

# Rebuilding a Resilient Britain: Local and National Growth

## Report from Areas of Research Interest (ARI) Working Group 8

Chair: Meg Kaufman, What Works Growth

Chair of subgroup A: Professor Donna Lee, Manchester Metropolitan University

Chair of subgroup B: Professor Leaza McSorley, University of Sunderland

Chair of subgroup C: Danielle Mason, What Works Growth

Chair of subgroup D: Giles W, Science Policy Officer, OCSA

Chair of subgroup E: Kathrin Enenkel, Centre for Cities

Facilitated by:

Audrey Smith, Government Office for Science

Annette Boaz, Government Office for Science

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## Foreword

The COVID-19 pandemic presents a fundamental challenge to our society, economy, and ways of living. We need to ensure that our response to these challenges is informed by the best possible evidence, by engaging with the right stakeholders. As a first step toward this goal, the ‘Rebuilding a Resilient Britain’ programme of work was launched in July 2020 to bring together researchers, funding bodies and policy makers to identify evidence and uncover research gaps around a set of cross-cutting Areas of Research Interest.

ARIs were initially developed in response to the recommendations of the *2014 Nurse Review of Research Councils*, which called on government departments to communicate clearly where their research objectives lie. The ARIs take the form of an annually updated list of priority research questions, which invite the academic community to engage with government departments to inform robust evidence-based policy making.

With the advent of the COVID-19 pandemic, however, it became clear that the societal issues affecting Britain’s recovery over the medium- to long-term cut across departments. The ESRC/GOS ARI Fellows therefore worked with the CSAs and Council for Science and Technology to identify a set of ARIs relevant across all departments and sectors. Under the meta-themes of **Rebuilding Communities**, **Environment and Place**, and **Local and Global Productivity**, each led by two CSAs, nine Working Groups were formed:

<b>Rebuilding Communities</b> led by Robin Grimes (MoD Nuclear CSA) and Osama Rahman (DfE CSA)	<b>Environment and Place</b> led by Robin May (FSA CSA) and Andrew Curran (HSE CSA)	<b>Local and Global Productivity</b> led by Paul Monks (BEIS CSA) and Mike Short (DIT CSA)
1. Vulnerable Communities	5. Supporting Lower-Carbon Local Economies	8. Local and National Growth
2. Supporting Services	6. Land Use	9. Trade and Aid
3. Trust in Public Institutions	7. Future of Work	
4. Crime Prevention		

With input from the Universities Policy Engagement Network, UKRI, the What Works Centres, and the National Academies, each Working Group was populated with subject experts and representatives from funding bodies and government departments.

The working groups met several times over the summer and used their networks to:

- a. identify a diverse range of existing or ongoing research,

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- b. synthesise evidence which can be quickly brought to bear on the issues facing departments
- c. identify research gaps in need of future investment.

This report represents the culmination of the work of one of these Working Groups. The expedited timeframe of this work, along with their specific areas of expertise, led to some variation in how each group approached the task. It should be noted that this document represents the views of the Working Group members and is not indicative of government policy.

As well as providing deep expert reflection on the cross-cutting ARIs, it is hoped that these reports, and the work that led to it, will prompt further collaboration between government, academia, and funders. Working across government and drawing from the extensive expertise of our academic community will be essential in the recovery from the COVID-19 pandemic, to rebuild a resilient Britain.

**Kathryn Oliver and Annette Boaz**

ESRC/GOS ARI Fellows, on behalf of the ARI team within GOS

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### List of acronyms

AI	Artificial Intelligence
ARI	Area of Research Interest
AHRC	Arts and Humanities Research Council
BAME	Black, Asian and Minority Ethnic
BBSRC	Biotechnology and Biological Sciences Research Council
BEIS	Department for Business, Energy and Industrial Strategy
CBI	Confederation of British Industry
CJS	Criminal Justice System
CO	Cabinet Office
COVID-19	Coronavirus Disease 19
CSA	Chief Scientific Advisor
DCMS	Department for Digital, Culture, Media and Sport
Defra	Department for Environment, Food and Rural Affairs
DfE	Department for Education
DfT	Department for Transport
DH	Department of Health
DHSC	Department of Health and Social Care
DIT	Department for International Trade
DWP	Department for Work and Pensions
EPSRC	Engineering and Physical Sciences Research Council
ESRC	Economic and Social Research Council
FCDO	Foreign, Commonwealth and Development Office
FSA	Food Standards Agency
GCSA	Government Chief Scientific Advisor
GOS	Government Office for Science
HMRC	Her Majesty's Revenue and Customs
HMT	Her Majesty's Treasury
HO	Home Office
HSE	Health and Safety Executive
MHCLG	Ministry of Housing, Communities and Local Government
MoD	Ministry of Defence
MoJ	Ministry for Justice
MRC	Medical Research Council
NERC	Natural Environment Research Council
NGO	Non-Governmental Organisations
NICE	The National Institute for Health and Care Excellence
ONS	Office for National Statistics
PHE	Public Health England
R&D	Research and Development
SAGE	Scientific Advisory Group for Emergencies
SME	Small and Medium-sized Enterprises
STEM	Science, Technology, Engineering, and Mathematics
STFC	Science and Technology Facilities Council
UKRI	UK Research and Innovation

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## 1. Chair's introduction

Our group was tasked with addressing 23 ARIs from a variety of government departments. We were fortunate to have a number of experts in the fields that the questions covered; they in turn drew upon their own networks to make sure that the results reflect the state of the evidence in the UK. Most of the work was done in July and August of 2020 by people working from home due to pandemic restrictions.

The ARIs we were presented with covered a wide variety of topics, some of which have been studied and debated for decades. We decided to split the work by topic into 5 subgroups to make it more manageable. Inevitably many questions and resources applied to more than one area, but members of the group often contributed to more than one topic which helped bring consistency to the exercise.

Nevertheless, there are differences to be aware of when looking at the evidence from the groups. Most notably, evidence standards varied: two groups relied on expert advice complemented by academic papers; one presents a list of organisations covering the ARIs for consultation; and two focussed on evidence from evaluations undertaken with control groups.

The members of the group have a great depth of experience in working with different types of evidence, and we agreed that often there is no substitute for a conversation to make sense of a complicated evidence base. We urge any analyst or policymaker who is working in this area to get in touch with me directly or with the chair of the relevant subgroup to talk through their questions. Contact details are below.

Finally, while this was a very challenging process given the need for a rapid response, it was very useful to meet the other members of the group and focus on the issues together. I hope that these documents can inform the government's response to the ongoing crisis.

Meg Kaufman  
What Works Centre for Local Economic Growth  
[m.kaufman@centreforcities.org](mailto:m.kaufman@centreforcities.org)

## 2. How the evidence was identified and collated

The ARIs were identified by departments and prioritised by CSAs. The ARI Fellows presented a set of priority areas to the CSA network and the GCSA who identified which topics would be of most use to take forward. We have not edited, amended, or added to the questions as we received them.

Group 8 was large and the topics we covered far reaching. We decided to break the work down into 5 subgroups on related topics:

- Subgroup A – education, research, and innovation
- Subgroup B – productivity, business, and national economy
- Subgroup C – local economies
- Subgroup D – global issues
- Subgroup E – employment

Each group was chaired by a volunteer with particular interest in the subject. Each group produced a report responding to the three tasks: evidence collation, key messages, and evidence gaps although they each chose to do the task in a slightly different way. The five group reports follow, with the resources collected by each group included in Annex 3.

# Report from subgroup A: education, research, and innovation

Chair: Professor Donna Lee, Manchester Metropolitan University

The report is from subgroup A, addressing ARIs related to education, research, and innovation. Their approach was to summarise messages offered by organisations with expertise in this area and have included details and contacts of those organisations in lieu of specific studies.

As with all subgroup chairs, Donna Lee is happy to be contacted to discuss in more detail any of these messages or evidence gaps: [d.lee@mmu.edu.uk](mailto:d.lee@mmu.edu.uk)

## A1. Key messages

### A1.1. Role of universities in supporting local regeneration and skills

- Establish partnerships with local businesses to design courses which directly meet the demand of employers, and address skills gaps.
- Carry out region specific research which identifies the development needs of the local area, designed to inform policy.
- There are a range of different ways in which universities interact with their local regions e.g. by being on boards of Local Enterprise Partnerships, Local Nature Partnerships, etc. and contributing to local strategies such as science and innovation audits and local industrial strategies. They also establish what works panels, which bring together academics, chamber of commerce, business leaders and local governance to address region specific problems.

### A1.2. Impact of university and school closure on productivity in terms of short term and long-term outcomes

- Lost productivity associated with a lack of childcare, the effects of which are likely to be felt in the short term as well as long-term career progression.
- The damaging effects of school closures on children, which are likely to be realised and fully understood in terms of both short and long-term outcomes, particularly for those in low socioeconomic groups.

### A1.3. How will COVID-19 impact on international cooperation on emerging technologies?

- In some cases, emerging technologies have been used as a tool to control the effect of COVID-19, with examples of COVID-relevant projects being accelerated.
- Travel restrictions have made international collaboration more difficult.
- Manufacturing processes have likely been adversely affected by lockdown restrictions implemented due to the outbreak.



#### **A1.4. What will future international scientific collaboration look like in a post-COVID world? Will scientists collaborate in a different way?**

- One of the effects of COVID-19 and the lockdown restrictions is that individuals, including scientists, have had to work remotely and interact using online tools. It is likely that through the use of such tools, and an understanding of their benefits, scientific collaboration may develop in a new way.
- Scientific research during the COVID-19 pandemic, for example research on vaccinations, has led to global collaboration of scientists studying the same thing with positive effects. As such, this may lead to a new era of international collaboration post-COVID.

#### **A1.5. How will COVID-19 impact on the uptake of international study? What are the longer-term implications for the research ecosystem in the UK and internationally? What will be the impact on the UK's reputation as a leading science nation?**

- The travel restrictions are significantly likely to reduce the numbers of international students in many countries in the short term, however, is also likely to lead to more severe long term issues, in terms of potential shortages in high skilled labour.
- The UK's reputation as a leading science nation will be significantly dependant on research processes during and post-COVID, including funding processes, impact projects and policy relevant research.

#### **A1.6. Importance of strong national research base to support effective policy**

- Post-COVID especially, it is paramount that policy creation is supported by robust research which will be necessary to address the issues created by the crisis.
- This includes short term policy, such as how to address unemployment figures and support regeneration in the retail sector, as well as long term issues, such as considering how to account for the fact many children missed out on months of schooling and how best to address this issue to limit long-term damage.
- In the medium-term 'greening the build-back' will be important, coming off of the back of reduced car and general transport use and increased access to the natural environment by the public during lockdown and the importance of this for mental and physical health and to promote climate and environment friendly behaviour.

#### **A1.7. Role for analytical and scientific skills to support national need**

- Ensure a scientific skills base is developed in order meet skills demand, which will be particularly important in the case of a reduction in international students.
- It is clear that universities will have to develop degree programs which meet the ever-changing needs of the scientific community, as well as the changing skills needs in local businesses.

## A2. Evidence gaps

The subject of the role of universities in supporting local regeneration and skills demand has been studied both academically and by external research institutions. The importance of universities promoting growth and development in their local areas is particularly apparent in terms of social mobility, reducing inequalities and ensuring universities play an invested role as a significant power in an area. Universities are considered anchor institutions which significantly impact the local area by contributing to the economy, in terms of professional development and knowledge, workforce development, management and leadership training, and research led policy.

While there exists a significant amount of research that considers the role of universities as anchor institutions in their respective local areas and regions in terms of impact, there is less emphasis on how universities should play the vital role of supporting regeneration and skills locally. Though there do exist a number of best practice examples which highlight the potential ways in which universities promote social mobility, skills development and integration, these are rarely discussed extensively in research. For example, in some universities, degree level apprenticeships are one avenue in which degrees are designed specifically to meet the demands of employers, for which content is based on findings from employer advisory boards. Degree level apprenticeships allow individuals to both study for a degree as well as earn a living, which as well as promoting demand based skills development, also address social mobility issues, with people gaining degree level qualifications who previously would have been unable to due to financial constraints. Another under-researched area in the literature is the scope for research centres to directly carry out research which addresses problems in the local area with collaboration with local governments, service providers and other stakeholders. For example, when addressing the issue of homelessness in any area, collaboration between research centres and local government would encourage city specific research on the subject, as well as evidence to inform policy making.

Universities are also being encouraged to work closely with stakeholders in their regions to [facilitate place-based industrial strategies](#). The Yorkshire Universities consortium is a good example of where the twelve universities in the region have convened events which brought together universities, Local Enterprise Partnerships, combined authorities, government and national research funding agencies to share information about the development of local industrial strategies in Yorkshire. This allowed them to illustrate the specific role of the universities in industrial policy and strategy.

Other best practice examples of how universities may support local regeneration and skills development include the case of the University of Liverpool, which has developed an Interchange project with a community previously marginalised

economically and socially. The aim of if the project was to bring together the universities with people who had never before interacted with or even considered the idea of going to university (Parnam, no date). The idea of university integration with the community emphasises the importance of interacting with local business leaders, and encourage entrepreneurship, to drive social mobility and growth. Another positive example is the case with Sheffield University that, in collaboration with two universities as well as the local community, is delivering housing in the community (Clark & Clark 2014). Research Council funded initiatives may focus on integrated working to develop local solutions, one such example being a community initiative in London funded by NERC. [Imperial College](#) is working with a range of stakeholders to explore water management for a liveable London. The project is bringing together environmental, engineering, urban planning and socio-economic experts with governmental and planning authorities, industry, developers and citizens to co-develop solutions that will enable required housing growth in London whilst sustainably managing its water and environment.

Assessing these best practice examples of the potential and scope for regeneration and skill development between universities and the local area highlights how universities may go about creating initiatives to promote such action. However, it is clear that while many institutions attempt such interventions, it is significantly under researched in the literature. Universities have immense power to properly identify variables which are of local importance, including societal problems, skills gaps and areas of potential, though more research is needed to understand how the system needs to be organised in a way to allow universities to properly impact local areas. This includes the resources which are required and the importance of collaborations with other stakeholders and city specific research.

References can be found in Annex 3.

# Report from subgroup B: productivity, business, and national economy

Chair: Professor Leaza McSorley, University of Sunderland

The report is from subgroup B, addressing ARIs related to productivity, business, and national economy.

As with all subgroup chairs, Leaza McSorley is happy to be contacted to discuss in more detail any of these messages or evidence gaps:

[leaza.mcsorley@sunderland.ac.uk](mailto:leaza.mcsorley@sunderland.ac.uk)

## B1. Key messages

### B1.1. What role does productivity play in the UK economy?

- Established productivity is a key driver of local, regional, and national growth.
- The productivity debate has moved on from viewing productivity as a technical measure of output (Labour productivity and Total Factor Productivity) to its role in driving growth and wages and wider economic and societal benefits.
- Evidence shows that the traditional 5 drivers (competition, enterprise, skills, investment and innovation) remain important for increasing productivity. Most evidence and research has focused on these areas.
- There is an increasing focus on the links between pay and productivity.
- From the literature, focused mainly on advanced European economies and the US, the current thinking on the drivers of weak productivity are:
  - Mismeasurement (Coyle 2017) – this is particularly identified as an issue for the UK due the relative size of the UK's service sector, the view being that services are not measured as effectively as tangible goods.
  - Weak investment – related to the financial crisis, and longer-term structural changes.
  - Hysteresis – “a long-term effect of recession on output due to reduced capital accumulation, scarring effects on workers through job loss, and disruptions to economic processes underlying technological progress” (Bryson and Forth 2016: 167).
  - Long tail of low productivity firms – US literature refers to low productivity firms as ‘zombie firms’ i.e. firms that are surviving but under more competitive circumstances would have gone out of business due to their low productivity and lack of competitiveness. In the UK, this divergence of productivity has clear sectoral and geographical dimensions.
  - Technological and digital diffusion – the rate of adoption of new technologies across industries and within firms.
  - Business concentration – in the US, the rise of the ‘superstar’ firm and their monopsonistic power are viewed to be skewing the productivity distribution.

- Declining business dynamism (Furman 2017) – also linked to this is a less ‘dynamic’ and less mobile workforce, showing reluctance to change jobs post-recession.
- A shift towards less productive sectors – this requires further detailed analysis for the UK to identify the sectors in which the new jobs have been created (self-employment, distribution) versus the jobs that were lost during the recession (financial services, construction, public sector).
- Reduced productivity in a few key high gross-value-added sectors (McKinsey 2018).
- Secular stagnation – a predominantly US phrase to explain stagnating economic growth and stagnating wages (Stansbury and Summers 2018).
- There is an emerging focus on inequality, well-being, and inclusive productivity growth (McSorley 2018 and 2019).

### **B1.2. What are the effects of the UK’s approach to business regulation, and how can the system develop to meet the economy’s needs in the future?**

- Need to grow regulatory expertise in the UK.
- No conclusive evidence that regulatory changes since finance crisis have held back productivity growth.
- “Do no harm” principle of over/under/wrong type of regulation.
- Emerging literature on market concentration and mark ups.

### **B1.3. Unlocking the benefits of investment in skills and entrepreneurship**

In terms of skills, the Industrial Strategy council report:

- “Clear overarching vision for UK skills and a long-term commitment to delivering it in partnership with employees, employers, training providers and employer organisations.
- Improving UK management practices and enabling individuals to assume ongoing responsibility for developing their own skills will need to be key elements of that overarching vision.
- Policy stability and continuity emerges as important for employers to navigate the skills system and build relationships within it. Interviews conducted for the Council call for evolution of existing policy, not revolution. Improved use of information and data analysis will be required to better meet sectoral and local needs while contributing to the wider objective of raising productivity and competitiveness”.
- Questions around weakening of return to investment in skills.
- Evidence of weakening of decoupling of wages from productivity. Significant variation across Organisation for Economic Co-operation and Development countries.
- A shortage of STEM skills at all levels from school to PhD and advanced level.

### B1.4. Mitigating the effects of business closures and redundancies

- Evaluations of redundancy support/re-employment policies can help workers overcome barriers to find work. However, there is a lack of evidence of effectiveness during a recession/major economic downturn as this must be matched by job creation initiatives.
- As well as the risk of significant job losses business R&D is at immediate risk. Reducing or outright halting R&D activities is one of the first cost-saving measures businesses are taking amidst falling demand and cash flow difficulties. However, R&D is recognized by businesses as part of the solution for recovery.

### B1.5. What are the future trends for demographics and working/saving behaviour and what is driving these trends? What further reforms to state and private pension provision might we require to ensure long-term sustainable financial security for older people and pensioners?

- “Macroeconomic effects could also be used to look at the regional distribution of potential productivity risks associated with population ageing. In general, spatial differentiation of demographic change attracted relatively little attention but will have significant consequences for regional policy (McCann, 2017)” (Lisenkova 2018).

## B2. Evidence gaps

Unanswered ARIs and Other Substantial Evidence Gaps	Proposed Steps to Address these Gaps
<b>1. What role does productivity play in the UK economy?</b>	
<p>Micro: Research evidence at a micro (firm/industry level) on policy and practice that prioritises/delivers <u>both</u> productivity and employment improvements</p> <p>Meso: Regional and structural inequalities and policy</p> <p>Macro: Structural causes and drivers of low productivity and economic growth</p>	<p>Some of the suggested research priorities may be within the remit of existing UKRI/ESRC investments. Including the new Productivity Institute: <a href="https://esrc.ukri.org/news-events-and-publications/news/news-items/esrc-productivity-announcement">https://esrc.ukri.org/news-events-and-publications/news/news-items/esrc-productivity-announcement</a>. Others may require new/additional funding streams.</p> <p>Most existing research evidence on productivity has been conducted at a micro level (firm/industry), there are significant evidence gaps at a regional and macro economic level. Also significant lack of investment into theoretical research regarding weaknesses/gaps in the theory underpinning productivity research, as such the gap between theory, data, policy and practice is diverging.</p> <p>Prioritisation of research:</p>



<p>Structural: Institutions and labour markets</p> <p>Regional economics – and regional-macro economic linkages</p> <p>Environmental sustainability and productivity and growth</p> <p>International best practice/comparative research</p> <p>Theoretical underpinnings of productivity</p>	<p>a) Regional policy and regional inequalities: further research on how to solve the regional productivity puzzle and delivering ‘levelling up’. To simultaneously increase UK aggregate productivity and growth and deliver balanced and sustainable regional growth.</p> <p>i) Regional economic to macroeconomic transitions. Better understanding (theoretical) of how regional economies contribute to macroeconomic outcomes, and how macroeconomic policy can more effectively address/benefit from regional economic issues.</p> <p>b) Structural causes and drivers of low productivity and economic growth: this should include:</p> <p>i) Labour market: creating the demand for skills and education; quality of work, pay and productivity; demographic change; inequality and inclusivity, particularly gender equality.</p> <p>ii) Institutions: what role do institutions national, regional and local play in supporting productivity and growth? Role of public sector (including education and health), NGOs, civic, voluntary, community.</p>
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**2. What are the effects of the UK's approach to business regulation, and how can the system develop to meet the economy's needs in the future?**

<p>To better understand the role of regulation, ethics and standards in supporting the development and diffusion of emerging technologies (e.g., AI, Internet of Things, 5G, advanced therapies, space) so as to achieve productivity growth</p>	<p>Governments around the world are searching for new governance mechanisms to influence the direction of innovation while fostering innovation-enabled economic growth. One such approach is state-supervised industry self-regulation through mandatory certification against standards that are developed by industry and approved by regulatory authorities. For instance, in the domain of AI, regulatory bodies generally perceive standards as a means of increasing accountability and trustworthiness.</p> <p>The British Standards Institution (BSI) is piloting some work in this area but much more rapid response and evidence review is needed to provide a step change in understanding of the interplay between standards, innovation, regulation and the ethics and human rights of emerging technologies. This could also facilitate the diffusion of innovative technologies to enable more widespread adoption and attendant productivity growth.</p> <p>Initiatives designed to aid in data/AI innovation adoption for Industry, such as the <a href="#">IROR programme</a> with the Hartree Centre and IBM Research have helped develop reusable <a href="#">digital assets and software</a> to solve a range of industry challenges from life science to aerospace boosting productivity and could be developed with further investment into aiding co-development of AI solutions focussed on Industry need. Test beds may also play a key role in helping innovators and adopters understand and evaluate case uses for specific sectors such as Health and social care with respect to the <a href="#">Liverpool 5G testbed</a>. However there is still a need to ensure that with diffusion, regulatory expertise, ethics and human rights issues keeps track with technology growth particularly as we edge</p>
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	<p>towards Quantum computing with the recently announced <a href="#">National Quantum Computing Centre based at the Harwell Campus</a> as well as the considerations for specific sectors.</p> <p>For example, in 2019 NICE <a href="#">released</a> the evidence standards framework for digital health technologies. Digital health is a significant growth market both in the UK and globally, playing a leading role in COVID-19 R&amp;D from supporting clinical trials and candidate assessment, to public health monitoring and applications development. A fundamental pillar of the recently released <a href="#">National Data Strategy</a> pro-growth focus is the alignment with regulation across the data and technology landscape and data protection. Therefore greater investment in the areas of regulatory science and diffusion to keep ahead of our growing technology and data advancements could aid in ensuring UK thought leadership and industry adoption.</p>
<p><b>3. Unlocking the benefits of investment in skills and entrepreneurship</b></p>	
<p>Continue to invest and grow STEM related apprenticeship and skill training programs to retain talent and support innovation companies accessing skills at different growth stages</p>	<p>Access to talent and skills is a key issue in the growth agenda for many technical industries and there is shortage of STEM skills at all levels from school to PhD and advanced level. Programmes such as the doctoral training programmes and UKRI <a href="#">future leaders fellowships</a> are working to train and attract the future research leaders and technical professions required to grow our R&amp;D base and global position in technical fields and will need continued investment and growth. Technical apprenticeships are also crucial to training the next generation of technical staff to develop high skilled jobs. In a <a href="#">recent report</a> on the UK partnership with CERN it highlights how it is addressing the shortage of STEM skills, delivering training schemes and 'on the job' training across a variety of sectors.</p> <p>The STFC <a href="#">Delivery Plan</a> &amp; CBI Report <a href="#">Skills for the Future</a> highlight the need to develop this <b>capacity for technical apprentices</b> and STFC is developing a proposal called 'Skills Factory' to leverage its world-class facilities and expertise to manage them on behalf of the UK academic community to train the next generation. This could see 75 apprentices on 4-year courses, 100 graduates on 2-year courses and 125 industrial placements, returners and re-skills taken on 1-year courses taken on each year. Such programmes will be essential to ensure the UK can meet the demands of the technical industries for the future and can support scale up.</p>
<p><b>4. Mitigating the effects of business closures and redundancies</b></p>	
<p>Greater need for UK to be actively supporting companies during scale-up to avoid early exits or</p>	<p>The UK's lies 13th in the world for "scale-ups" and this report by the Scale up Institute: <a href="#">The Future of Growth capital</a>, outlines a number of strategies including a national blueprint for growth to ensure the UK remains competitive and grows its industries, aligns its regulatory frameworks and supports the unlocking of innovation and growth capital.</p>



<p>movement of R&amp;D bases abroad</p>	<p>Aligning this growth capital infrastructure so that it harmonises with the investment in national R&amp;D centres (such as the National Laboratories located in campuses including Daresbury, Edinburgh and Harwell) and strategically work with the world leading universities can help to unlock the growth of UK industry R&amp;D bases, train and retrain talent as industries transform and attract inward investment across the country.</p>
<p><b>5. Role of government in stimulating demand (procurement)</b></p>	
<p>To develop a better understanding of what type of interventions works in boosting productivity (esp. among SMEs) that can also be employment creating/enhancing and how to deliver interventions at scale and in the most effective way</p> <p><b>Combining requirements across government will provide a stronger business case for companies to develop new solutions that satisfy government and commercial needs</b></p>	<p>The Business Basics Programme (BEIS) is designed to use randomised control trials to pilot innovative ways of encouraging firms to improve their productivity and use interventions aiming at technology adoption and improving management practices. A comprehensive review is needed to synthesise across various programmes already funded and from international evidence to provide insights on what works. Most programmes are limited to small groups of participants, very expensive to deliver and highly bespoke to replicate. Replication studies will be useful to validate findings and help better understand whether randomised controlled trial findings can be replicated to achieve wider productivity benefits among larger business communities.</p> <p>This is likely to support companies looking to scale-up as the larger contract will mean they can then move to large scale manufacture/delivery from bespoke solution. In addition, export opportunities will be enabled through the demonstration that UK government is utilising services. For instance in the space sector a number of companies at <a href="#">Harwell Space Cluster</a> find it easier to sell to international governments than the UK. The UK Space Agency's Space for Smarter Government Programme has been designed to address this issue.</p> <p>Similar perspectives are observed in other sectors such as the health and social care sector in terms of matching system need with innovation to create an innovation pipeline that can develop, evaluate and deploy at scale innovation. Such initiatives could be scaled across regions as part of a living laboratory initiatives (shaped to the need of specific sectors), which would aid entrepreneurs and innovators to co-design and evaluate in real life plug-and-play environments and scale innovation that is being asked for from specific regions. These interfaces could be supported by adopting cluster models to support and de-risk collaboration by convening partners together which understand and can stimulate this develop, evaluate deploy model for their sector. Examples of such cluster models are the Space, <a href="#">EnergyTec</a> and HealthTec Clusters in Oxfordshire at Harwell and the recently launched regional North West <a href="#">HealthTec</a> Cluster hosted at Daresbury.</p>

**6. What are the future trends for demographics and working/saving behaviour and what is driving these trends? What further reforms to state and private pension provision might we require to ensure long term sustainable financial security for older people and pensioners?**

<p>To understand at both a national <b>and critically at regional level</b> the Health Ageing agenda, in respect to narrative, need, engagement and market opportunity.</p>	<p>The government has a commitment “for everyone to have five extra years of healthy, independent life by 2035 and to narrow the gap between the richest and poorest”. The <a href="#">Health of the Nation</a> report released by the All Party Parliamentary Group for Longevity in February 2020 sets out key recommendations to address this, from business being involved in the solution to addressing health inequities which requires both a data informed national strategy as well as a regional narrative reflective on the health demographic and industry base. Health Inequalities as indicated in the Marmot review <a href="#">10 years on</a> continue to rise and it is imperative that this regional narrative be developed to support healthy ageing and that innovations nationally do not create regional health inequalities. Tools such as the <a href="#">Health Inequality Assessment Tool</a> have been developed so that projects have a health inequalities assessment to ensure interventions don’t accidentally increase inequalities and the Government recently invested in <a href="#">seven</a> Trailblazers across the UK (including in key areas aligned to the levelling up agenda in Lancashire, Manchester and Newcastle) to look at local healthy ageing projects that could drive innovation, recognise and address health inequalities and understand/drive the market opportunity of healthy ageing.</p> <p>These initiatives are key to understanding the regional opportunities and challenges and engaging business in the conversation, particularly as whilst large corporate entities may have the infrastructure to support innovation and tools that aid a healthier workforce, SME’s may not and make up a large proportion of the UK’s workforce which varies from region to region. Therefore better understanding of the national priorities, matched to a regional narrative, is required to create a sustainable innovation pipeline that supports local growth of the healthy ageing economy and services, engages business in transforming its workforce agenda, with respect to longevity regionally and helps address health inequalities.</p>
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References can be found in Annex 3.

## Report from subgroup C: local economies

Chair: Danielle Mason, What Works Growth

This report is from subgroup C, addressing ARIs related to local economies.

As with all subgroup chairs, Danielle Mason is happy to be contacted to discuss in more detail any of these messages or evidence gaps: [d.mason@centreforcities.org](mailto:d.mason@centreforcities.org).

### C1. Key messages

Displacement:

- Place-based policy should take concerns over displacement seriously. Growth in one place may come at the expense of nearby areas which could mean less, or even no, overall growth for the region.
- It may be the case that a policy is designed intentionally to redistribute employment between areas or concentrate local employment, which in turn may help reduce the cost of infrastructure provision such as broadband and transport. Where this is the case it should be clearly articulated in the strategic case.

Multiple interventions:

- Evaluations often aim to assess the impact of a particular intervention in isolation, treating other factors as static. In reality, a number of interventions are often delivered at once, and the effects of the different interventions will interact.
- To see the policy implications of this, consider an example. For most places, the evidence suggests that interventions designed to grow the local economy as a whole and increase the skills profile of the local population will be a better bet for improving the economic performance of the high street than public investment in the cultural or retail offer. However, if a particular place is simultaneously developing a strategy to create or attract a significant number of high skilled jobs, perhaps by attracting specific firms to the area, then investment in the cultural or retail offer might influence whether new workers choose to live in that place – with additional benefits to the local economy - or commute to it from elsewhere.
- This suggests that the sequencing of policy interventions, the order they are implemented, and the mix of policy interventions - skills interventions, transport projects, public realm investments etc. – is an important issue for places to consider and delivering economic growth strategies.

#### C1.1. How do we best support high streets during the current crisis and beyond?

Changes in shopping practices in recent years (including online and out-of-town shopping) mean that, in general, high streets of all types need less retail space. Not all high streets have been ‘struggling’ as a result of this, however. Some have successfully made a shift away from retail towards services such as restaurants and cafes. Others have managed to adapt their retail offer to remain attractive. However,

to make such adaptations sustainable, a high street needs sufficient customer demand for their retail or non-retail offer. In places with weaker local economies this does not always exist.

'Supply-side' interventions which aim to address this problem by tackling the quality of shops (retail-led regeneration) or the availability of non-retail activities (culture-led regeneration) are highly visible and often have local support, which can make them appealing. However, they are unlikely to be sustainable if there is not enough local demand. In some circumstances, such interventions may be able to induce a demand response, although the data suggests this is likely to be at the expense of other local destinations rather than from inducing substantial shifts from online or from at-home consumption.

Interventions designed to strengthen the local economy directly (and in particular, to increase the number of local high skilled jobs) are a more sustainable way to create sufficient demand for a thriving mixed-use high street. If this is not feasible, supply side strategies need to focus on reducing vacancies (for example, through change of use) and to be evidence driven in their assumptions about the extent to which supply side policies will induce additional demand (and from where).

Implications of COVID-19: So far post-lockdown, high streets in towns have recovered more quickly than high streets in big city centres. This is in part because high skilled workers have been slower to return to big city centres. More suburban centres in big cities have likely seen increased demand. More concrete data is needed to fully assess these trends, and this should be a priority to inform the policy response.<sup>1</sup>

**For most places, interventions focused at growing the local economy as a whole and increasing the skills profile of the local population will be a better bet for sustained impact on the high street than public investment in the cultural or retail offer.**

### **C1.2. What is the impact of improving physical connectivity between towns and cities, as well as rural and rural/urban transition zone?**

Investment in transport infrastructure and connectivity is an important tool for improving productivity. However, the evidence on how to invest cost-effectively is limited.

For cities and towns, increased 'effective density' (a measure of accessibility) is associated with improved productivity (this underpins DfTs wider benefits) but there

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<sup>1</sup> What Works Local Growth have resources on data which can help here: <https://whatworksgrowth.org/resources/covid-19-data-sources-to-inform-local-economic-recovery/>; the Centre for Cities High Streets Recovery Tracker is also helpful: <https://www.centreforcities.org/data/high-streets-recovery-tracker/>.

is no obvious relationship between connectivity (a measure of ‘ease of getting around’) per se and economic strength.<sup>2</sup>

Consistent with this there are surprisingly few studies which demonstrate that transport investments deliver improved economic performance, and the evidence there is suggests that impact will be highly context dependent. For example, there is some evidence that road projects have positive effects on outcomes including employment, wages or incomes, and productivity. However, whether a project will have these effects in a given place depends on the context and rationale. If congestion is limiting productivity, and a project is successful in reducing congestion, it is reasonable to expect productivity gains (imagine London without the underground). However, if a project successfully improves connectivity between a struggling place and a stronger economic centre, it does not follow that there will be productivity gains for the struggling place: it depends on whether that place can now operate economically as ‘part’ of the stronger centre, for which connectedness is not the only factor. Even if integration does increase, the main affect may be on commuting or household location, rather than firm location or productivity.

**In general, investment in transport infrastructure and connectivity cannot be expected to *automatically* deliver increased productivity. High quality analysis of the cost, purpose, and likely impact of a given project is needed. Given the high cost and risks associated with infrastructure projects, this analysis is especially important.**

### **C1.3. What are the drivers of regional economic disparity? What drives differences in productivity at the firm and regional level, and what are the effects of these differences on enterprise and business growth?**

A large body of evidence finds that bigger towns and cities have higher productivity. We would therefore expect differences between London and other places, or between major regional cities and their hinterland, because of size. However, some big cities, particularly in the north, are underperforming for their size, while some smaller cities and towns, particularly in the south are over-performing. This has been driving regional disparities.

Differences in the ‘skill composition’ of the places partly explain these differences (higher skilled workers are more productive, and skills matter more than city size for productivity). Researchers differ on what explains the rest of the difference. This is important because it has **crucial implications for how policy makers should address spatial disparities:**

- Some argue that most of the remaining difference is also explained by skills, but *indirectly*. They draw on evidence which suggests that the extent to which size drives productivity depends on the concentration of high-skilled workers. That is

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<sup>2</sup> <https://www.nic.org.uk/wp-content/uploads/Transport-Connectivity-discussion-paper.pdf>

why larger low-skilled places are under-performing relative to size, while smaller high-skilled places are over-performing. If this is correct, **improving the skill composition is the priority** for under-performing places, because without a better skills composition, size will not deliver increased productivity benefits, and investment (in infrastructure, R&D etc.) will not deliver productivity returns.

- Others argue that other factors – in particular public sector investment (in transport, R&D etc. which, currently, is disproportionately large in London and the South East), and place-based governance (which arguably only London gets, because UK governance is highly centralised in Whitehall) – are also significant drivers of productivity. The inequitable distribution of these factors between regions is increasing disparities. **A more equitable distribution of government investment, and devolved governance**, *in addition to* improving skills, is necessary to stop disparities increasing.

A further policy question, relevant to both interpretations, is *how* the skills composition of struggling places can best be improved. Crudely, is it more effective to improve the skills of the people already in a place, or to attract more high-skilled people from other places. The evidence on this is limited, but the following points are relevant for policy makers:

- Improving people's skills requires interventions to raise skills. Attracting skilled people requires place-based interventions which will attract high-skilled workers and firms. The evidence on how to improve skills is relatively well-developed. The evidence on how to attract high-skilled workers and firms to struggling places is extremely limited.
- Improving people's skills should have a higher impact on *overall* productivity (because it creates new skills rather than moving skills around), but could have a lower impact on regional disparities, if people leave once they have improved their skills.
- These two different strategies have very different implications for who benefits from policy.

#### **C1.4. What are the implications of reduced cash transactions for local economies and businesses?**

There has been reduced use of cash since the COVID-19 crisis began, due to reduced total transactions, increased preference for online shopping, and increased preference for contactless/card transactions in person.

For local economies and businesses, we can expect that the impact of the *overall* reduction in their transactions (driven by fewer total transactions and the move online) will dwarf any impact of a shift from cash to card, and so support for local economies and businesses should focus on the former. For individuals without access to the internet or a bank account, the shift from cash to card may restrict their access to important goods and services, with consequences for their health,



wellbeing, and finances, even where the impact on local economies and businesses is negligible.

In the medium term, it is possible that the move away from cash transactions could accelerate the trend towards a cashless economy. The implications of this for local economies and businesses include:

- Short term costs to businesses of adjusting to cashless technologies.
- Risk of 'financial exclusion' affecting vulnerable groups, including those without necessary.
- Technology skills and those without bank accounts.
- Overall reduction in transaction costs in the longer term.
- A reduced shadow economy, and a decline in crime and money laundering.

## C2. Evidence gaps

For many interventions designed to improve local growth, we lack evidence on their impact and whether they are cost-effective. This hampers good policy making, compared to policy areas such as education, labour market, and health. For example, in education there is good causal evidence which allows decision makers to compare the relative cost and effectiveness of reducing class sizes, using teaching assistants in classrooms, or offering one-to-one catch up tutoring, and allocate resources accordingly. It also means that there is no reliable 'policy toolkit' for informing policy aimed at addressing local economic decline, as there is for, say, addressing youth unemployment during recession at the national level.

To address this, government could invest in (and incentivise others to invest in) robust impact and process evaluation of local growth interventions. The priority should be interventions for which the evidence is currently poor, or which are expected to play a significant role in post-COVID recovery, including:

- **Employment training.** Employment training will be a significant element of the local and national response to COVID-driven changes in the labour market, such as the increase in youth unemployment. We lack evidence on which implementation factors are most important in maximising impact. Multi-arm randomised controlled trials which compare different delivery models would be valuable. (See evidence summary at <https://whatworksgrowth.org/policy-reviews/employment-training/>).
- **Business advice and business support.** There is some existing evidence on the effectiveness of business advice and support. However, costs for different interventions vary considerably, with intensive advice and support being much more expensive, and more evidence is need on the most *cost-effective* approaches, particularly as government looks to support businesses through the post-COVID recovery.
- **'Public realm' investments designed to improve the desirability of places to residents or businesses.** Evidence of the impact of such interventions on local

outcomes – from attracting more affluent residents, workers and shoppers, to improving outcomes for existing residents - is extremely limited. As decisions are made about how to invest the Towns Fund and Future High Street Fund, understanding what impacts can be expected and for whom will become increasingly important for local decision-making.

- **Investment in cultural events and cultural infrastructure such as new museums, and their impact on economic outcomes.** Cultural events and infrastructure are funded to deliver a wide range of social benefits. However, our understanding of their local *economic* benefits is limited. As local areas decide which types of investment will deliver economic recovery and growth, this evidence will be essential.
- **Road projects designed to increase productivity by reducing congestion or improving accessibility to a nearby economic centre.** As the government looks to invest more in ‘levelling up’, it will be increasingly important to understand whether such projects do deliver growth, or whether the increased accessibility does not necessarily result in the local economic changes that we expect.
- **Enterprise zones and freeports.** The commitment to ‘levelling up’ has increased interest in interventions designed to change the geographical distribution of growth. However, there is limited evidence to date demonstrating the impact that freeports would have in the UK context. An evaluation of the recent Enterprise Zones – which share some characteristics with some freeport models - would be both possible and particularly informative if the relevant data could be made available.
- Local procurement policies which prioritise ‘retaining’ major local spending within a particular area. There is growing interest in the ‘Preston model’, but no robust impact evaluation yet with regard to economic outcomes for the area.

As well as local **impact**, there is an evidence gap around the **displacement** effects of many interventions. Understanding whether jobs have been created by an intervention or simply moved from one place to another, for example, is essential for HMG when assessing whether to invest in similar projects in future. Evaluations should be designed to assess the extent of displacement, wherever possible.

There is also an evidence gap with regard to understanding how these types of interventions interact with one another. While filling this evidence gap is challenging, it is crucial because it is rare that a single intervention will be sufficient to address local economic problems.

References can be found in Annex 3.



## Report from subgroup D: global issues

Chair: Giles W., OCSA

The report is from subgroup D, addressing ARIs related to global issues.

The subgroup chair, Giles W., has now moved to another department. However, Sarah Webb of the UKRI is happy to be contacted to discuss in more detail any of these messages or evidence gaps: [sarah.webb@nerc.ukri.org](mailto:sarah.webb@nerc.ukri.org)

### D1. Key messages

#### D1.1. Is COVID-19 accelerating trends in emerging technologies?

Before COVID-19, BEIS and UKRI had identified the top 20 technologies where the UK was strong in terms of R&D.<sup>3</sup> The global challenge of COVID-19 has spurred a massive innovation effort from companies, governments, universities, and individuals, accompanied by a huge investment in research and innovation funding. Within a month of UK lockdown, countries had committed approximately £5.5bn<sup>4</sup> in funding (mainly public), to look at mainly vaccine and associated technologies and AI and data. UKRI has specifically funded over 238 grants to academia<sup>5</sup> and Innovate UK has funded over 900 industry-based projects.<sup>6</sup>

COVID-related technologies:

- The speed of response of vaccine development has been unprecedented, significantly outpacing that of previous infectious diseases. The speed of uptake of GMO technologies may be accelerated as regulations are relaxed.<sup>7</sup>
- The pandemic is strengthening the case for robotics and automation with many manufacturers overcoming the immediate challenge of lack of staff by increasing automation – this is likely to accelerate the whole automation ecosystem.
- The ‘Synthetic Biology’ discipline<sup>8</sup> has benefitted from considerable funding and increased levels of activity, which may accelerate the sector over the longer term.

Increased uptake of technology – spill over effects:

- Financial Technology including contactless interfaces, digital commerce spending and borderless banks was already increasing nationally and globally prior to

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<sup>3</sup> BEIS -UKRI Commercialisation pipeline identified Energy Generation, Omics, Disease Control, Medical imaging, AI& Machine learning as the top five.

<sup>4</sup> <https://sciencebusiness.net/covid-19/news/live-blog-rd-response-covid-19-pandemic>

<sup>5</sup> <https://www.ukri.org/research/coronavirus/covid-19-research-and-innovation-supported-by-ukri/>

<sup>6</sup> <https://www.ukri.org/news/additional-projects-awarded-funding-to-tackle-the-impact-of-the-coronavirus/>

<sup>7</sup> <https://www.euractiv.com/section/health-consumers/news/eu-goes-easy-on-gmos-in-race-for-covid-19-vaccine/>

<sup>8</sup> synthetic biology, which can be described as the design and construction of novel biologically based parts, devices and systems, as well as redesigning existing natural biological systems for useful purposes <https://bbsrc.ukri.org/funding/grants/priorities/synthetic-bio/>

COVID-19 but has seen rapid increases since the start of the pandemic as global remittances are reduced approx. 20% across UK with people unable to go into shops in person.<sup>9</sup> Globally the World Bank estimates that remittances to low- and middle-income countries will fall to \$445 bn in 2020 (down from \$574 bn in 2019).

- Remote presence technologies (video calling) and internet usage has seen a rapid growth in users and share value, as people worked, educated and entertained themselves from home and accelerated access to services previously delivered face to face such as online consultations with doctors and online prescribing.<sup>10</sup>
- It has become clearer that nations with a strong national research base that can be exploited through effective scaled collaboration between government and industry as well as a strong grip of emerging technologies will be better equipped to recover more quickly from the pandemic and associated impacts.

### **D1.2. How might these trends affect global employment and immigration patterns?**

The trend for cities to become ‘Smart cities’ (broad concept involving using digital, data and technology to create urban areas that better meet the needs of their citizens) is likely to accelerate as a result of COVID-19. Cities that are able to employ emerging technologies to become ‘smarter’ and manage COVID-19 effectively are likely to be more productive and have greater draw for economic migrants.

Workforces are likely to become more dispersed, requiring the technology to match, and the need to build and nurture business relationships virtually. Additionally, people employed in the hospitality (e.g. coffee shop) industry in cities are likely to be negatively impacted as those who can work away from cities continue to do so after the pandemic, forcing them to move elsewhere.

Once roles have been robotized, they are unlikely to go back to requiring human workers. However, the need for human workers to maintain and control robots remotely will grow. This will also result in greater disparity between the wealthier counties and the poorer ones such as parts of Africa; supply of machines and equipment is only the first stage; people are needed to maintain the machines and relatively simple biomass boilers have been abandoned in towns in Africa as no one knows how to maintain them.<sup>11</sup> (Similar trends also shown for low technology such as toilets – initiative in India for every village to have toilets, but poor workmanship and no maintenance means they are not usable).<sup>12</sup>

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<sup>9</sup> Laura Hammond

<sup>10</sup> <https://www.england.nhs.uk/wp-content/uploads/2020/01/online-consultations-implementation-toolkit-v1.1-updated.pdf>

<sup>11</sup> Carbon Trust

<sup>12</sup> UKRI India

Demands to have constant connectivity may dictate migration patterns and within countries it is predicted that following COVID-19, people who can afford to are looking at whether they can move out of cities and work from the countryside, while lower paid migrants continue to move toward the cities.

Access to healthcare and vaccines may become a bigger factor in migration decisions (in wealthier countries use of virtual consultations may see an increased migration out of cities for those who can afford to do so).

Advances in digital connectivity, fintech and blockchain technologies likely to have large impact on global remittances and international money transfers.

Emerging technologies will see some countries emerging as leaders in that technology and new opportunities and markets growing. With that will come the need for migrant labour from the informal economy (e.g. domestic, and daily wage workers). India has over 40 million internal migrants; more than 164 million people were estimated to be migrant workers in 2017. Migrant workers accounted for 20.6% and 17.8% of all workers in northern America, and in northern, southern, and western Europe respectively. As emerging digital and AI technologies become more widely used internationally, the gap between those with access and those without widens which in turn could force migration for those unable to afford the basics such as food.

For asylum seekers, they will continue to seek countries offering better conditions and access; embassies are moving toward digital and away from paper systems enabling people to apply remotely and in the UK the Home Office has provided free Wi-Fi in hostels enabling people to keep in touch with family.

### **D1.3. How might COVID-19 affect migration trends?**

One of the major problems with understanding global migration is the overall lack of available data (and data systems). This coupled with lack of any cohesive joined up system of tracking migration (both legal and illegal) remains a challenge. Border Forces around the world need to have a system of capturing and sharing data that can help understand migration patterns. In addition countries lack the systems to track migrations internally – this has been seen in the UK at a micro scale - the inability to Track and Trace people have been a significant blocker to understanding and stopping the spread of COVID-19.

Distressed migration:

- Increasing border restrictions have an impact on the mobility of migrants, resulting in migrants travelling shorter distances (distressed migration) as they cannot afford to move longer distances and lack access to food and water.
- This will in turn see people taking more risks. Having experienced people smugglers once, usually people are reluctant to use them again, however with

the lack of aid reaching camps, people are getting desperate. The Central Mediterranean remains the most dangerous maritime crossing for migrants. In April 2020, an estimated 1,132 people attempted to cross from North Africa to Italy and Malta, which is more than double the figure in the same month in 2019. In comparison the number of people using the Eastern or Western Mediterranean migration routes decreased significantly.<sup>13</sup> This is thought to be down to lack of food and reduced access to aid. However, the data is missing as this requires a concerted effort across many countries to collect and analyse.

#### **D1.4. Labour migration**

Migrants make important contributions to address the pandemic but are also exposed to higher risks of contracting the virus. For example, among the 15 countries most affected by COVID-19 as of 22 April 2020, available international data show that at least 10 countries – the United States, Spain, Italy, Germany, France, the United Kingdom, Belgium, the Netherlands, Canada and Switzerland – depend on foreign-born workers in the critical sector of healthcare services.<sup>14</sup> The closure of borders may see labour shortages in the short- to medium-term.

Many migrant workers have attempted to return to their countries of origin, often with the help of bilateral negotiations that allow borders to temporarily open to return stranded migrants. However, for some, returning to countries of origin has not been possible, trapping migrant domestic workers in destination countries without housing and income. Where migrants have returned to their country of origin there is no guarantee of when they will be able to return overseas to continue working. This has been seen in for the Oil and Gas industry in the UK as well gulf countries who rely on migrants from South Asia and East Africa. The economic slowdown around the world along with falling oil prices in the Gulf countries are projected to cause remittance flows to sub-Saharan Africa and South Asia to fall by 23% and 22% respectively in 2020 which in turn may result in forced migration.

Globally, there have been sharp falls in the remittances that support millions in low-income countries. The US, countries in the Eurozone, the UK and Canada together accounted for an estimated 46% of remittances sent to low- and middle-income countries in 2019 ([World Bank, 2019](#)).

In some countries e.g. India, internal migration is estimated to account for up 2.5 times the amount of international migration, and most of these individuals are employed within the informal economy. COVID-19 is expected to impact future internal migration for work, with many migrants wary of being stranded away from their villages. This will consequently impact businesses who will not necessarily be

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<sup>13</sup> <https://migrationdataportal.org/themes/migration-data-relevant-covid-19-pandemic>

<sup>14</sup> <https://migrationdataportal.org/themes/migration-data-relevant-covid-19-pandemic>

able to rely on cheap labour in the future. In addition, there are increased health vulnerabilities and socioeconomic pressures in the villages if people do return.

The role of humanitarian organizations in supporting migrants has been hampered by COVID-19 so we expect to see an increase in smuggling and an increase in the risks people are willing to take.

### D1.5. International students

Globally, there were over 5.3 million international students in tertiary education in 2017, and 3.3 million of them were studying in Northern America and Europe ([UNESCO, 2020](#)) with nearly one in four international students came from just three countries: China, India and Germany. International students have been affected by closure of university campuses, loss of student jobs and mobility restrictions by both origin and destination countries being hit by COVID-19.

It is expected that in the short term the attractiveness for students to study internationally will drop, and that moving forwards there might be adoption of new health criteria in migration management.

## D2. Evidence gaps

<p>1. Is COVID-19 accelerating trends in emerging technologies?</p> <p>2. How might these trends affect global employment and immigration patterns?</p> <p>3. How might COVID-19 affect migration trends? For example, as an amplifier or as a driver of migration in itself? If it impacts, which regions of the world are likely to be most affected?</p> <p>Evidence gaps in the academic literature: the community is still reacting to the emerging situation and academics are not yet in position to publish.</p> <p>Evidence gaps – lack of data: systems to enable linkage of data sets and collaboration between holding Gov departments (e.g. Home Office, HMRC) and</p>	<p>Questions 2 and 3 are future looking so by their very nature there will be gaps.</p> <p>UK government has been putting in place systems to ensure they are able to link to each other's data sets so people only have to "Apply Once " etc. This is a good way of ensuring comprehensive data, however access to this data for academics can be a problem.</p> <p>Potential opportunity as lockdowns ease to gain access to other countries data (subject to political constraints). Countries are not in a position to be able to understand the internal migrations patterns occurring or impacts to the migrant workforce. Could be opportunities to explore</p>
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<p>international counterparts may not be in place.</p> <p><b>‘ARI for future consideration’</b></p> <p>Though not directly related to this set of ARI questions we recognize a need for longer term research around how the pandemic is impacting migrant (and other) populations in urban (city) vs. rural locations (e.g. farms): esp. the impacts on mental and physical health in cramped urban conditions. With increasing urbanization (70% of population to be in based in cities by 2050) and as part of ‘rebuilding Britain better’ how can we design our cities and urban spaces to be healthier places to live and work in (with positive benefits for the environment also – reducing pollution, increasing biodiversity, etc.).</p>	<p>key research questions and see if other data sources can help e.g. use of satellite data and AI to follow migration patterns.</p> <p>During July 2020 NERC organised a series of Environmental Solutions for COVID-19 Ideas Series Thematic Ideas Workshops, involving academics, policy makers, businesses, third sector organisations and other Research Council representatives. The <b>Healthy people: Healthy Places</b> sessions discussed:</p> <p><i>How might communities act as catalysts for healthy place?</i></p> <p><i>How might we recognise quality healthy places?</i></p> <p><i>In what ways might we ensure equitable access to healthy places?</i></p> <p><i>How might we improve 'unhealthy' places?</i></p> <p>The research gaps, needs, and outputs of the workshop discussions are currently being analysed with a view to informing future research programme bids.</p>
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References can be found in Annex 3.

## Report from subgroup E: employment

Chair: Kathrin Enenkel, Centre for Cities

The report is from subgroup E, addressing ARIs related to employment.

As with all subgroup chairs, Kathrin Enenkel is happy to be contacted to discuss in more detail any of these messages or evidence gaps: [k.enenkel@centreforcities.org](mailto:k.enenkel@centreforcities.org)

### E1. Key messages

#### E1.1. Responding to probable higher levels of youth unemployment

The overarching message is that young people, and especially the most disadvantaged, need an **integrated and appropriately paced suite of support that is as comprehensive as their challenges are complex**. There is a need to address the fragmented nature of employment services, with better accessibility and integration of provisions between formal education, youth services, employability providers and public sector locally.

With regards to the **identification and engagement of young people in interventions**, identification of the most at-risk is likely to be more effective where Local Authorities are able to ensure that the services available locally 1) meet the most pressing needs of the most at risk, and 2) are delivered at the right time, before they lead to long term poor outcomes, and the scarring that accompanies long-term unemployment among young people.

The evidence also points to the effectiveness of **advisory support provided to young people throughout their journey towards and into employment**. This should be tailored, consistent support that offers a range of provisions from help with job searches to confidence building to addressing basic skills. The better the match to a young person's needs, the better the outcomes, highlighting the importance of accurate profiling and manageable provider caseloads. The reviewed evidence also suggests the need for clearer lines of accountability for achieving a good standard of careers advice. Local partnerships, such as youth transition partnerships, can help to hold local authorities and schools to account for the standard of provision locally, but there may be role for clearer ministerial accountability for delivering good careers advice and education, as well as stronger evidence about how and why such support achieves positive outcomes for young people. For the most disadvantaged young people, international evaluation evidence points to the benefit of specialist advisers sitting alongside employment services

Regarding **increasing young people's capability and reducing their barriers to employment**, the evidence reviewed highlights that successful provision addresses wider barriers to employment, joining up training with other available specialist support. This includes the delivery of personalised support including employability skills, work experience, capabilities, vocational skills and addressing barriers such as health and wellbeing, housing and life skills.

Highlights from the reviewed evidence regarding provision of **training and skills**:



- Vocational training programmes can be effective at getting young people into jobs, but close engagement between the provider/implementer and employer plays a key role in ensuring positive outcomes and positive attitudes towards hiring youth.
- As compared to employment services and subsidised employment interventions, skills training and entrepreneurship promotion interventions appear to yield more positive results on young people's earnings. So, there are potential benefits from combining supply- and demand-side interventions to support youth in the labour market.
- Evidence from the UK and internationally also suggests that pre-employment training programmes for the unemployed need to be well targeted, especially with it particularly important to target the long term unemployed (Martin et al., 2001). The Learning and Work Institute impact evaluation of the Liverpool City Region Youth Employment Gateway (YEG) found that young people who were the most disadvantaged (as measured by length of unemployment on joining the programme), were more likely to say YEG had played a role in helping them to achieve a positive job outcome.
- The evidence review shows that pre-employment training should be 1) employer-led: results appear to be more mixed for public- led than private-led programmes but this may be explained by other characteristics of the programme 2) on-the-job rather than classroom: overall, in-firm or on-the-job training programmes tend to outperform classroom-based training programmes.

**Well-targeted employer-focused strategies** (e.g. wage subsidy programmes) can also achieve positive outcomes for unemployed young people. The evidence reviewed highlights the following considerations:

- Provisions should be locally-driven and locally relevant, and engage local employers in design, and should proactively address or dispel employers' concerns regarding their specific recruitment needs, the financial incentives, finding the right young person for the job, and the administrative burden of participation.
- Work placements that improve young people's employability are built on a strong foundation of pre-placement advising/guidance, and offer a comprehensive combination of support and tailored interventions: refining the career goals, equipping them with the necessary qualifications, skills and work experience to achieve those goals, changed attitudes, motivation and increased confidence.
- Programmes that focus on creating temporary public sector job opportunities show poor outcomes for youth employment.

## **E1.2. The impact of demographic change on the health and safety of the future workforce**

Without significant improvements in health, UK population ageing will increase the amount of ill-health and disability. Chronic conditions, multi-morbidities, and cognitive impairments will become more common. At the same time families will face increasing pressure to balance care with other responsibilities, particularly work. It will be more common for people to be in work whilst managing chronic conditions and undertaking caring responsibilities. Social inequalities are influencing the ageing process – everyone will age differently. The impacts of COVID-19 will be long lasting – for some groups more than others, and health inequalities could widen.



These developments will have an impact on the types of work, older employees are demanding. It can be expected that there will be an increasing older worker demand for part-time and flexible work. At the same time, it is possible that certain sectors linked to precarious working patterns will intensify. One example is the gig economy whose work is characterised by short-term informal working relationships. For some, gig work offers benefits such as variety and flexibility. However, the main health risks associated with participation in the gig economy were found to be work-related stress and the development of other mental health issues. Currently, it is particularly the younger generations which are predominately working in the gig economy. There is however a danger that this younger age group may not be able to move beyond gig work and be perpetually 'trapped' in insecure and precarious work, with negative implications for the health of the future workforce.

Employers have a crucial role in helping to address these issues and in supporting those who have ill-health conditions and may need to rethink how they enable these people to remain healthy and safe at work. Research has shown that there are still barriers to discuss critical health conditions with the employer. Just over one-third of employees with a health condition had not discussed it with their employer, even in cases where it had affected their work. Those with a mental health condition were less comfortable discussing their condition than those with a physical health condition. One area that organisations should focus more on, is equipping managers with the skills needed to handle their teams' mental health concerns. Line manager training and leadership and stakeholder engagement are key interventions to improving health.

### **E1.3. Responding to probable higher levels of over 50s unemployment**

COVID-19 risks a surge in long-term unemployment for older workers – just one in 3 (35%) of over 50s who lose their job will return to work quickly compared to two in three (63%) of workers aged 25-34. Over 50s who are unemployed are [twice as likely to have been out of work for a year than those aged 18-24](#). Historically older workers have been failed by employment support programmes – the Work Programme led to just 19% of adults in late 50s finding a lasting job, as compared to 38% of people aged 18-24.

Evidence on effective employment support is limited, but [suggests that the following elements need consideration](#):

- Customisation to meet the complexity of needs.
- Segmentation of delivery, looking beyond age to other factors such as closeness labour market, personal circumstances such as health and caring responsibilities, and skills.
- Personalised advisor support.
- Motivational support and attitudinal challenge.
- Conducive support and engagement environment.
- Rapid response and early labour market engagement.
- Relevant skills, training and certification that builds on already existing skills.
- Mid- (and later-life) career reviews.

## E2. Evidence gaps

Unanswered ARIs and Other Substantial Evidence Gaps	Proposed Steps to Address these Gaps
<b>1. Responding to probably higher levels of youth unemployment</b>	
Further research to understand the likely effectiveness of apprenticeships in addressing the increase in youth employment following the COVID-19 crisis.	<p>Using labour market analysis, observing vacancy trends, and surveys with employers, and additional methods, the following could be explored:</p> <ul style="list-style-type: none"> <li>● What capacity will employers have to offer apprenticeships over the next 12-24 months?</li> <li>● Are the new incentives offered to employers for recruiting apprentices likely to affect their behaviour?</li> <li>● How willing will employers be to recruit school and college leavers onto apprenticeships relative to older learners?</li> <li>● What impact will the labour market crisis have on government receipts from the apprenticeship levy?</li> </ul>
Further research to understand the role of skills provisions, specifically traineeships, in addressing youth unemployment.	<p>The following issues could be explored:</p> <ul style="list-style-type: none"> <li>● Will the new incentives for employers to offer Traineeships encourage them to engage with the programme?</li> <li>● Will an expansion of Traineeships come at the expense of entry level apprenticeships?</li> <li>● Is there any demand from young people or employers for the new T-level qualifications starting in September?</li> <li>● Will the Kickstart scheme be targeted effectively at the right young people and employers to generate high quality jobs?</li> </ul>
Further research on the impact of COVID-19 on the most disadvantaged young people.	<p>Short-term primary research with BAME, care-leavers, and other vulnerable groups to:</p> <ul style="list-style-type: none"> <li>● Understand how their experience is similar to and unique from the experience of their less-disadvantaged peers.</li> <li>● Understand the types and scale of support needed by the most disadvantaged and how best it could be delivered.</li> </ul> <p>Longer term studies to understand the wider impact of support to groups that have been particularly affected by the crisis and provide insight on the determinants of successful outcomes.</p>
Further research on what the labour market young people are now facing looks like, and how best to support their transition into employment.	<p>Research to support the development of systemic, ambitious policy solutions that draw out and connect the:</p> <ul style="list-style-type: none"> <li>● Longer-term 'future of work' trends, e.g. emerging/declining sectors, shifts in skills required from the workforce, automation, shorter working week, considerations around universal basic income/provision.</li> <li>● Implications of the immediate impact of the crisis.</li> </ul>

	<ul style="list-style-type: none"> <li>• Medium term employment support / labour market initiatives already being recommended that are a crucial feature of the journey from immediate impact to a longer-term vision.</li> </ul>
Further research on the spatial element of the demand side for labour.	How to reduce youth unemployment in a labour market which is persistently weak and only has few job opportunities?
What impact might the Youth Hubs model have on young peoples' employment outcomes?	Further research into the operational aspects and short- and long-term outcomes associated with colocation of multiple services.
<b>2. The impact of demographic change on the health and safety of the future workforce</b>	
There must be more research on obtaining knowledge about good practices that make the biggest difference to workplace health.	DWP, Society of Occupational Medicine and UKRI, are at the moment working with partners to support research on both fundamental understanding of the health of the working population (i.e. occupational health of those in work and those out of the workforce and how they can get back into work).
How can employers support those who have no choice but to continue working in poorer health?	Choice will have a significant impact on whether people continue to work into older age – while some people will have the financial abilities to start their retirement at a regular age, some others may have no choice - out of financial necessity for example. Further research should investigate how employers can support those who have no choice but to continue working in poorer health – and ensure that health is not made worse by work they need to finance their living.
What are employers already doing to support the health of workers?	Do we know how employers are adapting work for (and supporting the health of) workers with multiple health conditions – and those who may have been impacted by COVID-19 (or are suffering after-effects of the virus)?  How can supportive management attitudes and behaviours be promoted?
How to deal with new work patterns that are arising due to COVID-19 or changes in the economic structure (such a higher importance of the gig economy)	If employers lack the skills to manage remote workers, this may have a negative impact on workers' health and safety.  If workers lack the competency and skills for a job/task and training / supervision is inadequate this may result in health and safety issues.  If more workers move about from job to job (with little experience or skills for the tasks they are required to do) this may result in greater levels of workplace accidents.

References can be found in Annex 3.

## **Annex 1: List of participants and contributors**

**Subgroup A Chair:** Professor Donna Lee, Manchester Metropolitan University

**Subgroup A members:**

Andrew Bourne, UKRI

Sophie Laurie, NERC

Dr Cher Li, Nottingham University

Tony Soteriou, UKRI

**Subgroup B Chair:** Professor Leaza McSorley, University of Sunderland

**Subgroup B members:**

Kathrin Enenkel, Centre for Cities

Barbara Ghinelli, STFC

Marie Laure-Hicks, Royal Academy of Engineering

Dr Cher Li, Nottingham University

Professor Philip McCann, Sheffield University

**Subgroup C Chair:** Danielle Mason, What Works Growth

**Subgroup C members:**

Dr Alessandro Biraglia, University of Leeds

Kathrin Enenkel, Centre for Cities

Dr Felicia Fai, University of Bath

Professor Donna Lee, Manchester Metropolitan University

Professor Philip McCann, Sheffield University

**Subgroup D Chair:** Giles W, OCSA

**Subgroup D members:**

Professor Laura Hammond, UKRI

Clare Howes, NERC

Professor Jenny Phillimore, Birmingham University

Dr Sarah Webb, NERC

Jacqueline Wood, NERC

**Subgroup E Chair:** Kathrin Enenkel, Centre for Cities

**Subgroup E members:**

Luke Price, Centre for Ageing Better

Paul Nightingale, UKRI

## Annex 2: List of ARIs considered by this group

### Subgroup A

1. Role of universities in supporting local regeneration and skills.
2. Impact of university and school closure on productivity in terms of short term and long-term outcomes.
3. How will COVID-19 impact on international cooperation on emerging technologies?
4. What will future international scientific collaboration look like in a post-COVID world? Will scientists collaborate in a different way?
5. How will COVID-19 impact on the uptake of international study? What are the longer-term implications for the research ecosystem in the UK and internationally? What will be the impact on the UK's reputation as a leading science nation?
6. Importance of strong national research base to support effective policy.
7. Role for analytical and scientific skills to support national need.

### Subgroup B

1. What role does productivity play in the UK economy?
2. What are the effects of the UK's approach to business regulation, and how can the system develop to meet the economy's needs in the future?
3. Unlocking the benefits of investment in skills and entrepreneurship.
4. Mitigating the effects of business closures and redundancies.
5. Role of government in stimulating demand (procurement).
6. What are the future trends for demographics and working/saving behaviour and what is driving these trends? What further reforms to state and private pension provision might we require to ensure long-term sustainable financial security for older people and pensioners?

### Subgroup C

1. How do we best support high streets during the current crisis and beyond?
2. What is the impact of improving physical connectivity between towns and cities, as well as rural and rural/urban transition zone?
3. What are the drivers of regional economic disparity?
4. What drives differences in productivity at the firm and regional level, and what are the effects of these differences on enterprise and business growth?
5. What are the implications of reduced cash transactions for local economies and businesses?

### Subgroup D

1. Is COVID-19 accelerating trends in emerging technologies?
2. How might these trends affect global employment and immigration patterns?
3. How might COVID-19 affect migration trends? For example, as an amplifier or driver of migration in itself? If it impacts, which regions of the world are most likely to be affected?

### **Subgroup E**

1. Responding to probable higher levels of youth unemployment.
2. The impact of demographic change on the health and safety of the future workforce.

## Annex 3: Evidence and resources relevant to ARIs

### Subgroup A

Research Centre	Relevance	Contact Point	Link
Centre for Enterprise and Economic Development Research (CEEDR)	<p>Our work has an established reputation for high quality, independence and meaningful impact in small business and local economic development policy and practice. Key research themes comprise:</p> <ul style="list-style-type: none"> <li>• SME growth, finance and development</li> <li>• Social and sustainable enterprise</li> <li>• Local/regional economic development and regeneration</li> <li>• Employment, skills and quality of work</li> </ul>	Prof Fergus Lyon F.Lyon@mdx.ac.uk	<a href="https://www.mdx.ac.uk/our-research/centres/ceedr">https://www.mdx.ac.uk/our-research/centres/ceedr</a>
University Alliance	<p>We are universities with a common mission to make the difference to our cities and regions. We use our experience of providing high quality teaching and research with real world impact to shape higher education and research policy for the benefit of our students and business and civic partners. We innovate together, learn from each other and support every member to transform lives and deliver growth.</p>	info@unialliance.ac.uk	<a href="https://www.unialliance.ac.uk/member/">https://www.unialliance.ac.uk/member/</a>
Universities UK	<p>Opportunity - anyone with the will and potential to succeed, regardless of their background, has the opportunity to transform their lives through accessing an outstanding learning experience at a UK university. Impact - UK universities are world-leading in the production and application of knowledge and skills. Trust - through demonstrating positive impact on students' lives, economic growth, public services and civil society, UK universities benefit from widespread public trust and political support. Global - UK universities are global leaders in international education and research. Autonomous - UK universities are free to make autonomous decisions according to their diverse missions and the needs of their students and communities.</p>	info@universitiesuk.ac.uk	<a href="https://universitiesuk.ac.uk/">https://universitiesuk.ac.uk/</a>

<p>National Centre for Universities and Business</p>	<p>The National Centre's Council, drawn from senior business leaders and Vice-Chancellors from our member organisations, review and make recommendations on the UK's long-term skills, graduate talent and innovation needs, deliver collaborative thinking on the big issues of sustainable growth and industrial strategy, and strengthen understanding with government and policy-makers through high level networking. At the National Centre for Universities and Business, we deliver digital platforms for innovation brokerage and work experience, research and analysis feeding into every major review of business-university collaboration and change programmes mapping out clear and practical solutions for both sectors and regional economies.</p>	<p>bethan.caunt@ncub.co.uk</p>	<p><a href="https://www.ncub.co.uk/">https://www.ncub.co.uk/</a></p>
<p>Centre for Cities</p>	<p>The UK's economy is driven by the success of its largest cities and towns, which generate opportunities and prosperity for people in all parts of the country. Our mission is to help the UK's largest cities and towns realise their economic potential. We produce rigorous, data-driven research and policy ideas to help cities, large towns and Government address the challenges and opportunities they face – from boosting productivity and wages to preparing for Brexit and the changing world of work. We also work closely with urban leaders, Whitehall and business to ensure our work is relevant, accessible and of practical use to cities, large towns and policy makers.</p>	<p>p.sundararajan@centreforcities.org</p>	<p><a href="https://www.centreforcities.org/about/person/prema-sundararajan/">https://www.centreforcities.org/about/person/prema-sundararajan/</a></p>
<p>City Region and Economic Development Institute (City REDI)</p>	<p>The Institute is:  At the forefront of academic debate on local and regional economic growth, as evidenced by high-quality research outputs. Utilising a systemic and interdisciplinary "Birmingham approach" to understanding and facilitating economic development in city regions. Attracting new, leading faculty in related fields to the University of Birmingham and providing a boost to the regions research capacity in areas such as data analytics and economic forecasting Developing international research partnerships to facilitate international</p>	<p>Professor Simon Collinson, s.collinson@bham.ac.uk (Director)Tasos Kitsos, a.kitsos@bham.ac.uk (Contact for Impact of Universities on Regional Economies Paper)</p>	<p><a href="https://www.birmingham.ac.uk/research/city-redi/index.aspx">https://www.birmingham.ac.uk/research/city-redi/index.aspx</a></p>



	<p>comparative analysis and maximise economies of scale and scope for research funding and outputs.</p> <p>Translating high level academic reports into practical and useful policy recommendations for practitioners, alongside longer-term intelligence and research papers. Including paper on The Impact for Universities on regional economies paper</p>		
Centre for Economic Performance (CEP), London School of Economics	<p>CEP studies the determinants of economic performance at the level of the company, the nation and the global economy by focusing on the major links between globalisation, technology, the educational system and the labour market and their impact on productivity, inequality, employment, stability and wellbeing.</p>	<p>Education and Skills Director: Prof. Sandra McNally; Growth Director: Dr. Ralf Martin</p>	<p><a href="http://cep.lse.ac.uk/default.asp">http://cep.lse.ac.uk/default.asp</a></p>
Centre for Regional Economic and Enterprise Development (CREED)	<p>The Centre for Regional Economic and Enterprise Development is an interdisciplinary research centre based within Sheffield University Management School. Its expertise is drawn from a number of disciplines including innovation, management and economic development.</p> <p>CREED is engaged in a variety of research project in the UK and across the world, examining the policy and practice of innovation, entrepreneurship and regional development. Much of our work has an institutional focus, examining how regulation, norms and cultures shape economic behaviours, landscapes and outcomes.</p>	<p>creed@sheffield.ac.uk</p>	<p><a href="https://www.sheffield.ac.uk/creed">https://www.sheffield.ac.uk/creed</a></p>
Centre for Regional Economic and Social Research (CRESR)	<p>As a leading UK policy research centre, CRESR seeks to understand the impact of social and economic disadvantage on places and people and assess critically the policies and interventions targeted at these issues. Clients include government departments and agencies, local authorities, charities and foundations, international organisations, and the private sector. We offer research expertise covering a wide range of qualitative and quantitative methods, evaluation, policy advice and guidance, and consultancy.</p>	<p>cresr@shu.ac.uk</p>	<p><a href="https://www4.sheffield.ac.uk/research/crest/">https://www4.sheffield.ac.uk/research/crest/</a></p>

Civic University Commission	Universities are facing a host of challenges. Politicians and commentators from all sides are asking fundamental questions about their purpose, whether they provide ‘value for money’, and whether they serve students and taxpayers. The Commission is an attempt to shift the debate on higher education, but it has a more fundamental and practical purpose. Universities will exist for centuries (indeed many already have) – far beyond any piece of government legislation or headline in the papers. The Commission will look at how, concretely, universities can serve their place as well as play a global role. To do this, the Commission wants to understand how civic universities operate today, how they operated in the past, and how they should operate in the future. We are looking at evidence from a wide range of sources including public opinion; expert witnesses and written evidence; and historical and current research.	upp- foundation@upp- ltd.com	<a href="https://upp-foundation.org/civic-university-commission/">https://upp-foundation.org/civic-university-commission/</a>
UK Research and Innovation (UKRI)	UK Research and Innovation works in partnership with universities, research organisations, businesses, charities, and government to create the best possible environment for research and innovation to flourish. We aim to maximise the contribution of each of our component parts, working individually and collectively. We work with our many partners to benefit everyone through knowledge, talent and ideas.  Operating across the whole of the UK with a combined budget of more than £7 billion, UK Research and Innovation brings together the seven research councils, Innovate UK and Research England.	communications@ ukri.org	<a href="https://www.ukri.org/contact/">https://www.ukri.org/contact/</a>
Institute for Social Innovation and Impact (ISII)	The ISII aims to evaluate and measure the impact of social innovations in the UK and around the world, while also exploring the financing of, and policy support for, social innovation. The Institute defines social impact as ‘the economic, social and environmental benefits delivered by an organisation to society’ and views social innovation as any new structure or process that enhances society’s resources and cohesion. The ISII supports social innovators through the delivery of academic research and consultancy	Dr Richard Hazenberg, Principal Researcher and Research Leader, richard.hazenberg@northampton.ac.uk	<a href="https://www.northampton.ac.uk/research/research-institutes/institute-for-social-innovation-and-impact/">https://www.northampton.ac.uk/research/research-institutes/institute-for-social-innovation-and-impact/</a>

	<p>services, including social impact measurement reporting. The Institute collaborates on multi-disciplinary research projects through internal partnerships with other research institutes and centres, as well through external partnerships with other universities and organisations.</p>		
The Research Centre for Social Sciences	<p>The Research Centre for Social Sciences works to promote social science research at York. It fosters interdisciplinary research collaborations, provides training and skills development for our community of researchers, and promotes knowledge exchange and impact with our regional, national and international partners outside the academy.</p>	rcss-admin@york.ac.uk	<a href="https://www.york.ac.uk/social-science/">https://www.york.ac.uk/social-science/</a>
Social Innovation Exchange (SIX)	<p>SIX is a social innovation exchange built on mutual value, relationships and knowledge. We work globally to facilitate purposeful cross-sector conversations, that challenge and inspire people to use innovation to increase social impact. SIX was founded to help identify and connect isolated people and organisations within social innovation, fuelled by the belief that change is more effective when people work collectively. Ten years later, we have helped create a lively and impactful exchange between socially innovative thinkers and doers. This exchange is more than a network and more than just talk, it improves societal wellbeing. In the coming years, we are working to grow the social innovation movement and invite new people, sectors, and regions into this exchange.</p>		<a href="https://socialinnovationexchange.org/">https://socialinnovationexchange.org/</a>
European University Association (EUA)	<p>The EUA represents more than 800 universities and national rectors' conferences in 48 European countries. EUA plays a crucial role in the Bologna Process and in influencing EU policies on higher education, research and innovation. Through continuous interaction with a range of other European and international organisations, EUA ensures that the independent voice of European universities is heard. EUA provides unrivalled opportunities for members to</p>	Dr Sybille Reichert (The Role of Universities in Regional innovation Ecosystems)	<a href="https://eua.eu/">https://eua.eu/</a>

	share best practices by participating in projects, events and other mutual-learning activities involving a wide range of universities. The Association also provides members with unique opportunities to shape European policies and initiatives affecting higher education and research.		
ESRC Hub: Impact of HEIs on regional economies (2007-2011)	Some useful resources from a previous ESRC-funded large initiative based at Strathclyde University, led by Prof. Peter McGregor and Ursula Kelly. Although the consortium was finished in 2011, the insights and resources generated can still be useful esp. re the linkage between Higher Education Institutes (HEIs) and their contribution to regional economies. Many Co-Is associated with this initiative have gone on to further their work in areas re HEI-firm knowledge transfer and innovation network, academic entrepreneurship etc. (e.g., Markus Perkmann at Imperial, Richard Harris/John Moffat at Durham, Rob Huggins etc.). Here is a detailed list of the funded <a href="#">projects</a> and <a href="#">the research outputs</a> .		<a href="https://ewds.stirath.ac.uk/impact/Home.aspx">https://ewds.stirath.ac.uk/impact/Home.aspx</a>
<a href="#">PrOPEL Productivity Hub (2020-2013)</a>	The ESRC <a href="#">PrOPEL Hub</a> (Productivity Outcomes of Workplace Practice, Engagement and Learning) was launched this year to support knowledge exchange and evidence coordination on productivity (2020-2022). This is a multi-disciplinary hub (led by Strathclyde Business School) to help boost productivity – and wellbeing – through supporting the growth of better workplaces in the UK. The specific focus of the Hub is on workplace, managerial practices and innovation adoption. It aims to provide practical lessons, ideas and toolkits for businesses to draw upon, all informed by the very latest research and evidence. The Hub will work with businesses, policymakers and support organisations to help improve the UK's productivity performance through improved management practices, employee engagement and adoption of digital technologies.	Dr Cher Li (Nottingham University Business School); Prof. Graeme Roy (Strathclyde Business School)	<a href="https://www.propelhub.org/">https://www.propelhub.org/</a>

Productivity Institute (2020-2025)	<p>The recently announced £32m Productivity Institute is the largest ever ESRC investment that aims to advance knowledge and inform significant decisions by policy makers and business leaders to increase productivity. “The Institute and programme will address low productivity identified by traditional measures, but will also go beyond these measures to explore wider issues, including variation across places and what can be done to improve productivity for the UK as a whole; the importance of delivering a low carbon economy; relationships between well-being, productivity and skills; and the need for new ways of measuring productivity in a changing economic, technological and environmental context.”</p> <p>‘The aim is to ensure that advances in knowledge inform the significant decisions and interventions that policy makers, businesses and individuals must make to improve productivity, and to achieve the attendant improvements in wages and living conditions that doing so can drive.’</p>	Prof Bart van Ark (Alliance Manchester Business School)	<a href="https://esrc.ukri.org/news-events-and-publications/news/news-items/esrc-productivity-announcement/">https://esrc.ukri.org/news-events-and-publications/news/news-items/esrc-productivity-announcement/</a>
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## Subgroup B

<b>ARI</b>	<b>Type of Resource</b>	<b>Key Messages</b>
What role does productivity play in the UK economy?	<p><b>UK:</b>  <b>Industrial Strategy Council:</b>  <a href="https://industrialstrategyCouncil.org/">https://industrialstrategyCouncil.org/</a></p> <p><b>UK Gov:</b>  <a href="#">Business Productivity Review (2019)</a></p> <p><a href="#">Made Smarter Review (2017)</a></p> <p><b>UKRI – Strategic Priorities Fund:</b>  <a href="https://www.ukri.org/research/themes-and-programmes/strategic-priorities-fund/">https://www.ukri.org/research/themes-and-programmes/strategic-priorities-fund/</a></p> <p><b>ESRC Productivity Strategic Investments:</b>  <a href="https://esrc.ukri.org/about-us/strategy-and-priorities/productivity/?_ga=2.48676128.721253446.1598969235-910505521.1555417717">https://esrc.ukri.org/about-us/strategy-and-priorities/productivity/?_ga=2.48676128.721253446.1598969235-910505521.1555417717</a></p>	<p>Established productivity key driver of local, regional and national growth</p> <p>Productivity debate has moved on from viewing productivity as a technical measure of output (Labour productivity and Total Factor Productivity) to its role in driving growth and wages and wider economic and societal benefits</p> <p>The traditional 5 drivers (competition, enterprise, skills, investment and innovation) of productivity evidence shows remain important for increasing productivity. Most evidence and research has focused on these areas.</p> <p>Increasing focus on links between pay and productivity</p> <p>(McSorley 2018):  <a href="https://productivityinsightsnetwork.co">https://productivityinsightsnetwork.co</a></p>

	<p><b>Productivity Insights Network:</b>  <a href="https://productivityinsightsnetwork.co.uk/">https://productivityinsightsnetwork.co.uk/</a></p> <p><b>International evidence:</b>  <b>OECD (2019), OECD Compendium of Productivity Indicators 2019, OECD Publishing, Paris,</b>  <a href="https://doi.org/10.1787/b2774f97-en">https://doi.org/10.1787/b2774f97-en</a></p> <p><b>Australian Productivity Commission:</b>  <a href="https://www.pc.gov.au/">https://www.pc.gov.au/</a></p> <p><b>New Zealand Productivity Commission:</b>  <a href="https://www.productivity.govt.nz/">https://www.productivity.govt.nz/</a></p> <p><b>Charities/Think tanks</b>  <b>What Works Centre for Local Economic Growth (WWLEG)</b>  <a href="https://whatworksgrowth.org/policy-reviews/">https://whatworksgrowth.org/policy-reviews/</a></p> <p><b>Resolution Foundation Publications</b>  <a href="https://www.resolutionfoundation.org/publications/">https://www.resolutionfoundation.org/publications/</a></p> <p><b>Institute for Fiscal Studies</b>  <a href="https://www.ifs.org.uk/">https://www.ifs.org.uk/</a></p> <p><b>Joseph Rowntree Foundation</b>  <a href="https://www.jrf.org.uk/">https://www.jrf.org.uk/</a></p> <p><b>Economic Statistics Centre of Excellence</b>  <a href="https://www.escoe.ac.uk/">https://www.escoe.ac.uk/</a></p>	<p><a href="https://www.resolutionfoundation.org/app/uploads/2018/07/Evidence-Review-Inequality-Well-being-and-Inclusive-Growth-1.pdf">.uk/app/uploads/2018/07/Evidence-Review Inequality-Well-being-and-Inclusive-Growth-1.pdf</a></p> <p>From the literature, focused mainly on advanced European economies and the US, the current thinking on the drivers of weak productivity are:</p> <ul style="list-style-type: none"> <li>• Mismeasurement (Coyle 2017,) - this is particularly identified as an issue for the UK due the relative size of the UK’s service sector. The view being that services are not measured as effectively as tangible goods.</li> <li>• Weak investment - related to the financial crisis, and longer-term structural changes</li> <li>• Hysteresis - “a long-term effect of recession on output due to reduced capital accumulation, scarring effects on workers through job loss, and disruptions to economic processes underlying technological progress” (Bryson and Forth 2016: 167).</li> <li>• Long tail of low productivity firms. US literature refers to low productivity firms as ‘zombie firms’ i.e. firms that are surviving but under more competitive circumstances would have gone out of business due to their low productivity and lack of competitiveness. In the UK this divergence of productivity has clear sectoral and geographical dimensions</li> <li>• Technological and digital diffusion - the rate of adoption of new technologies across industries and within firms</li> <li>• Business concentration - in the US the rise of the ‘superstar’ firm and their monopsonistic power are viewed to be skewing the productivity distribution</li> <li>• Declining business dynamism (Furman 2017) - also linked to this is a less ‘dynamic’ and less mobile workforce, showing reluctance to change jobs post-recession</li> <li>• A shift towards less productive sectors - this requires further detailed analysis for the UK to</li> </ul>
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		<p>identify the sectors in which the new jobs have been created (self-employment, distribution) versus the jobs that were lost during the recession (financial services, construction, public sector)</p> <ul style="list-style-type: none"> <li>• Reduced productivity in a few key high-gross value-added sectors (McKinsey 2018)</li> <li>• Secular stagnation - a predominantly US phrase to explain stagnating economic growth and stagnating wages (Stansbury and Summers 2018).</li> </ul> <p>Emerging focus on inequality, well-being and inclusive productivity growth (McSorley 2018 and 2019)</p>
<p>What are the effects of the UK's approach to business regulation, and how can the system develop to meet the economy's needs in the future</p>	<p>PrOPEL Hub (Productivity Outcomes of Workplace Practice, Engagement and Learning) for knowledge exchange and evidence coordination on productivity (2020-2022):</p> <p>The Hub will work with businesses, policymakers and support organisations to help improve the UK's productivity performance through improved management practices, employee engagement and adoption of digital technologies. It aims to provide practical lessons, ideas and toolkits for businesses to draw upon, all informed by the very latest research and evidence.</p> <p>Regulation Evidence:</p> <ul style="list-style-type: none"> <li>· Evidence: Report 'First do no Harm' by Independent Medicines &amp; Medical Devices Safety Review</li> <li>· Key Message: Need to grow regulatory science expertise in the UK</li> <li>· Details: There is a need to grow our regulatory science expertise to support the scientific underpinnings, mechanisms and provide an evidence base to better inform policy and legislation. Specific sectors are seeing large changes in the regulatory landscape both with the implementation at pace of innovation (such as AI in healthcare) but also changes in regulatory frameworks. The EU medical device regulation changes for instance are coming</li> </ul>	<p>Key Message: Need to grow regulatory expertise in the UK</p> <p>No conclusive evidence that regulatory changes since finance crisis have held back Productivity growth since the financial crisis.</p> <p>'Do no harm' principle of over/under/wrong type of regulation</p> <p>Emerging literature on market concentration and mark ups</p>



	<p>into force in the coming years for the Medical Device Regulation (MDR; 2021) and <i>In-Vitro</i> Diagnostic Regulation (IVDR; 2022). There are opportunities to improve reporting of adverse incidents involving medicines &amp; medical devices and understand further how the UK regulates medical devices particularly with the pace of technological development to ensure patient safety and regulation policy alignments are supporting the UK in staying at the forefront of utilising cutting edge developments.</p> <p>Rebecca Riley &amp; Ana Rincon-Aznar &amp; Lea Samek, 2018. "<a href="#">Below the Aggregate: A Sectoral Account of the UK Productivity Puzzle</a>," <a href="#">Economic Statistics Centre of Excellence (ESCoE) Discussion Papers</a> ESCoE DP-2018-06, Economic Statistics Centre of Excellence (ESCoE).</p>	
<p>Unlocking the benefits of investment in skills and entrepreneurship</p>	<p><b>Rising to the UK's Skills Challenges</b> <b>Industrial Strategy Council (2020)</b></p> <p><a href="https://industrialstrategyCouncil.org/sites/default/files/attachments/Rising%20to%20the%20UK%27s%20skills%20challenges.pdf">https://industrialstrategyCouncil.org/sites/default/files/attachments/Rising%20to%20the%20UK%27s%20skills%20challenges.pdf</a></p> <p><b>The Council believes government, employers, and individuals all have a role to play in upskilling and reskilling the UK workforce</b></p> <p><b>OECD (2019) Job polarisation and the work profile of the middle class</b> <a href="http://www.oecd.org/els/emp/Job-polarisation-and-the-work-profile-of-the-middle-class-Policy-brief-2019.pdf">http://www.oecd.org/els/emp/Job-polarisation-and-the-work-profile-of-the-middle-class-Policy-brief-2019.pdf</a> (Also, the other OECD references in the report relate to skills)</p> <p><b>OECD (2018) Decoupling of wages from productivity, Chapter 2, OECD Economic Outlook 2018.</b> <a href="https://www.oecd.org/eco/outlook/Decoupling-of-wages-from-productivity-november-2018-OECD-economic-outlook-chapter.pdf">https://www.oecd.org/eco/outlook/Decoupling-of-wages-from-productivity-november-2018-OECD-economic-outlook-chapter.pdf</a></p> <p><b>Stansbury, A and Summers, L.H. (2018) "On the link Between US Pay and Productivity". Vox, CEPR's Policy Portal.</b> <a href="https://voxeu.org/article/link-between-us-pay-and-productivity">https://voxeu.org/article/link-between-us-pay-and-productivity</a></p>	<p>Skills:</p> <p>Industrial Strategy council report: "clear overarching vision for UK skills and a long-term commitment to delivering it in partnership with employees, employers, training providers and employer organisations.</p> <p>Improving UK management practices and enabling individuals to assume ongoing responsibility for developing their own skills will need to be key elements of that overarching vision.</p> <p>Policy stability and continuity emerges as important for employers to navigate the skills system and build relationships within it. Interviews conducted for the Council call for evolution of existing policy, not revolution. Improved use of information and data analysis will be required to better meet sectoral and local needs while contributing to the wider objective of raising productivity and competitiveness".</p> <p>A main driver of productivity. Questions around weakening of return to investment in skills</p>

	<p><b>Ernst, Merola and Samaan (2018) The economics of artificial intelligence: Implications for the future of work, ILO Research</b>  <a href="https://www.researchgate.net/publication/328353684_The_economics_of_artificial_intelligence_Implications_for_the_future_of_work">https://www.researchgate.net/publication/328353684_The_economics_of_artificial_intelligence_Implications_for_the_future_of_work</a></p> <p><b>ILO Global Commission on the Future of Work: Work for a Brighter Future</b>  <a href="https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_662410.pdf">https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_662410.pdf</a>.  <b>(Individual learning accounts, and reinvigorating the social contract/ a human centred focus)</b></p> <p><b>OECD (2017) <a href="#">Better use of skills in the workplace: Why it matters for productivity and local jobs</a>.</b> :</p> <p>(joint with International Labour Organisation) offers a recent survey of relevant evidence in the literature and presents a number of international case studies on the impact of skills utilisation on productivity. Lessons from international case studies (incl. one UK-based intervention): targeted local interventions; leadership; employer and worker engagement; specialized/technical expertise; Initiatives should be strategically targeted to SMEs</p> <p>CERN Impact Report (2020):  report: <a href="https://stfc.ukri.org/files/impact-publications/cern-impact-report/">https://stfc.ukri.org/files/impact-publications/cern-impact-report/</a>)</p> <p>Addressing shortage of STEM skills – CERN delivers training schemes and ‘on the job’ training across a variety of sectors  Productivity: Evidence: <a href="#">The Future of Growth capital</a>  · Key Message: <b>Greater need for UK to be actively supporting companies during scale-up to avoid early exits or movement of R&amp;D bases abroad</b>  · Details: The UK’s lies 13th in the world for ‘scaleups’ and this report outlines a number of strategies including a national blueprint</p>	<p>Evidence of weakening of decoupling of wages from productivity.  Significant variation across OECD countries</p> <p>STEM skills:  shortage of STEM skills at all levels from school to PhD and advanced level</p>
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	<p>for growth to ensure the UK remains competitive and grows its industries, aligns its regulatory frameworks and support the unlocking of innovation and growth capital.</p> <p><a href="https://stfc.ukri.org/files/stfc-impact-report-2018/">https://stfc.ukri.org/files/stfc-impact-report-2018/</a> Eight Centres for Doctoral Training in data-intensive science established in 2017 to address identified skills gaps in four areas: instrumentation, software, mathematics and data.</p> <p><a href="https://stfc.ukri.org/files/stfc-impact-report-2018/">https://stfc.ukri.org/files/stfc-impact-report-2018/</a> Eight Centres for Doctoral Training in data-intensive science established in 2017 to address identified skills gaps in four areas: instrumentation, software, mathematics and data.</p> <p>CERN Impact Report (2020): report: <a href="https://stfc.ukri.org/files/impact-publications/cern-impact-report/">https://stfc.ukri.org/files/impact-publications/cern-impact-report/</a>)</p> <p>CERN@School initiative has had impact on skills development and engagement of young people in physics. Institute of Research in Schools (IRIS), aims to develop an extended range of research fields within</p> <p>Skills &amp; Evidence:</p> <ul style="list-style-type: none"> <li>· Evidence : Science and Technology Facilities Council <a href="#">Delivery Plan</a> &amp; CBI Report <a href="#">Skills for the Future</a></li> <li>· Key Message: <b>Developing capacity for technical apprentices</b></li> <li>· Details: STFC is developing a proposal called 'Skills Factory' to leverage its world-class facilities and expertise to manage them on behalf of the UK academic community to train the next generation. This could see 75 apprentices on 4-year courses, 100 graduates on 2-year courses and 125 industrial placements, returners and re-skills taken on 1-year courses taken on each year. Such programmes will be essential to ensure the UK can meet the demands of the technical industries for the future and can support scale up.</li> </ul>	
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	<p>Evidence : Science and Technology Facilities Council <a href="#">Harwell Space Cluster Strategy</a></p> <ul style="list-style-type: none"> <li>· Key Message: <b>Combining requirements across Government will provide a stronger business case for companies to develop new solutions that satisfy Govt and commercial needs</b></li> <li>· Details: This is likely to support companies looking to scale-up as the larger contract will mean they can then move to large scale manufacture/delivery from bespoke solution. In addition, export opportunities will be enabled through the demonstration that UK Govt is utilising services. A number of companies at Harwell Space Cluster find it easier to sell to international Govt's than the UK. UKSA's Space for Smarter Government Programme has been designed to address this issue.</li> </ul> <p><a href="#">Assessing the economic returns of engineering research and postgraduate training in the UK</a>, Technopolis (2015)  <a href="#">Engineering for a successful nation</a>, Royal Academy of Engineering (2015)  <a href="#">Investing in Innovation</a>, Royal Academy of Engineering (2015)  <a href="#">Increasing R&amp;D investment: business perspectives</a>, Royal Academy of Engineering (2018):  sets out the aspects of the current UK environment which encourage or discourage engineering businesses to invest in R&amp;D and innovation</p> <p><a href="#">Evidence synthesis on the conditions needed to translate research and drive innovation</a>, RAND (2018)  <a href="#">Evidence synthesis on measuring the distribution of benefits of research and innovation</a>, RAND (2018)  <a href="#">Engineering skills for the future</a>, Education for Engineering and Royal Academy of Engineering (2019):</p> <p>Teacher recruitment and retention has worsened, as well as continuing challenges with balance in uptake of certain subjects at A-level with a continued fall in students studying creative, technical subjects</p>	
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	<p><a href="#">Evaluation of the Royal Academy of Engineering's SME Leaders Programme</a>, Technopolis (2020)</p> <p><a href="#">Engineering Growth: an evaluation of the Enterprise Fellowship Programme</a>, Steer Economic Development (2020)</p> <p><a href="#">Stimulating R&amp;D for a faster and better recovery</a>, Royal Academy of Engineering (2020)</p> <p><a href="#">Innovation after Lockdown</a>, Nesta (2020)</p> <p><a href="#">The Missing £4 Billion</a>, Nesta (2020)</p> <p><a href="#">From starting to scaling</a>, Nesta (2020)</p> <p><a href="#">Testing innovation in the real world</a>, Nesta (2019)</p> <p><a href="#">The power of place</a>, CaSE (2020)</p>	
<p>Mitigating the effects of business closures and redundancies</p>	<p><b>SEDA, (2007)</b></p> <p><b><i>Mid-term Evaluation of the Redundancy Support Service in the South East</i></b></p> <p><a href="https://www.secouncils.gov.uk/wp-content/uploads/pdfs/publications/RedundancySupportService_finalreport.pdf">https://www.secouncils.gov.uk/wp-content/uploads/pdfs/publications/RedundancySupportService_finalreport.pdf</a></p> <p>Jobcentre Plus previously offered a Rapid Response Service/Redundancy Support Service specifically for this circumstance. The only evaluation of it that we are aware of is a mid-term evaluation of the redundancy support service in the South – East, but this has not been reviewed by DWP analysts so we cannot couch for its robustness.</p> <p><i>Sector-based work academies and work experience trials for older claimants: combined quantitative and qualitative findings</i> (DWP, 2017).</p> <p><a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/584663/sector-based-work-academies-and-work-experience-trials-for-older-claimants.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/584663/sector-based-work-academies-and-work-experience-trials-for-older-claimants.pdf</a></p> <p>There was evidence that both programmes helped participants to overcome age-related and other barriers to work. The majority of participants considered that they had become more job-ready as a result of taking part and reported improved skills and qualifications as well as improved confidence. Reported benefits included being able to update and supplement curriculum vitae and broaden the scope of</p>	<p>Evaluations of redundancy support/re-employment policies can help workers overcome barriers to find work. However, lack of evidence of effectiveness during a recession/major economic downturn as this must be matched by job creation initiatives.</p> <p>As well as the risk of significant job losses business R&amp;D is at immediate risk. Reducing or outright halting R&amp;D activities is one of the first cost-saving measures businesses are taking amidst falling demand and cash flow difficulties. However, R&amp;D is recognized by businesses as part of the solution for recovery.</p>

	<p>job search. Participants experienced high levels of satisfaction with the programmes.</p> <p><b><u><a href="#">COVID-19 immediate impact on R&amp;D-intensive businesses</a></u></b>, Royal Academy of Engineering (2020):</p> <p>Business R&amp;D is at immediate risk. Reducing or outright halting R&amp;D activities is one of the first cost-saving measures businesses are taking amidst falling demand and cash flow difficulties. However, R&amp;D is recognized by businesses as part of the solution for recovery</p> <p>Local Responses to Economic Shocks: <a href="https://whatworksgrowth.org/resources/local-responses-to-economic-shocks/">https://whatworksgrowth.org/resources/local-responses-to-economic-shocks/</a></p>	
<p>Role of government in stimulating demand (procurement)</p>	<p><b><u><a href="#">Balance and effectiveness of research and innovation spending</a></u></b>, House of Commons Science and Technology Select Committee (2019)</p> <p><b><u><a href="#">Public Projects and Procurement in the UK</a></u></b>, Royal Academy of Engineering (2014)</p> <p><b><u><a href="#">Increasing R&amp;D investment: business perspectives</a></u></b>, Royal Academy of Engineering (2018)</p> <p><b><u><a href="#">Leveraging public procurement to grow the innovation economy</a></u></b> (2017)</p>	
<p>What are the future trends for demographics and working/saving behaviour and what is driving these trends? What further reforms to state and private pension provision might we require to ensure long-term sustainable financial security for older people and pensioners?</p>	<p><b>Lisenkova, K (2018) Demographic Ageing and Productivity</b> <a href="https://productivityinsightsnetwork.co.uk/app/uploads/2018/07/Evidence-Review-Demographic-Ageing-and-Productivity-1.pdf">https://productivityinsightsnetwork.co.uk/app/uploads/2018/07/Evidence-Review-Demographic-Ageing-and-Productivity-1.pdf</a></p> <p><b>Lisenkova, K. and Sanchez-Martinez, M. (2016) The Long-Term Macroeconomic Effects of Lower Migration to the UK</b>, NIESR Discussion Paper No. 460. McCann, P. (2017) "Urban futures, population ageing and demographic decline", Cambridge Journal of Regions, <b>Economy and Society</b>, <b>10</b>, pp. 543–557.</p>	<p>"Macroeconomic effects could also be used to look at the regional distribution of potential productivity risks associated with population ageing. In general, spatial differentiation of demographic change attracted relatively little attention but will have significant consequences for regional policy (McCann, 2017)" (Lisenkova 2018).</p>



## Subgroup C

ARI	Type of Resource	Key Messages
<p>What are the drivers of regional economic disparity? What drives differences in productivity at the firm and regional level, and what are the effects of these differences on enterprise and business growth?</p>	<p>Academic paper, meets level 2 or above on The Maryland Scientific Methods Scale</p> <p><a href="#">Divergent cities in post-industrial Britain</a>  <a href="#">Ron Martin, Peter Sunley, Peter Tyler, Ben Gardiner</a></p>	<p>According to Moretti (2013), deindustrialisation has been responsible for a 'great divergence' between cities that have moved to become centres of innovation and ideas, and those that have continued to produce material goods. Other authors, however, place more emphasis on trends in specialisation and differences in productive bases as the driving forces behind urban divergence. Somewhat similarly, Storper (2013) argues that recent divergence has been fundamentally driven by the fact that some cities have become more specialised in knowledge intensive sectors. While most of this interest in urban divergence has been based on US cities, recent European research also reports divergent processes. The aim of this article is to examine the degree of divergence across UK cities and to analyse how far this has been driven by differences among cities in industrial structure and specialisation, tradable bases and productivity.</p>
	<p>Academic paper, meets level 2 or above on The Maryland Scientific Methods Scale</p> <p><a href="#">The Economic Performance of Britain's Cities: Patterns, Processes and Policy Implications</a>  <a href="#">Ron Martin, David Bailey, Emil Evenhuis, Ben Gardiner, Andy Pike, Peter Sunley, Peter Tyler</a></p>	<p>The research has had several interrelated aims:</p> <ul style="list-style-type: none"> <li>• How have British cities differed in their growth paths since 1971, and what are the geographical patterns of these differences?</li> <li>• Given that the past five decades have witnessed major shifts in the structure of the national economy, how far do the growth paths of British cities reflect the uneven progress of these structural changes? Put another way, how have British city economies adapted over time?</li> <li>• What other factors have influenced the growth paths of British cities?</li> <li>• To what extent is the UK's 'productivity problem', of slow productivity advance, itself a problem that has a city dimension? How have cities differed in terms of productivity growth over recent decades, and what has caused these differences?</li> <li>• How have skills developed across British cities? Much has been made (especially in relation to US cities) about the importance of skills to city economic performance. How far do patterns of city economic performance reflect differences in skill development?</li> <li>• How resilient are British cities to major economic shocks? Since 1971 there have been four major recessions. How have cities reacted to and recovered from these disruptions? Does a lack of resilience have permanent negative consequences for long run city growth?</li> <li>• For a selection of case-study cities, how have policy regimes and institutions differed over the study period, and is it possible to ascertain what effects these may have had on city economic performance?</li> </ul>
	<p>Academic paper, meets level 2 or above on The</p>	<p>We consider the link between birthplace and wages. Using a unique panel dataset, we estimate a raw elasticity of wages with respect to birthplace size of 4.2%, two thirds of</p>



	<p>Maryland Scientific Methods Scale</p> <p><a href="#">Why does birthplace matter so much?</a>  <a href="#">Clement Bosquet, Henry G. Overman</a></p>	<p>the 6.8% raw elasticity with respect to city size. Part of this effect simply reflects intergenerational transmission and the spatial sorting of parents; part is explained by the role that birthplace size plays in determining current city size. Lifetime immobility explains a lot of the correlation between birthplace and current city size: we show that 43.7% of individuals only ever work while living in the place they were born. Our results highlight the importance of intergenerational and individual sorting in helping explain the persistence of spatial disparities.</p>
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## Subgroup D

ARI	Type of Resource	Key Messages
<p>1. Is COVID-19 accelerating trends in emerging technologies?</p> <p>2. How might these trends affect global employment and immigration patterns?</p> <p>3. How might COVID-19 affect migration trends? For example, as an amplifier or as a driver of migration in itself? If it impacts, which regions of the world are likely to be most affected?</p>	<p>BEIS -UKRI Commercialisation pipeline (work ongoing)</p> <p><a href="https://sciencebusiness.net/covid-19/news/live-blog-rd-response-covid-19-pandemic">https://sciencebusiness.net/covid-19/news/live-blog-rd-response-covid-19-pandemic</a></p> <p><a href="https://www.ukri.org/research/coronavirus/covid-19-research-and-innovation-supported-by-ukri/">https://www.ukri.org/research/coronavirus/covid-19-research-and-innovation-supported-by-ukri/</a></p> <p><a href="https://www.ukri.org/news/additional-projects-awarded-funding-to-tackle-the-impact-of-the-coronavirus/">https://www.ukri.org/news/additional-projects-awarded-funding-to-tackle-the-impact-of-the-coronavirus/</a></p> <p><a href="https://www.euractiv.com/section/health-consumers/news/eu-goes-easy-on-gmos-in-race-for-covid-19-vaccine/">https://www.euractiv.com/section/health-consumers/news/eu-goes-easy-on-gmos-in-race-for-covid-19-vaccine/</a></p> <p><a href="https://migrationdataportal.org/themes/migration-data-relevant-covid-19-pandemic">https://migrationdataportal.org/themes/migration-data-relevant-covid-19-pandemic</a></p> <p><a href="#">MoD IRIS - Covid-19: impact on technology</a></p> <p><a href="#">MoD IRIS - Covid-19 vaccines: from lab to patient</a></p> <p><a href="#">Emerging Technology in a Post Covid world</a></p> <p><a href="https://www2.deloitte.com/global/en/pages/about-deloitte/articles/covid-19/understanding-covid-19-s-">https://www2.deloitte.com/global/en/pages/about-deloitte/articles/covid-19/understanding-covid-19-s-</a></p>	<p>Identified Energy Generation, Omics, Disease Control, Medical imaging, AI&amp; Machine learning as the top five.</p> <p>Example of the types of funding available publicly</p> <p>Lists of all research projects funded to date under the UKRI COVID-19 urgency grants scheme and InnovateUK awards to businesses.</p> <p>News item on changing EU policy approach for genetically modified organism usage.</p> <p>Migration data</p> <p>Internal government papers on COVID-19 emerging technology impacts</p> <p>Deloitte article articulating covid-19 impacts on the technology sector itself</p>

	<p><a href="#">impact-on-the-technology-sector-.html</a></p> <p><u>An update to our 2020 Technology Vision trends Driving Value and Values During COVID-19</u></p> <p><u>20200730 COVID 19 Research Project Tracker Epidemics Group.pdf</u></p> <p><u>IOM UN Migration - Migration Factsheet No. 6 – The impact of COVID-19 on migrants</u></p> <p><a href="https://www.csis.org/analysis/five-ways-covid-19-changing-global-migration">https://www.csis.org/analysis/five-ways-covid-19-changing-global-migration</a></p> <p><a href="http://www.oecd.org/coronavirus/policy-responses/managing-international-migration-under-covid-19-6e914d57/">http://www.oecd.org/coronavirus/policy-responses/managing-international-migration-under-covid-19-6e914d57/</a></p> <p>Ratha, Dilip K.; De, Supriyo; Kim, Eung Ju; Plaza, Sonia; Seshan, Ganesh Kumar; Yameogo, Nadege Desiree.2020.</p> <p>COVID-19 Crisis Through a Migration Lens (English). Migration and Development Brief; no. 32 Washington, D.C.: World Bank Group. <a href="http://documents.worldbank.org/curated/en/989721587512418006/COVID-19-Crisis-Through-a-Migration-Lens">http://documents.worldbank.org/curated/en/989721587512418006/COVID-19-Crisis-Through-a-Migration-Lens</a></p> <p><a href="http://www.glimer.eu/wp-content/uploads/2020/06/Global-Migration-Policies-and-COVID-19.pdf">http://www.glimer.eu/wp-content/uploads/2020/06/Global-Migration-Policies-and-COVID-19.pdf</a></p> <p>Interviews were conducted with:</p> <p>Professor Laura Hammond UKRI Challenge Leader for Security Protracted Conflict, Refugee Crises and Forced Displacement</p>	<p>Accenture Technology Future Trends reassessed in light of COVID-19</p> <p>The tracker contains nearly 2,000 funded research projects - the most comprehensive picture of the COVID-19 research landscape</p> <p>United Nations Migration Factsheet on COVID-19 Impact on Migrants, covers migrant health</p> <p>US think tank article ways COVID-19 may change global migration</p> <p>OECD paper on short term policy responses impacting migration</p> <p>Paper looking at International remittance flows how these have been impacted by COVID-19</p> <p>Working Paper that assess short term migration policy responses to COVID-19</p>
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	<p>Jenny Phillimore, Professor of Migration and Superdiversity, <a href="#">Department of Social Policy, Sociology and Criminology</a> University of Birmingham</p> <p>NERC Conversations with the UK Carbon Trust and UKRI India were also drawn upon.</p>	
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## Subgroup E

ARI	Resource	Key Messages
<b>Responding to probable higher levels of youth unemployment</b>		
<p>Responding to the needs of unemployed people in light of the withdrawal of COVID-19 emergency support</p>	<p>Institute for Employment Studies, Learning and Work Institute, Youth Futures Foundation, Reform, Impetus, the Association of Colleges, the Employment Related Services Association, the Recruitment and Employment Confederation and the Institute for Employability Professionals. (2020). Help wanted: Getting Britain back to work</p>	<p>Tapering of emergency support to ensure minimal risk of second spike of unemployment.</p> <p>Provision of rapid back to work support for those newly unemployed.</p> <p>Provision of targeted, personalised support for the long-term unemployed.</p> <p>Education and employment promise for young people.</p> <p>Building more joined-up employment and skills support for the future</p>
<b>The effectiveness of different approaches to supporting young people into work</b>		
<p>The impact of training and skills development, entrepreneurship promotion, employment services and subsidized employment on the labour market outcomes of young people.</p>	<p>Kluge J, Puerto S, Robalino D, Romero J M, Rother F, Stöterau J, Weidenkaff F, Witte M. (2017) Interventions to improve the labour market outcomes of youth: a systematic review of training, entrepreneurship promotion, employment services, and subsidized</p>	<p>As compared to employment services and subsidised employment interventions, skills training and entrepreneurship promotion interventions appear to yield more positive results on young people's earnings. So, there are potential benefits from combining supply- and demand-side interventions to support youth in the labour market</p>

*This is not a statement of government policy*

	<p>employment interventions. Campbell Systematic Reviews 2017:12</p> <p>DOI: 10.4073/csr.2017.12</p>	<p>Programmes targeting the most disadvantaged youth (low-income youth, those with low levels of education or exhibiting strong disadvantages in the labour market) were associated with bigger programme effects both in terms of earnings outcomes and higher employment</p>
<p><b>Subsidised employment programmes</b></p>		
<p>What is the impact of Active Labour Market Programme (ALMP) (does not only refer to young persons)</p>	<p>David Card, Jochen Kluve, Andrea Weber, What Works? A Meta Analysis of Recent Active Labour Market Programme Evaluations, <i>Journal of the European Economic Association</i>, Volume 16, Issue 3, June 2018, Pages 894–931, <a href="https://doi.org/10.1093/ieea/ivx028">https://doi.org/10.1093/ieea/ivx028</a></p>	<p>Card et al. (2017) undertook a meta-analysis of over 200 evaluations of active labour market policies (ALMPs) including:</p> <ul style="list-style-type: none"> <li>• Subsidised private sector employment</li> <li>• Subsidised public sector employment</li> <li>• Classroom or on-the-job training</li> <li>• Job search assistance, monitoring, or sanctions for failing to search</li> <li>• Programmes that combined two or more of the above.</li> </ul> <p>They found that:</p> <ul style="list-style-type: none"> <li>• Impacts are close to zero on average in the short run but become more positive two to three years after completion of the programme</li> <li>• The time profile of impacts varies by type of programme, with larger average gains for programmes that emphasise the development of human capital (such as skills, knowledge and attributes)</li> <li>• Job search assistance programmes that emphasise 'work first' (i.e. that prioritise taking</li> </ul>

		<p>up available employment opportunities over other outcomes) tend to have similar impacts in the short and long run, whereas training and subsidised private sector employment programmes have larger average effects in the medium and longer runs. Public sector employment subsidies tend to have small or even negative average impacts</p> <ul style="list-style-type: none"> <li>• There is variation across participant groups, with larger impacts for females and participants who enter from long term unemployment</li> <li>• ALMPs are more likely to show positive impacts in a recession.</li> </ul>
What is the longer-term impact of the New Deal for Young People	Beale I, Bloss C, Thomas A (2008) The longer-term impact of the New Deal for Young People, Department for Work and Pensions Working Paper No 23	Longer-term impacts suggest that positive effects were sustained, with New Deal participants spending on average 90 fewer days on benefit over a four-year period than a comparison group (Beale et al, 2008). More specifically, the success of the programme was attributed to the personalised support available through the Gateway, which contributed over two thirds of employment outcomes. As outlined earlier, Beale et al. (2008) found that the subsidised employment option appeared to be the most effective, followed by full-time training.
<i>What are the impacts of the UK Work Experience Programme?</i>	Ward, R. Woods, J. and Haigh, R. (2016) <i>Sector-based work academies: A quantitative impact assessment</i> , DWP Research Report 918 <a href="https://assets.publishing.service.gov.uk/">https://assets.publishing.service.gov.uk/</a>	In 2011, the UK introduced the Work Experience programme, to help young unemployed people get valuable work-based skills through a subsidised two to eight-week placement with a local employer. The results of the extended

	<a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/508175/rr918-sector-based-work-academies.pdf">government/uploads/system/uploads/attachment_data/file/508175/rr918-sector-based-work-academies.pdf</a>	<p>impact assessment provide evidence that taking part in work experience reduced the time 19 to 24-year-old Jobseekers Allowance (JSA) claimants spent in receipt of DWP benefits and increased the time they spent in employment. A range of results are presented by DWP by subgroup and cohort (Haigh and Woods, 2016). However, these findings need to be caveated given the self-selection bias that might undermine the study as participation was voluntary and unobserved variables (such as motivation) cannot be accounted for.</p>
<p>What are the impacts of public works programmes?</p>	<p>Caliendo, M., &amp; Schmidl, R. (2016). Youth unemployment and active labor market policies in Europe. <i>IZA Journal of Labor Policy</i>, 5(1), 1</p>	<p>Within subsidised employment schemes, a specific sub-set is those where the individuals are employed to deliver 'public works', normally improvements to the public realm. The evidence on the effectiveness of public works is generally weaker due to stigmatisation and lack of meaningful contact with employers.</p>



	<p>Azam, Mehtabul; Ferre, Celine; Ajwad, Mohamed Ihsan. 2012. Did Latvia's public works programme mitigate the impact of the 2008-2010 crisis? (English). Policy Research working paper; no. WPS 6144. Washington, DC: World Bank.</p> <p><a href="http://documents.worldbank.org/curated/en/705321468265794265/Did-Latvias-public-works-programme-mitigate-the-impact-of-the-2008-2010-crisis">http://documents.worldbank.org/curated/en/705321468265794265/Did-Latvias-public-works-programme-mitigate-the-impact-of-the-2008-2010-crisis</a></p>	<p>A World Bank report on Latvia found that emergency public work programmes raised participating household incomes by 37 percent relative to similar households not participating in the programme</p>
	<p>Wang, Iris J. Y.; Carling, Kenneth; Nääs, Ola (2006) : High school students' summer jobs and their ensuing labour market achievement, Working Paper, No. 2006:14, Institute for Labour Market Policy Evaluation (IFAU), Uppsala</p> <p><a href="https://www.econstor.eu/handle/10419/78660">https://www.econstor.eu/handle/10419/78660</a></p>	<p>A quasi-experimental study from Sweden found summer jobs offered by the public sector generate a slight improvement in earnings immediately after graduation, but the effect does not persist.</p>
	<p>Hohmeyer, Katrin &amp; Wolff, Joachim, 2016. "Of carrots and sticks: The effect of workfare announcements on the job search behaviour and reservation wage of welfare recipients," <u>Annual Conference 2016 (Augsburg): Demographic Change</u> 145523, Verein für Socialpolitik / German Economic Association.</p>	<p>(Public works programme) A German study evaluated the impact of announcing a public works scheme ('One-Euro-Jobs') on job search behaviour, wage and employment and found that the announcement increases job search activities, decreases the reservation wage significantly, and has no effects on the short-term employment probability</p>

	<a href="https://ideas.repec.org/p/zbw/vfsc16/145523.html">https://ideas.repec.org/p/zbw/vfsc16/145523.html</a>	
	<p><u>Cahuc, Kramarz, Nevoux (2018) "When Short-Time Work Works" Banque de France Working Paper, WP #692</u>  <a href="https://www.iza.org/publications/dp/11673/when-short-time-work-works">https://www.iza.org/publications/dp/11673/when-short-time-work-works</a></p>	<p>(programme design) Similarly, analysis of the 2008 recession by Cahuc et al. (2018) found that wage subsidies are particularly effective during a recession if they are targeted at a subset of firms (in this case, targeted at small firms) rather than being economy-wide.</p>
	<p>Layard, R. 2009 "Job guarantee: a new promise on long-term unemployment" London School of Economics CentrePiece Winter 2009/2010  <a href="http://cep.lse.ac.uk/pubs/download/cp308.pdf">http://cep.lse.ac.uk/pubs/download/cp308.pdf</a></p>	<p>(programme design) argues the duration of subsidised employment programmes should be six months and be targeted at those that have been unemployed for 12 months or more for 18 to 25-year olds and 18 months for more or those over 25.</p>
	<p>Brodsky (2000) "Public-service employment programmes in selected OECD countries" Monthly Labour Review, October 2000  <a href="https://www.bls.gov/opub/mlr/2000/10/art4full.pdf">https://www.bls.gov/opub/mlr/2000/10/art4full.pdf</a></p>	<p>(Classroom or on the job training) While they may be organised and funded nationally, there is a case to be made that subsidised employment programmes should be implemented on a local level, generating the jobs that address unmet local needs (Brodsky, 2000). The importance of place-based ALMPs is also highlighted by the Centre for Cities (2014).</p>
	<p>Belley, P., &amp; Lochner, L. (2007). The changing role of family income and ability in determining educational</p>	<p>(Classroom or on the job training) Available evaluations (all undertaken during periods of economic growth) suggest that family income</p>

	<p>achievement. <i>Journal of Human capital</i>, 1(1), 37-89.</p> <p>Dynarski, S. M. (2003). Does aid matter? Measuring the effect of student aid on college attendance and completion. <i>American Economic Review</i>, 93(1), 279-288.</p>	<p>impacts on post-secondary education attendance (e.g. <u>Belley and Lochner, 2007</u>) and that cash grants are effective in increasing the probability of college attendance (<u>Dynarski, 2003</u>).</p>
	<p>Lochner, L. J., &amp; Monge-Naranjo, A. (2011). The nature of credit constraints and human capital. <i>American economic review</i>, 101(6), 2487-2529.</p> <p>Lovenheim, M. F. (2011). The effect of liquid housing wealth on college enrolment. <i>Journal of Labor Economics</i>, 29(4), 741-771.</p>	<p>(Classroom or on the job training) In addition, there is some evidence that short-term credit constraints are a driver of postsecondary drop-out and reductions in enrolment (<u>Lochner and Monge-Naranjo, 2011</u>; <u>Lovenheim, 2011</u>). Policy responses that increased credit facilities for students, such as increasing student loan limits in Denmark, Sweden or Canada (OECD, 2020), can reduce drop-out and maintain enrolment in times of recession. However, the effect of credit constraints on postsecondary attendance should not be overstated, as some work found a modest impact of policies that expand or increase access to student loans (<u>Johnson, 2013</u>; <u>Stinebrickner and Stinebrickner, 2008</u>).</p>
	<p>Martin JP and Grubb D (2001) <i>What works and for whom: a review of OECD countries' experiences with active labour market policies</i>, IFAU - Office of Labour Market Policy Evaluation, Working Paper 2001:14. <a href="https://www.employment-studies.co.uk/system/files/resources/files/541.1.pdf">https://www.employment-studies.co.uk/system/files/resources/files/541.1.pdf</a></p>	<p>The benefits of pre-employment training programmes are perhaps the <u>most robustly evidenced</u> among the local economic growth policies reviewed by What Works Centre for Local Economic Growth. The evidence review shows that they should be:</p> <ul style="list-style-type: none"> <li>• Employer-led: Results appear to be more mixed for public- led than private-led</li> </ul>

	<p><u>Ray, K., Crunden, O. and Murphy, H. (2018) Liverpool City Region Youth Employment Gateway (YEG) Evaluation, Learning and Work Institute</u>  <a href="https://learningandwork.org.uk/resources/research-and-reports/evaluation-of-liverpool-city-region-youth-employment-gateway/">https://learningandwork.org.uk/resources/research-and-reports/evaluation-of-liverpool-city-region-youth-employment-gateway/</a></p>	<p>programmes but this may be explained by other characteristics of the programme.</p> <ul style="list-style-type: none"> <li>• On-the-job rather than classroom: Overall, in-firm or on-the-job training programmes tend to outperform classroom- based training programmes.</li> </ul> <p>Evidence from the UK and internationally also suggests that pre-employment training programmes for the unemployed need to be well targeted, especially with it particularly important to target the long term unemployed (Martin et al., 2001). The Learning and Work Institute impact evaluation of the Liverpool City Region Youth Employment Gateway (YEG) found that young people who were the most disadvantaged (as measured by length of unemployment on joining the programme), were more likely to say YEG had played a role in helping them to achieve a positive job outcome (Ray et al, 2018).</p>
	<p>Lechner, M., &amp; Wunsch, C. (2006). Are Training Programs more effective when Unemployment is high?</p>	<p>The literature on the effects of ALMPs suggests that almost all programmes reduce (unsubsidised) employment and earnings in the short run. This is also called a lock-in effect and is attributed to the reduced search intensity of programme participants or fewer job offers by caseworkers while participating in the programme (e.g. van Ours, 2004). Research on German pre-employment training programmes found that these lock-in effects were smaller and positive long-run labour market effects (employability and earnings) larger during times of high unemployment (Lechner and Wunsch, 2006).</p>

		<p>Returns from pre-employment training programmes this summer may therefore be larger than in more normal economic circumstances.</p> <p>(employer training tax credits) Whilst most discussion in relation to improving skills focuses on encouraging individuals to participate in further and higher education, skills can also be raised through in-work training. There is limited evidence on the effectiveness of this approach, with the evidence that does exist focusing on policies that target firm-level tax credits to invest in employees (London SE Growth Commission, 2017). One study estimated that such tax credits lead businesses to increase training investments by 8.5 percent (<u>Fitzpayne and Ethan, 2018</u>).</p>
	<p>Ward, R. Woods, J. and Haigh, R. (2016) <i>Sector-based work academies: A quantitative impact assessment</i>, DWP Research Report 918  <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/508175/rr918-sector-based-work-academies.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/508175/rr918-sector-based-work-academies.pdf</a></p>	<p>Sector-based work academies are intended to help employers meet their recruitment needs. They have three main elements – pre-employment training, a work experience placement and a guaranteed job interview. They can last for up to 6 weeks. The Institute for Employment Studies flagged the success of this programme in the UK (Ward et al, 2016). A DWP impact evaluation of the academies conclude that individuals who participated in all three elements of the sector-based work academy experienced on average 39 days less in receipt of benefit and not in employment relative to non-participants across the 18-month tracking period. Their cost benefit calculations conclude that the total benefit to the Exchequer was in the region of £20m. These findings need to be strongly caveated</p>

		given the self-selection bias that might undermine the study as participation in academies is voluntary and the matching did not account for a number of important observed variables (such as educational attainment) and unobserved variables (such as motivation).
	<p>Graversen, B. K., &amp; Van Ours, J. C. (2008). How to help unemployed find jobs quickly: Experimental evidence from a mandatory activation program. <i>Journal of Public economics</i>, 92(10-11), 2020-2035.</p> <p>Wilson, J., Mantovan, N., Sauer, R. M. (2017): Volunteer work as a self-developmental strategy in an age of precarious employment. Mimeo</p>	<p>The importance of intensive caseworker support for job search support followed by training was established by a randomized controlled trial in Denmark (Graverson and Van Ours, 2008). Evaluation evidence points to the benefit of specialist advisers for disadvantaged young people sitting alongside employment services (Ray et al, 2018). Wilson et al., (2020) from the Institute for Employment Studies also show examples of many European countries that have adopted similar and successful models of the last fifteen years – including Germany, Sweden, Denmark and Ireland.</p>
		Baert et al. (2018), in their summary of the peer reviewed literature on the benefits and costs of volunteering, found that in all studies except one undertaken between 1997 and 2017 there were statistically significantly positive effects of volunteer work on income. However, this premium varied considerably, from 2.6 to 94.7%.
		Baert and Vujić (2018) conducted the first field experiment on volunteering, where they randomly assigned volunteering activities to fictitious CVs

		<p>and job applications and found that volunteers are 7.3 percentage points more likely to get a positive reaction to their job applications.</p>
		<p>Decisions to enrol in further education may be hampered by insufficient information about the benefits and costs and the necessary steps and assistance available to facilitate such investments. Using variation in the dissemination and timing of letters sent to Unemployment Insurance (UI) recipients, Barr and Turner (2018) found, in a well-established randomised control trial in the US, that individuals sent information about benefits and costs of post-secondary education were 40 percent more likely to enrol in postsecondary programmes.</p>
	<p>Jordan, Lizzie; McGinigal; Thomas, Andrew; Coleman, Nick. Early evaluation of the Youth Contract wage incentive scheme. DWP Research Report 828. 2013.</p> <p><a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/194228/rrep828.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/194228/rrep828.pdf</a></p>	<p>Providers and Jobcentre Plus staff felt that wage incentives could 'tip the balance', making young people who already had the right skill set more attractive to employers, compared to other potential employees who did not attract wage incentives; which reflects the policy intent of this scheme. Providers and Jobcentre Plus staff also believed that overall, large employers were disinterested in the scheme, partly because local branches of large employers did not benefit financially and partly because some felt there was a reputational issue following negative media coverage of government employment schemes earlier in the year. It was felt that micro and small</p>



		employers tended to be more likely to take up the scheme.
	<p>Youth Contract wage incentive: wave 2 research. TNS-BMRB research Report on behalf of DWP. 2014.</p> <p><a href="https://www.gov.uk/government/publications/youth-contract-wage-incentive-wave-2-research">https://www.gov.uk/government/publications/youth-contract-wage-incentive-wave-2-research</a></p>	<p>Overall, staff felt that wage incentives appealed to a limited group of employers with specific recruitment needs, and that this resulted in fairly low take-up. Staff stressed the importance of tailoring their messages to employers, to reflect the varying motivations noted above. In some cases, this could mean emphasising the financial incentive, while for other employers it was important to stress the role of Jobcentre Plus as a free recruitment service that would help them to find the right person. Staff also found it helpful to dispel concerns about the administrative burden associated with the scheme.</p>
	<p>Employer perceptions of work experience and sector-based work academies. TNS-BMRB on behalf of DWP. DWP Research Report 842. 2013.</p> <p><a href="https://www.gov.uk/government/publications/employer-perceptions-of-work-experience-and-sector-based-work-academies-rr-842">https://www.gov.uk/government/publications/employer-perceptions-of-work-experience-and-sector-based-work-academies-rr-842</a></p> <p>Customers' experiences of the Youth Contract. DWP Research Report 865. 2014.</p>	<p>Most employers were happy with the two schemes as they are currently offered (with nine in ten who would recommend them to other employers and eight in ten who were satisfied with the overall quality of the candidates), with many seeing a range of benefits for their organisation and for young people that take part. The main suggested improvements tended to focus either on the quality of people on placements (15% work experience employers, 11% sector-based work academy employers) and the way they were prepared, or communication with Jobcentre Plus (one in ten for each).</p>

	<a href="https://www.gov.uk/government/publications/youth-contract-customers-experiences">https://www.gov.uk/government/publications/youth-contract-customers-experiences</a>	
The effectiveness of youth employment programs, focusing on skills training, entrepreneurship promotion, employment services, and subsidized employment.	Kluve, J., Rother, F., Puerto, S., Stöterau, J., Robalino, D., Weidenkaf, F., ROMERO, j., Witte, M. (2016) Do Youth Employment Programs Improve Labor Market Outcomes? A Systematic Review. <i>IZA Discussion Paper No. 10263</i>	<p>Programmes that integrate multiple interventions are more likely to succeed because they are better able to respond to the different needs of beneficiaries through multiple portfolios of interventions.</p> <p>Interventions with strong profiling and follow-up systems perform best. This points to the need for strong monitoring and evaluation systems.</p> <p>Entrepreneurship interventions can do better at increasing employment rates than other programs, perhaps because by design the intervention directly “creates” a job for each beneficiary.</p>
What lessons can be learned for the design of training programmes for young people aged 19 to 24 who are unemployed, not in learning and have low or no qualifications?	Centre for Economic and Social Inclusion (2013) Youth Unemployment: Review of Training for Young People with Low Qualifications. <i>BIS Research Paper Number 101</i>	<p>Robust targeting considerations should include qualification level, time spent out of work or learning, and potentially age (training may be more effective for age 20+).</p> <p>Successful provision addresses wider barriers to employment, joining up training with other available specialist support.</p> <p>Provision must have a strong focus on supporting transitions to employment, by training in workplaces rather than classrooms, and providing built-in post-training support.</p>

		<p>As more evidence about what works is needed, programmes should be designed with evaluability in mind.</p> <p>Provisions should be locally driven and locally relevant and engage local employers in design.</p> <p>Consider the merits of payment-by-results models to reward providers for achieving key outcomes.</p>
Effectiveness of employment training programmes aimed at improving labour market outcomes	What Works Centre for Local Economic Growth (2016) Evidence Review 1— Employment Training	<p>Youth needs are unique and specific. Employment training programmes that find positive impacts do not show the same positive impacts for youth.</p> <p>Timing and targeting of vocational training programmes go hand in hand. Such interventions may work better for younger youth (15-19) earlier in their experience of unemployment, and slightly later for older young people (20+).</p> <p>Vocational training programmes can be effective at getting young people into jobs, but close engagement between the provider/implementer and employer plays a key role in ensuring positive outcomes and positive attitudes towards hiring youth.</p>
Which aspects of New Deal for Young People have worked	Hasluck, C., and Green, A.E. (2007). What works for whom? A review of evidence and meta-analysis for the Department for Work and Pensions.	Advice and guidance—tailored, consistent support that offers a range of provisions from help with job searches to confidence building to addressing basic skills. The better the match to a

<p>most effectively for young people?</p>	<p>Warwick Institute for Employment Research on behalf of the Department for Work and Pensions. <i>DWP Research Report No 407</i></p>	<p>young person's needs, the better the outcomes, highlighting the importance of accurate profiling and manageable provider caseloads.</p> <p>Work placements that improve young people's employability are built on a strong foundation of pre-placement advising/guidance, and offer a comprehensive combination of support and tailored interventions: refining the career goals, equipping them with the necessary qualifications, skills and work experience to achieve those goals, changed attitudes, motivation and increased confidence.</p> <p>Programmes with a focus on quickly progressing young people through a series of interventions tend to benefit those already closest to the job market or with minimal needs for work experience or training, and young people with severe or multiple disadvantages benefit least from such approaches.</p>
<p>What do young people need to be ready for work? And what makes the biggest difference to their work readiness?</p>	<p>Impetus, The Young Foundation, Dartington Service Design Lab (2014) <i>Ready for Work: The capabilities young people need to find and keep work –and the programmes proven to help develop these.</i></p>	<p>There are 6 essential capabilities for young people to demonstrate in order to be considered ready for work: self-aware, receptive, driven, self-assured, resilient, and informed.</p> <p>While the long-term objective of interventions is employment, successful interventions develop the short-term and intermediate outcomes (reflected in the above 6 capabilities) that are essential for getting to that goal. These should therefore be</p>

		incorporated into programme design, commissioning and evaluations.
<b>Characteristics &amp; Needs of particular groups of disadvantaged young people</b>		
Analysis of the population of young people who are neither earning nor learning - looking at both the current drivers of, and future trends associated with, being in this group.	Youth Futures Foundation and Impetus (2020) Young, vulnerable, and increasing –why we need to start worrying more about youth unemployment	<p>Address the fragmented nature of employment services, with better accessibility and integration of provisions between formal education, youth services, employability providers and public sector.</p> <p>Accurate and early identification and tracking of at-risk young people.</p> <p>Effective engagement approaches, e.g. cultural and financial magnets.</p> <p>Use of trusted advisors providing one-to-one support.</p> <p>Delivery of personalised support including employability skills, work experience, capabilities, vocational skills and addressing barriers such as health and wellbeing, housing and life skills.</p>
How to better protect the most vulnerable young people from falling out of education and employment, particularly those with extensive contact with Social Care (Newcastle case study)	Social Finance (2016) New Insights into Improving Outcomes for At-Risk Youth: The Newcastle Experience.	Local Authorities can identify the youth with the highest probability of experiencing multiple poor life outcomes, and therefore most at risk of becoming Not in Education, Employment, or Training (NEET), by using local data to develop risk hierarchies.

		<p>Bridge the divide between NEET and Children's Social Care interventions: Government should bring together departments' data to track long term outcomes of all those who have been connected with Children's Social Care</p> <p>Identification of the most at-risk is likely to be more effective where Local Authorities can ensure that the services available locally 1) meet the most pressing needs of the most at risk, and 2)are delivered at the right time, before they lead to long term poor outcomes</p> <p>Programmes helping vulnerable young people avoid becoming NEET may benefit from incorporating a more explicit focus on supporting their family's functioning, and the young people's response to it.</p> <p>Central departmental initiatives should incentivise holistic, systemic models which treat young people in the round rather than targeting one or other of their needs</p> <p>Local Authorities and Clinical Commissioning Groups should work together to explore opportunities to jointly commission services to include a therapeutic element for young people and/or their families.</p>
<p>How young people's experiences of being Not in Education, Employment, or</p>	<p>Impetus &amp; NIESR, authored by Ben Gadsby (2019) Establishing the Employment Gap</p>	<p>Disadvantaged young people are more likely to be NEET than their better-off peers. Programmes and policies aimed at reducing the number of</p>

<p>Training (NEET) differ for young people based on whether they are from a disadvantaged background, their qualifications, and where they live</p>		<p>NEETs need to be designed with this group in mind.</p> <p>Education, while an important part of the solution, will not be enough on its own. In some cases, there might be specific additional support needs, such as mental health support, housing advice or debt management.</p>
<p>Ethnic disparities in labour market outcomes</p>	<p>Hughes, C. (2015) Ethnicity, Poverty and Youth Employment: Improving Outcomes for Young People. Joseph Rowntree Foundation Solutions Paper</p>	<p>Policies to support youth labour market transitions should be based on local data about the education and labour market outcomes for different groups of young people.</p> <p>Care should be taken to adapt any participation targets to the local population, and ensure that support reaches the most disadvantaged</p> <p>Employers (with support of employer representatives and sector bodies) have an important role to play in supporting non-traditional candidates and young workers, through on-the-job mentoring and equality monitoring.</p> <p>Young people from ethnic minorities are under-represented in some high-quality apprenticeship frameworks and tend to have lower success rates when they do participate, pointing to a need for better targeting and improved support.</p> <p>There need to be clearer lines of accountability for achieving a good standard of careers advice. Local partnerships, such as youth transition partnerships, can help to hold local authorities</p>

		and schools to account for the standard of provision locally, but ultimately there needs to be clearer ministerial accountability for delivering good careers advice and education.
<b>The impact of demographic change on the health and safety of the future workforce</b>		
<b>Extending working lives</b>		
Exploring the role of employment as one factor that could have a strong bearing on young people's future health outcomes	Papoutsaki, D., Byford, M., Wilson, T., and Newton, B. (2019) Young People's Future Health Inquiry: The quality of work on offer to young people and how it supports the building blocks for a healthy life	Supporting good work for young people involves: <ul style="list-style-type: none"> <li>• An education, employment and training guarantee, building on provisions already available.</li> <li>• Improved and better coordinated outreach to those farthest from the labour market and good quality work.</li> <li>• Targeted, multi-sector support for those facing barriers to work, including provisions for young people with disabilities, mental health support, childcare, and subsidised transport schemes.</li> <li>• A renewed focus on improving the quality of work for young people (including within the public sector), promoting existing standards and initiatives.</li> <li>• Funding targeted 'intermediate labour markets' for the most disadvantaged young people.</li> <li>• Supporting better coordinated and more integrated approach.</li> <li>• Investment in 'what works' resources and further development of the evidence base.</li> </ul>



	<p>GOS (2016) – Future of an ageing population</p> <p><a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/535187/gS-16-10-future-of-an-ageing-population.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/535187/gS-16-10-future-of-an-ageing-population.pdf</a></p>	<p>This report brings together the evidence from 22 peer reviewed evidence reviews about today's older population, with future trends and projections, to identify the most critical implications for Government policy and the socio-economic resilience of the UK.</p> <p>Without significant improvements in health, UK population ageing will increase the amount of ill-health and disability. Chronic conditions, multi-morbidities, and cognitive impairments will become more common. At the same time families will face increasing pressure to balance care with other responsibilities, particularly work.</p> <p>It will be more common for people to be in work whilst managing chronic conditions and undertaking caring responsibilities. Employers may need to rethink how they enable these people to remain healthy and safe at work.</p>
	<p>Johnson, S. (2015). How are work requirements and environments evolving, and what will be the impact of this on individuals who will reach 65 in 2025 and 2040? GOS</p> <p><a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/461437/gS-15-25-future-ageing-work-environments-er18.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/461437/gS-15-25-future-ageing-work-environments-er18.pdf</a></p>	<p>There will be increasing older worker demand for part-time and flexible work</p> <p>The trend towards reduced manual and increased people work will continue</p> <p>Negative perceptions of older workers will only change gradually - and are not anticipated to improve.</p>

	<p>The Work Foundation (2014) Living in the age of no retirement</p> <p><a href="http://www.theworkfoundation.com/Media/Press-Release-Detail?oltemId=2342">http://www.theworkfoundation.com/Media/Press-Release-Detail?oltemId=2342</a></p>	<p>Whilst it is misleading to generalise about anyone over 50 - poor health, poverty and mental frailty are likely for many people as they age.</p> <p>Nothing is likely to change unless companies provide opportunities to retain, retrain and reinvent these 'would-be-retirees'.</p> <p>Reconfiguring jobs and reconsidering employment options is hard - "portfolio careers" may not be possible. Ageing is an unequal process - with social inequality starting early in life.</p> <p>key message - Social inequalities influence the ageing process – everyone will age differently</p>
	<p>Cara Leavey, Isabel Abbs, Louise Marshall (2020) Health Foundation. Blog series: COVID-19, health and health inequalities</p> <p><a href="https://www.health.org.uk/what-we-do/a-healthier-uk-population/useful-publications-and-resources-on-healthy-lives/covid-19-and-health-inequalities-blogs-">https://www.health.org.uk/what-we-do/a-healthier-uk-population/useful-publications-and-resources-on-healthy-lives/covid-19-and-health-inequalities-blogs-</a></p>	<p>COVID-19 has brought health and health inequalities into sharp focus – with some groups being more affected than others.</p> <p>Those facing the greatest deprivation are at higher risk of catching and dying from the virus. Factors such as age, ethnicity, gender and socioeconomic circumstance all contribute to how people are impacted.</p> <p>The unequal impact of COVID-19 on employment - Those in low-paid jobs, young people and female parents have been most negatively impacted by reduced employment and/or income during the pandemic.</p>

		The impacts of COVID-19 will be long lasting – for some groups more than others - and health inequalities could widen.
<b>Competency and Skills</b>		
	<p>Philippe Schneider, Hasan Bakhshi and Harry Armstrong (2017). The future of skills: Employment in 2030. Oxford Martin School.</p> <p><a href="https://futureskills.pearson.com/#/home">https://futureskills.pearson.com/#/home</a> screen</p>	<p>Many jobs today will still be in demand by 2030 and beyond. The skills needed for success are changing.</p> <p>Demand for ‘human’ skills will rise – with social skills being important. Skills forecast to be in higher demand include social perceptiveness, active learning, active listening, judgment, and decision making</p>
	<p>Watson, T. (2017) The Future of Work - Independent Commission.</p> <p><a href="http://www.futureofworkcommission.com/">www.futureofworkcommission.com/</a></p>	<p>This report focuses on technology driving change. It groups recommendations into 6 main areas:</p> <ul style="list-style-type: none"> <li>• Prioritising Good Work</li> <li>• Skills for the Future</li> <li>• Promoting Innovation</li> <li>• New Models: Corporate Governance and Alternative Ownership</li> <li>• Labour Rights and Standards</li> <li>• Ethics.</li> </ul> <p>The aim of the recommendations is to turn the guiding, foundational principles of good work into reality,</p> <p>Without policy intervention, the power of the high-skilled over the low-skilled will increase further.</p>

	<p>Sapana Agrawal, Aaron De Smet, Sébastien Lacroix, and Angelika Reich (2020)</p> <p>To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now</p> <p><a href="https://www.mckinsey.com/business-functions/organization/our-insights/to-emerge-stronger-from-the-covid-19-crisis-companies-should-start-reskilling-their-workforces-now#">https://www.mckinsey.com/business-functions/organization/our-insights/to-emerge-stronger-from-the-covid-19-crisis-companies-should-start-reskilling-their-workforces-now#</a></p>	<p>Before COVID-19, changing technologies and new ways of working were disrupting jobs and the skills workers need to do them.</p> <p>In 2017, the McKinsey Global Institute estimated that as many as 375 million workers—or 14 percent of the global workforce—would have to switch occupations or acquire new skills by 2030 because of automation and artificial intelligence.</p> <p>Skills gaps are being reported; with some employers unclear about how to address this.</p>
	<p>Betterlley, C. (2020). Upskilling the ageing workforce for industry 4.0.</p> <p><a href="https://www.raconteur.net/the-hive/impact-ageing-workforce-problems?utm_source=email&amp;utm_medium=Newsletter&amp;utm_campaign=Weekly&amp;utm_term=Jan-9&amp;utm_content=6">https://www.raconteur.net/the-hive/impact-ageing-workforce-problems?utm_source=email&amp;utm_medium=Newsletter&amp;utm_campaign=Weekly&amp;utm_term=Jan-9&amp;utm_content=6</a></p>	<p>Employers are fighting for a shrinking pool of talent.</p> <p>“Ongoing opportunities to reskill and upskill are therefore crucial for older workers, so that they can manage portfolio careers, keep up to speed with industry changes, and adapt to rapidly changing work environments”.</p>
<b>Working cultures</b>		
	<p>Morales, C., Lyall, D., Guo, Y., Steell, L., Llanas, D., Ward, J., Mackay, D., Biello, S., Bailey, M., Pell, J., and Gill, J. (2017). Sleep characteristics modify the association of genetic predisposition with obesity and anthropometric measurements in 119,679 UK Biobank</p>	<p>The findings, based on data from the UK Biobank, emphasise that while genetics have a large role to play in obesity, lifestyle also plays an important role.</p> <p>Researchers looked at the effects of abnormal sleeping habits such as short sleep duration (less</p>

	<p>participants. American Journal of Clinical Nutrition.</p> <p>See  <a href="http://www.gla.ac.uk/research/news/headline_515971_en.html">http://www.gla.ac.uk/research/news/headline_515971_en.html</a></p>	<p>than 7 hours sleep a night) and long sleep duration (more than 9 hours sleep a night), along with daytime napping and shift work.</p> <p>The study examined the interactions of sleeping habits and genes with obesity - found that in people with high genetic risk for obesity, both short sleep durations (less than 7 hours per night) and long sleep durations (more than 9 hours per night) further increased risk of carrying excess weight, compared with those who slept for normal durations (between 7 and 9 hours every night).</p> <p>Key message - Getting a bad night's sleep could increase some people's likelihood of becoming obese</p>
	<p>Fox, D., Webster, J. Jones, A. (2019). Understanding the health and safety implications of the gig economy.</p> <p><a href="https://www.hse.gov.uk/research/rrhtm/r1143.htm">https://www.hse.gov.uk/research/rrhtm/r1143.htm</a></p>	<p>Gig economy work is characterised by short-term informal working relationships. This work is generally on-demand, obtained via an on-line platform and delivered, and paid for, on a task-by-task basis. It is casual, unpredictable, irregular, contingent, and temporary, with the possibility of increased work intensification. Determining the size of the gig economy, and identifying typical number of hours worked, is challenging. Gig economy workers in GB are estimated to be around 2.8 million.</p> <p>There is a possibility that for many the hours are excessively high, and that gig work is used to supplement other income.</p>

		<p>For some, gig work offers benefits such as variety and flexibility. However, the main health risks associated with participation in the gig economy were found to be work-related stress and the development of other mental health issues.</p> <p>Participation in the gig economy is currently, and is likely to continue to be, dominated by the under 35 demographic group, typically described as “Millennials” (24 to 34 years) and “Generation Z” (22 years and under). There is a danger that this younger age group may not be able to move beyond gig work and be perpetually ‘trapped’ in insecure and precarious work, with negative implications for the health of the future workforce.</p> <p>It is likely that the new business model, where work is mediated by online platforms, will remove supportive management relationships. The way work is managed, combined with the way gig work is performed, may give rise to new risks which may have a greater negative impact on more vulnerable groups of workers.</p> <p>As the number of those engaged in gig work continues to grow, there is a possibility that work-related stress and mental health issues will increase as a result of financial insecurity, high job demands, low job control and little or no support.</p>
<b>Attitudes and Behaviours</b>		
	UKCES (2014). The Future of Work Jobs and Skills in 2030	The global labour market in 2030 is likely to be highly competitive. New attitudes and behaviours

	<p><a href="https://www.gov.uk/government/publications/jobs-and-skills-in-2030">https://www.gov.uk/government/publications/jobs-and-skills-in-2030</a></p>	<p>will be needed by individuals and businesses founded on flexibility, resilience, collaboration, entrepreneurship and creativity. Above all, the ability to respond to continuous change will be critical.</p> <p>Work in the future will be more interconnected and network oriented. Employees (and employers) will require the competencies to work across different disciplines, to collaborate virtually, and to demonstrate cultural sensitivity. The high-skilled minority (characterised by their creativity, analytical and problem solving capabilities and communication skills) will have strong bargaining power in the labour market, whilst the low-skilled will bear the brunt of the drive for flexibility and cost reduction, resulting in growing inequality.</p> <p>Key messages: Highly skilled workers will be more secure than others. Flexibility, resilience, collaboration will be some key skills for the future. Attitudes and behaviours at work will need to change. There is growing inequality between high/low skilled workers.</p>
	<p>Health and wellbeing at work: a survey of employees (2014). DWP. <a href="https://www.gov.uk/government/publications/health-and-wellbeing-at-work-survey-of-employees">https://www.gov.uk/government/publications/health-and-wellbeing-at-work-survey-of-employees</a></p>	<p>Almost a third of employees had a health condition (defined in the survey as a long-term health condition or disability, or an illness or injury that affected the work they could do) in the 12 months preceding the survey. Just over one-third of employees with a health condition had not discussed it with their employer, even in cases where it had affected their work. Those with a mental health condition were less comfortable discussing their condition than those with a physical health condition.</p>

	<p>Lewis, S. (2019). Why aren't more people talking about the impact of longevity on the workforce? International Longevity Centre. <a href="https://ilcuk.org.uk/why-arent-more-people-talking-about-the-impact-of-longevity-on-the-workforce/">https://ilcuk.org.uk/why-arent-more-people-talking-about-the-impact-of-longevity-on-the-workforce/</a></p>	<p>Attitudes need to change. Subtle forms of age discrimination need to be identified and tackled and people need to start discussing age in the workplace openly and positively.</p>
	<p>Webber, A. (2019). A decade on, are we still 'Working for a Healthier Tomorrow'? Occupational Health and Wellbeing <a href="https://www.personneltoday.com/a-decade-on-are-we-still-working-for-a...">https://www.personneltoday.com/a-decade-on-are-we-still-working-for-a...</a></p>	<p>Despite the wider, societal challenges, great strides have been made in employers' attitudes to health at work - we now talk about mental health at work. One area that organisations should focus more on, is equipping managers with the skills needed to handle their teams' mental health concerns. Line manager training and leadership and stakeholder engagement are key interventions to improving health.</p>
	<p>Longevity Leaders (2020). Longevity Trends 2020. Mid-Year Update Available to download from <a href="https://www.lsxleaders.com/longevity-leaders-congress/download-longevity-trends-report-update?utm_campaign=Longevity%20Leaders%202021&amp;utm_medium=email&amp;_hsmi=92748738&amp;_hsenc=p2ANqtz--byVo5JeWRQv6cunFWA8K6Uw4fmjPgdtDyGyKkKrAT8mJe5PhCrln8TVmDQ8N83kGNXiJxj5sBNfS_UvhY5iKYFIEIJg&amp;utm_content=92748738&amp;utm_source=hs_email">https://www.lsxleaders.com/longevity-leaders-congress/download-longevity-trends-report-update?utm_campaign=Longevity%20Leaders%202021&amp;utm_medium=email&amp;_hsmi=92748738&amp;_hsenc=p2ANqtz--byVo5JeWRQv6cunFWA8K6Uw4fmjPgdtDyGyKkKrAT8mJe5PhCrln8TVmDQ8N83kGNXiJxj5sBNfS_UvhY5iKYFIEIJg&amp;utm_content=92748738&amp;utm_source=hs_email</a></p>	<p>Longevity is disrupting the world across health, science, business, technology and financial services, and COVID-19 has thrown longevity into sharp focus. We should be looking to catalyse a shift in social attitudes to ageing (p. 45)</p>



<b>Responding to probable higher levels of over 50s unemployment</b>		
Employment support for over 50s: Rapid evidence review	Rapid evidence review - <a href="https://www.ageing-better.org.uk/sites/default/files/2019-06/Employment-support-over-50s.pdf">https://www.ageing-better.org.uk/sites/default/files/2019-06/Employment-support-over-50s.pdf</a>	Looks at evidence on active labour market policy aimed at tackling worklessness of over 50s. Much research narrow and lacks high quality data and analysis. Most research looks at one or more of three areas: 1) motivations to continue working; 2) retirement perspectives; 3) health issues at work. Gaps in research include: 1) role of employment information, advice and guidance; 2) potential for self-employment for those aged 50+; 3) nature and effects of age-bias in recruitment/employment practice; 4) attitudes to skills development amongst people aged 50+ amongst employers; 5) how disability and ill health can affect opportunities people have to continue work.
Supporting carers back into work	Qualitative research with participants in Working Potential (Greater Manchester) - <a href="https://www.ageing-better.org.uk/sites/default/files/2020-06/Supporting-carers-back-into-work.pdf">https://www.ageing-better.org.uk/sites/default/files/2020-06/Supporting-carers-back-into-work.pdf</a>	Older carers who have fallen out of work face significant barriers to getting back into employment. Barriers include practical - skills, training and CVs - and personal - lack of confidence/self-worth – reasons. Support does not currently adequately address these needs.
Improving employment support for over 50s jobseekers	Secondary data analysis and qualitative work with employment support leads in four areas (City of Bristol, Liverpool City Region, West Midlands, West of England) - <a href="https://www.ageing-better.org.uk/sites/default/files/2020-07/back-on-track.pdf">https://www.ageing-better.org.uk/sites/default/files/2020-07/back-on-track.pdf</a>	Barriers to regaining employment for over 50s include: <ul style="list-style-type: none"> <li>• Lack of confidence</li> <li>• Changes to job application processes</li> <li>• Unsuitable training</li> <li>• Underdeveloped digital skills</li> </ul>

*This is not a statement of government policy*

		<ul style="list-style-type: none"><li>• Lack of access to flexible working</li></ul> <p>Potential for good practice:</p> <ul style="list-style-type: none"><li>• Support must consider individual's experiences/responsibilities outside of work</li><li>• Training should expand on clients' past work and experience/skills</li><li>• Support to navigate new job application processes</li><li>• Better and more thoughtful advertising/marketing of employment services</li><li>• Accessible signposting to relevant training at the end of support programmes (e.g. apprenticeships)</li></ul>
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