidance and Race (In)Equality in England. In *Career Guidance for Emancipation*. Routledge.

Chetty, R., Friedman, J., Saez, E., Turner, N. and Yagan, D. (2020). Mobility Report Cards: Income Segregation and Intergenerational Mobility Across Colleges in the United States. *Opportunity Insights*. Available at: <https://opportunityinsights.org/paper/undermatching/>

Choi, S. J., Jeong, J. C., and Kim, S. N. (2019). Impact of vocational education and training on adult skills and employment: An applied multilevel analysis. *International Journal of Educational Development*, 66, 129–138. <https://doi.org/10.1016/j.ijedudev.2018.09.007>

Cohen, D. (2023). 100,000 lose out as universities use taxpayer money on courses for top executives. *The Independent*. Available at: <https://www.independent.co.uk/news/uk/home-news/apprenticeship-levy-university-money-b2294442.html>

Department for Education. (2021). Teaching Excellence and Student Outcomes Framework. GOV.UK. Available at: <https://www.gov.uk/government/collections/teaching-excellence-framework>

Department for Education. (2022a). Graduate labour market statistics, Calendar year 2021. GOV.UK. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/graduate-labour-markets/2021>

Department for Education. (2022b). 'All Characteristics' from 'Widening participation in higher education', Permanent data table. GOV.UK. Available at: <https://explore-education-statistics.service.gov.uk/data-tables/permalink/ba167855-3fa8-43bf-b258-862049bbf169>



Department for Levelling Up, Housing and Communities. (2022). Levelling Up the United Kingdom. GOV.UK. Available at: <https://www.gov.uk/government/publications/levelling-up-the-united-kingdom>

Department for Levelling Up, Housing and Communities. (2023). Investment Zones: Technical document. GOV.UK. Available at: <https://www.gov.uk/government/publications/investment-zones-technical-document/investment-zones-technical-document>

Department for Levelling Up, Housing and Communities and HM Treasury. (2023, March 15). Investment Zones. GOV.UK. Available at: <https://www.gov.uk/government/publications/investment-zones>

Department of Education. (2023a). 'All Characteristics' for Q1—Most Disadvantaged, Q2, Q3, Q4, Q5—Most Advantaged and 1 other filter in England between 2009/10 and 2021/22 [Table]. Higher Education Statistics. GOV.UK. Available at: <https://explore-education-statistics.service.gov.uk/datatables/permalink/2f55a5f9-8dc7-4752-fd2c-08dbda004494>

Department of Education. (2023b). Graduate labour market statistics, Calendar year 2022. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/graduate-labour-markets>

Fongwa, S. (2023). Universities as anchor institutions in place-based development: Implications for South African universities engagement. 37. <https://doi.org/10.20853/37-1-5693>

Frontier Economics. (2021). The Economic Contribution of the Higher Education Sector in England (pp. 1–3). Frontier Economics. Available at: <https://www.universitiesuk.ac.uk/sites/default/files/field/downloads/2021-09/UUK%20Economic%20Footprint%20of%20HE%20Sector%20Summary.pdf>

Garlick, S. (2022) Ethnic group, England and Wales - Office for National Statistics, Office of National Statistics. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/bulletins/ethnicgroupenglandandwales/census2021> (Accessed: 3 October 2024)

Gennaioli, N., Porta, R. L., Lopez-de-Silanes, F., and Shleifer, A. (2013). Human Capital and Regional Development. The Quarterly Journal of Economics, 128(1), 105–164. Available at: <https://ideas.repec.org//a/oup/qjecon/v128y2013i1p105-164.html>

Gibson-Graham, J. K., and Dombroski, K. (2020). Introduction to The Handbook of Diverse Economies: Inventory as ethical intervention. In The Handbook of Diverse Economies (pp. 1–24). Edward Elgar Publishing. Available at: <https://www.elgaronline.com/edcollchap/edcoll/9781788119955/9781788119955.00008.xml>

Grant, J., and Westwood, A. (2022). What is the role of universities in levelling up the UK? Bennett Institute for Public Policy. Available at: <https://www.bennettinstitute.cam.ac.uk/blog/universities-levelling-up/>

Heery, E., Hann, D., and Nash, and D. (2023). The Real Living Wage: Civil Regulation and the Employment Relationship. Oxford University Press.

HESA. (2022). Higher Education Staff Statistics: UK, 2020/21 [Higher Education Statistics Agency]. Available at: <https://www.hesa.ac.uk/news/01-02-2022/sb261-higher-education-staff-statistics>

Ishizaka, A., Pickernell, D., Huang, S., and Senyard, J. M. (2020). Examining knowledge transfer activities in UK universities: Advocating a PROMETHEE-based approach. *International Journal of Entrepreneurial Behavior and Research*, 26(6), 1389–1409. <https://doi.org/10.1108/IJEBR-01-2020-0028>

Kempton, L., Rego, M. C., Alves, L. R., Vallance, P., Serra, M. A., and Tewdwr-Jones, M. (2021a). 1. Introduction. *Regional Studies Policy Impact Books*, 3(1), 9–11. <https://doi.org/10.1080/2578711X.2021.1891764>

Kempton, L., Rego, M. C., Alves, L. R., Vallance, P., Serra, M. A., and Tewdwr-Jones, M. (2021b). 2. Understanding the contributions of universities to regional development. *Regional Studies Policy Impact Books*, 3(1), 13–32. <https://doi.org/10.1080/2578711X.2021.1891765>

Kempton, L., Rego, M. C., Alves, L. R., Vallance, P., Serra, M. A., and Tewdwr-Jones, M. (2021c). 3. Examining university models in regional development. *Regional Studies Policy Impact Books*, 3(1), 33–44. <https://doi.org/10.1080/2578711X.2021.1891767>

Kempton, L., Rego, M. C., Alves, L. R., Vallance, P., Serra, M. A., and Tewdwr-Jones, M. (2021d). 4. Placing universities and regional relationships in context. *Regional Studies Policy Impact Books*, 3(1), 45–60. <https://doi.org/10.1080/2578711X.2021.1891768>

Kempton, L., Rego, M. C., Alves, L. R., Vallance, P., Serra, M. A., and Tewdwr-Jones, M. (2021e). 5. Putting universities in their place: The ORPHIC Framework. *Regional Studies Policy Impact Books*, 3(1), 61–77. <https://doi.org/10.1080/2578711X.2021.1891770>

Kempton, L., Rego, M. C., Alves, L. R., Vallance, P., Serra, M. A., and Tewdwr-Jones, M. (2021f). 6. Recommendations for policy-makers. *Regional Studies Policy Impact Books*, 3(1), 79–80. <https://doi.org/10.1080/2578711X.2021.1891771>

Kroeger, T., and Wright, G. (2021). Entrepreneurship and the Racial Wealth Gap: The Impact of Entrepreneurial Success or Failure on the Wealth Mobility of Black and White Families. *Journal of Economics, Race, and Policy*, 4(3), 183–195. Available at: [https://ideas.repec.org//a/spr/joerap/v4y2021i3d10.1007\\_s41996-021-00081-6.html](https://ideas.repec.org//a/spr/joerap/v4y2021i3d10.1007_s41996-021-00081-6.html)

Lacey-Barnacle, M., Smith, A., and Foxon, T. J. (2023). Community wealth building in an age of just transitions: Exploring civil society approaches to net zero and future research synergies. *Energy Policy*, 172, 113277. <https://doi.org/10.1016/j.enpol.2022.113277>

Lessard-Phillips, L., Boliver, V., Pampaka, M., and Swain, D. (2018). Exploring ethnic differences in the post-university destinations of Russell Group graduates. *Ethnicities*, 18, 146879681877754. <https://doi.org/10.1177/1468796818777543>

Lewis, J., and Bolton, P. (2023). Equality of access and outcomes in higher education in England. Available at: <https://commonslibrary.parliament.uk/research-briefings/cbp-9195/>

Li, L. (2022). Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and Beyond. *Information Systems Frontiers*. <https://doi.org/10.1007/s10796-022-10308-y>

London Economics. (2023a). The benefits and costs of international higher education students to the UK economy: Analysis for the 2021-22 cohort - May 2023. London Economics. Available at: <https://londoneconomics.co.uk/blog/publication/the-benefits-and-costs-of-international-higher-education-students-to-the-uk-economy-analysis-for-the-2021-22-cohort-may-2023/>

London Economics. (2023b). The impact of the higher education sector on the UK economy (p. 16). London Economics. Available at: <https://www.universitiesuk.ac.uk/what-we-do/policy-and-research/publications/impact-higher-education-sector-uk>

Markowitsch, J., and Hefler, G. (2019). Future developments in Vocational Education and Training in Europe: Report on reskilling and upskilling through formal and vocational education training. *JRC Working Papers Series on Labour, Education and Technology*, 7. Available at: <https://publications.jrc.ec.europa.eu/repository/handle/JRC117691>

Matthewes, S. H., and Ventura, G. (2022). On Track to Success? Returns to Vocational Education against different Alternatives. CVER Discussion Paper Series, 38, 1–73.

McNeill, D., Mossman, M., Rogers, D., and Tewdwr-Jones, M. (2021). The university and the city: Spaces of risk, decolonisation, and civic disruption. *Environment and Planning A: Economy and Space*. <https://doi.org/10.1177/0308518X211053019>

Millward, C. (2023). Balancing the incentives in English higher education: The imperative to strengthen civic influence for levelling up\*. *Contemporary Social Science*, 0(0), 1–15. <https://doi.org/10.1080/21582041.2023.2219664>

O'Donovan, N. (2020). From Knowledge Economy to Automation Anxiety: A Growth Regime in Crisis? *New Political Economy*, 25(2), 248–266. <https://doi.org/10.1080/13563467.2019.1590326>

OECD. (2022). EECOLE Roundtable (pp. 1–9) [Proceedings]. Paris. Available at: <https://www.oecd.org/content/dam/oecd/en/about/programmes/cfe/skills-for-smes-and-entrepreneurs/pdfs/Proceedings-Second-EECOLE-Rountable.pdf>

Office for Students. (2021). Place matters: Inequality, employment and the role of higher education - Office for Students (Worldwide; pp. 1–10). Office for Students. Available at: <https://www.officeforstudents.org.uk/publications/place-matters-inequality-employment-and-the-role-of-higher-education/>

Office for Students. (2023, March 28). Consultation on a new approach to regulating equality of opportunity: Analysis of responses and decisions (Worldwide) [Office for Students]. Office for Students. Available at: <https://www.officeforstudents.org.uk/publications/consultation-on-a-new-approach-to-regulating-equality-of-opportunity-analysis-of-responses/>

Overman, H., and Xu, X. (2022). Spatial disparities across labour markets. IFS Deaton Review of Inequalities, 1–67. Available at: <https://ifs.org.uk/inequality/spatial-disparities-across-labour-markets/>

Swinney, P. and Enenkel, K.. (2020). Why big cities are crucial to levelling up. Centre for Cities. Available at: <https://www.centreforcities.org/wp-content/uploads/2020/02/Why-big-cities-are-crucial-to-levelling-up.pdf>

Platt, L., and Zuccotti, C. (2021). Social mobility and ethnicity (IFS Deaton Review). Institute for Fiscal Studies. Available at: <https://ifs.org.uk/inequality/social-mobility-and-ethnicity/>

Powell, A. (2023). Apprenticeship statistics for England. Available at: <https://commonslibrary.parliament.uk/research-briefings/sn06113/>

Raworth, K. (2017). A Doughnut for the Anthropocene: Humanity's compass in the 21st century. *The Lancet Planetary Health*, 1(2), e48–e49. [https://doi.org/10.1016/S2542-5196\(17\)30028-1](https://doi.org/10.1016/S2542-5196(17)30028-1)

Redwood, M. E., Smith, A. M., Steiner, A., and Whittam, G. (2022). Community wealth building or local authority rhetoric? *Local Economy*, 37(7), 602–621. <https://doi.org/10.1177/02690942231171657>

Smith, D. P., Sage, J., and Balsdon, S. (2014). The geographies of studentification: 'Here, there and everywhere'? *Geography*, 99(3), 116–127. <https://doi.org/10.1080/00167487.2014.12094405>

Startups. (2022). The average entrepreneur. Available at: <https://startups.co.uk/analysis/the-average-entrepreneur/>

Stiglitz, J. (1999). Public policy for a knowledge economy. Remarks at the Department for Trade and Industry and Center for Economic Policy Research, 27(3), 3–6.

Swinney, P., and Enekel, K. (2020). Why big cities are crucial to 'levelling up' (pp. 1–9). Centre for Cities. Available at: <https://www.centreforcities.org/wp-content/uploads/2020/02/Why-big-cities-are-crucial-to-levelling-up.pdf>

The Bridge Group. (2021). Staying local: Understanding the value of graduate retention for social equality (pp. 1–98). UPP Foundation. Available at: <https://static1.squarespace.com/static/5c18e090b40b9d6b43b093d8/t/613fd08c48c6e3113f579e52/1631572127190/Staying+local+-+graduate+retention+in+regions+10.9.21.pdf>

The Sutton Trust. (2021). Universities and Social Mobility (pp. 1–11) [Summary Report]. The Sutton Trust. Available at: <https://www.suttontrust.com/wp-content/uploads/2021/11/Universities-and-Social-Mobility-Summary.pdf>

Torgerson, P. C., Gascoine, L., Heaps, C., Menzies, V., and Younger, K. (2014). Higher Education access: Evidence of effectiveness of university access strategies and approaches (pp. 1–106) [Report to Sutton Trust]. Durham University. Available at: <https://www.suttontrust.com/wp-content/uploads/2019/12/Higher-Education-Access-Report-1.pdf>

Troiani, I. and Dutson, C. (2021) 'The Neoliberal University as a Space to Learn/Think/Work in Higher Education', *Architecture and Culture*, 9(1), pp. 5–23. <https://doi.org/10.1080/20507828.2021.1898836>.

Turner, C. (2022). Business Improvement Districts in the British Isles: The Annual BID Survey and Report 2022 (pp. 1–55). British BIDs.

Unger, R. M. (2019). *The Knowledge Economy*. Verso.

University and College Union and Hatch Regeneris. (2020). New study demonstrates huge local economic impact of universities. Available at: <https://www.ucu.org.uk/article/10922/New-study-demonstrates-huge-local-economic-impact-of-universities>

UPP Foundation. (2019). Truly Civic: Strengthening the connection between universities and their places (pp. 1–79) [Civic University Commission]. UPP Foundation. Available at: <https://upp-foundation.org/wp-content/uploads/2019/02/Civic-University-Commission-Final-Report.pdf>

Vaivode, I. (2015). Triple Helix Model of University–Industry–Government Cooperation in the Context of Uncertainties. *Procedia - Social and Behavioral Sciences*, 213, 1063–1067. <https://doi.org/10.1016/j.sbspro.2015.11.526>

Valero, A., and Van Reenen, J. (2016). Since the middle of the twentieth century, higher education has flourished around the world. Analysing data on 15,000 universities in 78 countries for the period since 1950.

Valero, A., and Van Reenen, J. (2019). The economic impact of universities: Evidence from across the globe. *Economics of Education Review*, 68, 53–67. <https://doi.org/10.1016/j.econedurev.2018.09.001>

Waddington, B. (2023) Disability age standardised - Census Maps, ONS, Office of National Statistics. Available at: <https://www.ons.gov.uk/census/maps/choropleth/health/disability-age-standardised/disability-4a/disabled-under-the-equality-act-day-to-day-activities-limited-a-lot>

West Yorkshire Combined Authority, Tracy Branbin, Leeds City Region Enterprise Partnership, and European Social Fund. (2022). Leeds City Region Employment Hub: Final Evaluation. Available at: <https://www.westyorks-ca.gov.uk/media/8503/employment-hubs-programme-evaluation-report.pdf>

World Inequality Database. (2023). United Kingdom. WID - World Inequality Database. Available at: <https://wid.world/country/united-kingdom/>



Led by



Powered by



Funded by



Delivered in partnership with

