

# ANNUAL REVIEW 2020/ 2021

The Productivity Institute is a UK-wide research organisation which aims to pinpoint the causes of the stagnation in UK productivity and focus energies to laying the foundations for a new era of sustained and inclusive productivity growth through interdisciplinary research in collaboration with businesses and policymakers.

The Productivity Institute is a £32 million investment, made possible by a grant of £26 million from the Economic and Social Research Council (ESRC) and an additional £6 million from our partners.

Based on the premise that the long-term underperformance of productivity in the United Kingdom threatens a future of global excellence in economic performance and shared prosperity across the nation, The Productivity Institute’s mission is to lay the foundations for an era of sustained and inclusive productivity growth.

Our broad-based interdisciplinary research programme focuses on identifying the causes of the stagnation in UK productivity and making proposals for solutions and with strong regional engagement with stakeholders across the whole country.

THE PRODUCTIVITY INSTITUTE PARTNERS



CONTENTS

FOREWORD	4
MANAGING DIRECTOR’S REPORT	6
PURPOSE, OBJECTIVES, OUTCOMES AND IMPACT	8
THE PRODUCTIVITY INSTITUTE AT A GLANCE	9
HIGHLIGHTS 2020/21	10
THE RESEARCH PROGRAMME	12
PRODUCTIVITY AND THE COVID-19 PANDEMIC	14
8 RESEARCH THEMES	16
BUSINESS AND POLICY ENGAGEMENT	26
BUILDING A COMMUNITY	28
STRUCTURE AND GOVERNANCE	30
OUR TEAM	32

# FOREWORD

**The word ‘productivity’ can conjure up nothing more than the image of a grim production line with hourly targets, and there are still plenty of examples of that kind of work in the UK. But even on those production lines there should be thought about innovation to improve output and about how to make the work experience more pleasant.**

We will miss the point if we see productivity as working harder or longer hours. It must be about working better and working smarter. It is the basis for the income and wealth of the UK. So it is critical that it is exploited across private and public sectors, large and small companies, high-tech businesses and services.

The Productivity Institute is a very important initiative, clearly evidenced by the £26.6 million grant from the Economic and Social Research Council – the largest single grant ever made by this organisation - with the addition of £6.2 million from partner institutions. It has a big aim, to contribute to sustained and broad-based economic growth across the UK. I am delighted to have been asked to play a role in supporting it.

There is general agreement that the UK’s level of productivity and recent record is weak by comparison with most other G7 economies. A little more contested is the evidence suggesting the UK has greater regional disparities than elsewhere and that we have a ‘long tail’ of underperforming firms. There is concern over weakness in adopting best practice management and long-standing worries over finance for innovative and growing companies. Poor technical education is seen as one cause of skill shortages.

Most of these issues have been known and discussed over a long period. Yet the response to them has been too often inadequate and short-lived policies. The Productivity Institute will work directly with businesses across the UK and with policymakers, to understand these issues better and enable more resilient policy.

As we move through the impact of the twin economic shocks of Brexit and the COVID-19 pandemic there is much talk of creating a different economy with more care for well-being and for the environment. We will not succeed in delivering this unless The Productivity Institute is able to deliver its goals. It is truly a vital mission.



**Dame Kate Barker**

Chair, The Productivity Institute Governing Council

**Productivity in the UK has slowed in the past decade, and it seems to have slowed faster than elsewhere.**

Historical research suggests that the current productivity slowdown is unprecedented. Just before the pandemic began, measured productivity was 20% lower than what you would have expected had the trend growth in productivity prior to the financial crisis of 2008/09 continued over the intervening period.

I think we do underestimate the rate of productivity growth. But I think we were doing that in the late 1990s, almost as much perhaps as today. So although there are some measurement issues, I don’t think that they, by any means, account for the whole of the productivity slowdown.

What can The Productivity Institute do to counter this trend? First it can help improve our understanding of the causes of the

slowdown by tapping into a large network of universities and leading researchers.

We need to focus on the long-term economic and social benefits of productivity, finding better ways to measure productivity and integrate them with other metrics on economy and society.

Second, the Institute can benefit from its breadth in terms of eight large themes (including geography and place, human and knowledge capital, and institutions and governance) as well as its potential to take a multidisciplinary approach to some of the topics.

Third, the ability of the Institute to reach out to stakeholders in the business and policy communities across all regions of the country provides a two-way channel from research into practice and vice versa. This raises the potential for high quality research to make an impact.



**Professor Nicholas Crafts**

Chair, The Productivity Institute Steering and Impact Committee

# MANAGING DIRECTOR'S REPORT

**On September 1st 2020, The Productivity Institute opened its virtual doors, getting a five-year initiative underway to advance the understanding of UK productivity performance, including the causes of the productivity slowdown over the past 15 years and the potential effects of policy and business interventions to restore productivity growth.**

Our mission is to leverage the best research and knowledge at hand to help policy and business leaders across the UK to improve productivity and raise living standards in a sustained and inclusive manner.

This will be done through a broad-based research programme across a range of disciplines, the development of strong engagement with the business community, within regions and devolved nations as well as providing insights for policy makers at all levels of government. This three-pronged approach is essential to addressing the systemic nature of the UK's productivity challenges.

The first year of the Institute's activities consisted of a launch phase (September 2020 – April 2021) and the start of the first implementation phase (running from May 2021 until August 2022).

The Institute's objectives during the launch phase were to:

1. Establish the Institute and implement all relevant processes and procedures
2. Recruit the Institute's professional support staff and undertake other recruitment for the various entities in the Institute (including the Governing Council, the Steering and Impact Committee, the Regional Productivity Forums, the Productivity Commission)
3. Start up the initial round of research activities including thematic scoping papers, assessments of productivity for UK regions and a number of projects focused on productivity issues related to the pandemic and the period after it.

Despite the extraordinary circumstances posed by the COVID-19 pandemic, we have achieved the bulk of our objectives during the launch phase. The following reports by Research Director Anthony Venables, describing the activities under the Institute's eight research themes, and by Engagement and Operation Director Nicola Pike, reporting on the recruitment and first series of meetings of the eight Regional Productivity Forums and the staffing of the professional services teams, describe some of the most important milestones.

Over the past year, we have built a large community of contributors to the Institute involving more than 40 co-investigators, another 12 named researchers, 130 members of our Regional Productivity Forums, as well as more than 50 individuals who have joined the Institute as a member to contribute to its activities.

We have already created a significant visibility for the Institute through the activities reported in this review. Our own podcast series, *Productivity Puzzles*, and our collaboration in co-editing the *International Productivity Monitor*, an international research publication on productivity trends and developments, deserve special mention.

During the launch phase, we have spent considerable time and effort to develop a transparent and agile management process for the Institute. This was necessary given the large number of people involved with the institute as well as the relative long grant period of five years, which requires flexibility as to disbursing the budget to maximise impact and create value for money over time.

Our governance structure is such that all eight participating universities, the National Institute of Economic and Social Research (NIESR) and the Economic and Statistics Centre of Excellence (ESCoE) are represented on our Executive Team to take key strategic decisions, spearheaded by an Executive Committee which advises and supports the Institute's Management Team on a continuous basis.

During the launch phase, the Institute's activities were overseen by an interim Governing Council from the leadership of the University of Manchester. By the start of the implementation phase, the permanent Governing Council, chaired by Dame Kate Barker, has begun its work to oversee the strategic direction of Institute and approve the strategic and financial

plans of the Institute. A broad-based Steering and Impact Committee, with members from across academic, policy and business, has also been formed and will commence its activities in October 2021. This Committee, chaired by Professor Nicholas Crafts, will advise the Institute with regard to the research, engagement and implementation programmes, in particular regarding content and quality of those programmes, and their potential to create an impact in the academic, policy and business communities.

Over the next year the Institute will implement its research and engagement activities as planned. We will put in place the Productivity Fellowship and Business Innovation programmes to widen participation and engagement from research and business. We will also establish a Productivity Laboratory, which will be the Institute's "engine room" and one-stop-shop for data, surveys and expertise on creating and using datasets for the purpose of research and applications.

Finally, we acknowledge the great efforts made by many people to get the Institute off the ground during the difficult circumstances created by the pandemic. The professional support team based at our headquarters in Manchester and other support teams from our partner institutions across the UK deserve a special mention. They have undertaken their activities, often in a new role, largely by working from home during the COVID-19 pandemic. We are looking forward to work with all in what will hopefully be another productive year for the Institute.



**Bart van Ark**

TPI Managing Director, Professor of Productivity Studies, The University of Manchester

PURPOSE, OBJECTIVES, OUTCOMES AND IMPACT

OUR PURPOSE

Lay the foundations for an era of sustained and inclusive productivity growth and help policy makers and business leaders across the UK understand how to improve productivity and raise living standards

OBJECTIVES

- To set an agenda and develop national capacity that will deliver research and promote actions that contribute to the improvement of productivity
- To frame the productivity narrative such that it enters the classroom, boardroom, councils of government, and other civic societal groups and influences ideas at each of these levels
- To work with organisations to identify obstacles to productivity at the individual, firm, and institutional level, and to formulate and evaluate private and public policy actions
- To work with policy makers as part of an agenda to better understand the impact of local, regional and national policies on providing an environment supportive of productivity growth

DESIRED OUTCOMES

- To discover new facts and create knowledge about the causes of and obstacles to productivity
- To improve the knowledge base made available to policymakers (national, regional and local) and embed productivity as a priority across policy domains
- To extend recognition across society that productivity is critical to improving living standards and tackling inequality
- To develop and implement scientifically based measurement and methods to assess the effectiveness of business and policy interventions
- To increase capability of researchers working directly with business to deliver an improved evidence base relating to UK productivity better connection between insights and implementation

DESIRED IMPACT

- To discover new facts and create knowledge about the causes of and obstacles to productivity
- To increase capability of researchers working directly with business to deliver an improved evidence base relating to UK productivity better connection between insights and implementation
- To extend recognition across society that productivity is critical to improving living standards and tackling inequality
- To improve the knowledge base made available to policymakers (national, regional and local) and embed productivity as a priority across policy domains
- To develop and implement scientifically based measurement and methods to assess the effectiveness of business and policy interventions

THE PRODUCTIVITY INSTITUTE AT A GLANCE

ESTABLISHED  
1ST SEPT  
2020

130 INDIVIDUALS INVOLVED IN OUR REGIONAL PRODUCTIVITY FORUMS

10 INSTITUTIONAL PARTNERS

5 YEAR GRANT

8 REGIONAL PRODUCTIVITY FORUMS

8 RESEARCH THEMES

£32M INVESTMENT

40+ CO-INVESTIGATORS



# HIGHLIGHTS 2020/21

## Productivity Puzzles podcast

Our new and original podcast series, Productivity Puzzles, launched in May 2020, taking a deep dive into why productivity matters. Hosted by **Professor Bart van Ark**, the first series has 20 episodes and runs until May 2021. Capita sponsored the podcast for its debut series and available episodes include:



### Episode 1: Why does productivity matter?

Three esteemed economists – **Andy Haldane**, **Dame Kate Barker** and **Professor Nicholas Crafts** – explain what productivity actually is and why it matters to everyone.



### Episode 2: Productivity in the post-COVID 19 era

Could COVID 19 be the game changer for the economy and create a true productivity miracle in the coming years? McKinsey's **Jan Mischke** and **Tera Allas** discuss about a recent report by the McKinsey Global Institute about productivity post-Covid.



### Episode 3: Productivity in UK health care during and after the COVID-19 pandemic

**Professor Diane Coyle** and **Kaya M. Dreesbeimdiek** from the University of Cambridge and **Dr. Jennifer Dixon**, chief executive of The Health Foundation discuss what has happened to health productivity during the COVID-19 pandemic and ask how we rebuild a more resilient health care sector.



### Episode 4: Can levelling up raise productivity in the Northern Powerhouse?

In this episode, host **Professor Bart van Ark** talks to **Lord Jim O'Neill**, **Professor Dame Nancy Rothwell** & **Professor Philip McCann** about raising productivity in the Northern Powerhouse, a powerful concept introduced more than five years ago with the aim to rebuild a competitive economy in northern England.



### Episode 5: Will hybrid and flexible work help or hurt productivity and well-being?

**Andy Start**, CEO Government Services (Capita) & **Professor Diane Coyle** of the University of Cambridge discuss how the pandemic has dramatically changed the way many of us work and the positive and negative effects it's had on personal and organisational productivity.



Professor Diane Coyle



### Episode 6: How can productivity create sustained growth in Northern Ireland?

**Dame Rotha Johnston**, **Professor John Turner** and **Dr. Esmond Birnie** discuss the productivity pearls and perils in Northern Ireland in the 100th year of its creation, covering historic difficulties and the new challenges of Brexit.



### Episode 7: Can we still measure productivity in the modern economy?

**Josh Martin**, **Professor Rebecca Riley** and **Professor Jonathan Haskel** discuss productivity measurement from the widget counting days of economist founding father Adam Smith to today's methods that include the service economy, new technologies, worker well-being and the environment.



Professor Rebecca Riley



Professor Sir Cary Cooper



Sir Charlie Mayfield



Professor Erik Brynjolfsson

## The International Productivity Monitor

[30th June 2021](#)

The Productivity Institute joined forces with the International Productivity Monitor (IPM), a 20-year old open-access journal for empirical work on productivity produced by the Center for the Study of Living Standards in Canada. TPI Managing Director, **Professor Bart van Ark** joined **Dr. Andrew Sharpe** of CSLS as a co-editor from the 40th edition in Spring 2021.

A theme edition on "Productivity and Well-Being – Measurement and Explanations" is planned for Spring 2022. The latest edition of the IPM is now also published on The Productivity Institute website.

## Treasury Select Committee inquiry into jobs, growth and productivity after coronavirus

[12th July 2021](#)

**Professor Bart van Ark** gave oral and written evidence to members of the UK Treasury Select Committee inquiry on Jobs, growth, and productivity after coronavirus.

The two-and-a-half hour session was wide-ranging in its scope, covering how productivity is measured, the effect of Brexit, the adoption and diffusion of technology and the importance of skills, education and management competencies and more.

## Business Conference

10 June, 2021

In a two-hour virtual conference, more than 160 business decision makers joined us to explore how productivity is the key to improving living standards and wages across the UK in a post-COVID world.

Short films highlighting the productivity challenges and opportunities for each of our eight Productivity Forums were commissioned and premiered during the conference.

### Highlights included:

- ▶ A keynote speech from **Sir Charlie Mayfield** urging business owners to spend time on their businesses, not just in them.
- ▶ A lively discussion between **Professor Sir Cary Cooper** and **Professor Diane Coyle** about the positives and negatives of hybrid working, touching on managerial skills, emotional intelligence and how women could miss out on opportunities.

Business leaders from our eight Regional Productivity Forums provided unique insights & perspectives on productivity issues in two round tables.

- ▶ What does the UK Government need to do to help business succeed?
- ▶ What can UK companies do to thrive in the post-pandemic, post-Brexit era?

## Research Conference

9 June, 2021

The Productivity Institute were delighted to welcome **Professor Erik Brynjolfsson** as keynote speaker for its inaugural research conference on 9th June 2021.

As Director of the Stanford Digital Economy Lab, Erik's research examines the effects of information technologies on business strategy, productivity and performance, digital commerce, and intangible assets. Presenting to over 100 leading academics and policymakers he shared his recent findings about which professions and businesses have been affected most by AI and the pandemic and how it is affecting the economy, productivity, the way we work and employment wages.

### Other speakers at the inaugural conference included:

**Professor John Fernald** (INSEAD) and **Professor Robert Inklaar** (University of Groningen)

**Professor Jagjit Chadha**, **Dr. Hande Küçük** and **Professor Adrian Pabst** (NIESR)

**Professor Stephen Roper** and **Dr. Halima Jibril** (University Warwick) and **Professor Mark Hart** (Aston University)

**Dr. Enrique Garcilazo**, **Dr. Ana I. Moreno-Monroy** and **Dr. Joaquim Oliveira Martins** (OECD)

**Professor Tony Venables** (The University of Manchester)

# THE RESEARCH PROGRAMME

**During our first year we have launched research projects in each of our eight themes. Theme leaders have drafted ‘scoping papers’, outlining the state of knowledge in each area and setting out what it is that we don’t know. Six studies were “rapid response” projects to specific COVID-19 related issues.**

Other studies completed or underway include work on Business Model Innovation (Dr. Chander Velu), Institutions of Innovation (Professor Richard Jones), Productivity in Regulated Industries (Professor Michael Pollitt), UK Productivity in International Perspective (Professor John Fernald), Sectoral and Occupational Productivity across UK regions (Professor Tony Venables), and Institutions for Local Economic Development (Professor Andy Westwood). Papers were presented in various internal seminars and at the Institute’s first research conference in June 2021. In addition to Co-Is and other researchers, the Institute is currently employing 12 post-docs and research associates at Cambridge, Warwick and NIESR and a number of PhD students are also affiliated with the institute through our member institutions.

We have three objectives for the coming year. The first is to get more projects underway. A number of those approved in the first year will commence as research staff come into post. These include work on UK Regional Productivity using micro data (Professor Giordano Mion), Labour Market Polarisation and Productivity (Professor Anthony Rafferty), Low-carbon transitions and productivity (Professor Frank Geels), Innovation, Internationalisation and Productivity (Professor Stephen Roper), Inward Investment and Productivity post-Brexit (Professor Nigel Driffeld), Intangible Capital and Productivity (Professor Jonathan Haskel), Devolution (Professor Michael Kenny), Demand and supply of skills across regions of the UK (Professor Mary O’Mahony).

We have a pipeline of about 20 projects under development. Issues to be addressed in these include:

- How can the match between labour training programmes and local demand for skills be improved, particularly in an era of rapidly changing technology?
- Is there a trade-off between resilience and productivity in contexts ranging from resilience in supply chains through to resilience against climate and other major shocks?

- Why are many UK businesses apparently slow to adopt new technology?
- Does the problem lie in corporate governance, financial constraints, shortages of appropriate skills, or abundance of cheap labour? How might this, and other aspects of firms’ investment, be affected by the multiple legacies of COVID-19?

The second objective is to review and revise our research strategy for coming years. This will involve working to fill the knowledge gaps identified in the scoping papers and addressing issues raised in dialogue with the Institute’s Regional Productivity Forums. Focus on policy relevant aspects of the UK productivity puzzle will be enhanced by working with the Productivity Commission to produce a series of reports on key topics.

We anticipate increased emphasis on cross-theme topics, some requiring new research teams. For example, business location decisions studied in our Geography and Place theme interact with skills acquisition as addressed in Human Capital, and with institutions for local economic development covered in Governance and Institutions. In the area of finance and investment, work is needed that links firm-level

research on investment with work on corporate governance and the macro-environment of finance.

At a systemic level, what are the common threads that underpin the productivity puzzle? Do decision takers in the UK systematically fail to consider the full social value of their decisions, in the short term and more critically in their long run effects? If so, what features of our economy and institutions cause this? Some of these projects will involve participation of researchers from multiple disciplines including, for example, political scientists, economists and innovation researchers.

The third objective is to broaden and deepen our community of researchers. A regular seminar series is underway, the Fellowship programme will be launched and more PhD students, post-doctoral researchers and research assistants will come into post. Face-to-face contact will enable us to increase our engagement with existing university research staff, particularly in The University of Manchester, and we will promote collaboration between researchers in TPI partner institutions.



**Tony Venables**

TPI Research Director and Professor of Economics at The University of Manchester

# PRODUCTIVITY AND THE COVID-19 PANDEMIC

The Productivity Institute was formally created in September 2020, in the build up to the second UK wave of Covid-19. Several short-term research projects were undertaken to determine effects of the pandemic on productivity.



## Covid-19 business support and SME productivity in the UK

 Professor Stephen Roper, Dr. Halima Jibril, Professor Mark Hart

What effects have the government's furlough scheme and pandemic loans and grants had on firms and how will this shape their growth and productivity in the future? This research looks at some early impacts on investment plans and employee well-being – well-established lead indicators for future productivity.

Its analysis draws on two surveys of small and medium enterprises (SMEs) covering around 12,000 firms in total, conducted between October 2020 and March 2021.

It finds the furlough scheme and loan schemes both individually, and when firms are in receipt of both, have a strong and positive effect on both firms' future investment plans and staff well-being.

Both the furlough and loan schemes are contributing to firms' cash flow and this may be encouraging investment planning. The link to well-being is less direct, but the use of furlough may have positive effects in terms of job security. Many firms have also introduced new support mechanisms for employees over the pandemic period and this may be easier to do when the firm has stronger cash flow.

While it is too early to draw firm conclusions, the results suggest that loans and the furlough scheme are working to potentially sustain or grow productivity in the longer term.



## Public investments in Covid-19 green recovery packages

 Professor Frank Geels, Dr. Guillermo Pereira, Professor Jonatan Pinkse

UK's post-pandemic green recovery is much-heralded but short on ambition. Looking at budgets for green recovery in UK, France and Germany, this research project analysed the size, sectoral allocation, and implementation choices of their green recovery spending plans.

France spent most, both in absolute and GDP-relative terms, followed by Germany while total UK spending is 43% less than France. But compared to France and Germany, research found the UK green recovery could have been more ambitious, less bumpy, and more clearly delivered.

The UK and France mostly support existing sectors, while Germany focuses 57.8% of its funding on new technologies (electric vehicles, hydrogen), using the green recovery to make headway into delivering new technologies in the hope of becoming world leaders in a net-zero economy and accelerating the development of sectors with long-term economic and green potential.

Focusing their green recovery on building energy retrofits and railway infrastructure, France and the UK aim to deliver short-term economic and environmental benefits.

The UK experienced a bumpy implementation, with changes in both policy, programmes and delivery, while Germany focused on existing schemes and France used a mixed approach.

How each country decided to balance its options was shaped by their pre-pandemic trajectory on climate and economic progress, and priorities for the future, with political motivations for both France and the UK.

Looking ahead, the UK would benefit from less drastic changes in its policy proposals to provide more certainty to the public on what it wants to achieve and how it wants to get there.



## Productivity in UK healthcare during and after the Covid-19 pandemic

 Professor Diane Coyle, Kaya Dreesbeimdieck, Annabel Manley

UK healthcare productivity should not be measured just by conventional statistics but should also take into account broader economic welfare, including, the insurance value of better infectious-disease control.


This research examined the impact of Covid-19 treatment pressures along with substantial falls in non-pandemic health care activities on measured productivity in the NHS through a series of interviews conducted in November and December 2020 in two English hospital trusts, as well as official health output figures.

It highlights the impact of limited capacity in the NHS and asks how to think about and measure productivity in healthcare going forward, taking into account both the use of new technology in the past year, and the impact of the pandemic on health care activities. The authors argue that the NHS should be considered as a part of the nation's infrastructure, with implications for additional capacity to insure against future health crises.

Future productivity improvements will require both adequate resources and use of new technologies such as video consultations or remote monitoring – but introduced with care, both to evaluate patient outcomes and to avoid a digital divide.



## Productivity and the pandemic

 Klaas de Vries, Dr. Abdul Erumban, Professor Bart van Ark

The dynamics of productivity growth are best understood in the longer term. However, in times of crisis, analysing short-term productivity trends can help to reflect on whether the crisis might cause lasting damage to productivity or create opportunities for a revival in productivity growth.

Has the pandemic weakened or strengthened drivers of productivity growth in the longer term? This paper analyses quarterly estimates of productivity growth at industry level for three advanced economies of France, the United Kingdom, and the United States, for 2020.

The 36 industries were grouped into three taxonomies:

- Type of activity (manufacturing, industry, market services, hospitality and culture and non-market services)
- Working from home
- Digital intensity

While above-average digital-intensive industries outperformed below-average ones in both France and the UK, the US showed higher productivity growth in both groups compared to the European countries.

The US also seems placed to enjoy a better productivity growth recovery than France and the UK.

The large differences in productivity performance between countries during the pandemic also suggest that country-specific factors such as the response of innovation ecosystems to the opportunities for adoption of new technologies play an important role in the future. Such differences in policy environment may also have a significant impact on the within-country regional fortunes of a productivity revival.



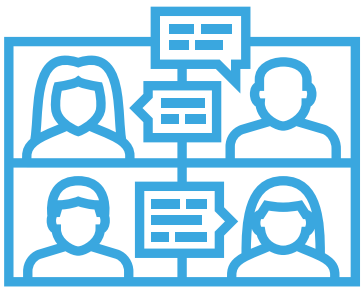
# 8 RESEARCH THEMES

## INVEST IN PEOPLE, IDEAS AND YOUR ORGANISATION



### Human capital

The UK labour force is characterised by strong high-end skills, weak vocational skills and a relatively low level of basic skills such as numeracy and literacy. More research is needed on which skills and abilities are important for productivity and wellbeing, and how these can best be developed and deployed in a rapidly changing digital economy.



### Organisational capital

Stagnant long-term productivity growth in UK firms has been linked to low levels of investment, failures in technology diffusion, short termism, and a general decline in business dynamism. As the UK seeks to develop a more activist industrial strategy, key questions arise on barriers to entry, obstacles to innovation in SMEs, and the resilience of supply chains.



### Knowledge capital

The institutional structure of research in the UK seems not to provide the coordination necessary for success, particularly in high technology and high value-added areas. There is a need to better understand and measure the impact knowledge capital and other types of intangible capital created by the public and private sectors on productivity.



### Geography and place

The low productivity levels of some regions or areas of the UK, and the consequent disparities in income and broader wellbeing, are widely documented. There are lessons to be learned concerning the effectiveness of local economic development strategies, infrastructure investment, land use and housing policy, educational and social interventions, and their interactions.

## COLLABORATE



### Macroeconomic trends and policy

Many of the UK productivity issues reflect economy-wide failures. From a private finance viewpoint, large financing gap for business seems to have emerged as banking restrictions on lending lead to shortfalls in productive investment. From a fiscal viewpoint, public investment in productivity-enhancing infrastructure may be limited by the fiscal regime and accounting frameworks used by the Treasury.



### Institutions and governance

UK productivity suffers from overcentralised decision making, topdownism, short-termism, silos, and the absence of effective joined-up government. The geographical concentration of power may stifle local initiative and innovation. A common research theme is the need to better recognise the interactions between those taking the decisions and those affected by them.

## MEASURE SUCCESS



### Measurement and methods

Productivity is fraught with measurement issues, notably to do with output in service sectors, regional price and productivity differentials, intangible inputs and environmental capital, and knowledge. New techniques and novel data sources, including administrative data and 'big-data' at granular levels, can help to gain deep understanding of regional, national and firm-level productivity drivers.

## FOCUS ON THE BIG PICTURE



### Social, environmental and technological transitions

Coming decades will see major transitions as the UK adopts new technologies and responds to climate change. There are both opportunities and risks for productivity, jobs and the distribution of the gains emerging from digital transformation and green growth. These transitions will require transformative changes in business models, skills needs, infrastructure, regulatory policies and markets.

## HUMAN CAPITAL



**The UK labour force is characterised by strong high-end skills, weak vocational skills and a relatively low level of basic skills such as numeracy and literacy. More research is needed on which skills and abilities are important for productivity and wellbeing, and how these can best be developed and deployed in a rapidly changing digital economy.**

### Theme lead

Professor Damian Grimshaw

### Co-investigators

Dr. Simone Schnall  
Dr. Augustin De Coulon  
Professor Eugenio Proto  
Professor Jill Rubery  
Professor Anthony Rafferty  
Professor Christopher Warhurst

### Human capital and productivity

Human capital is the skills, knowledge, and experience possessed by an individual or group. Analysing recent theoretical and experienced insights from the fields of employment studies and innovation studies helps to understand its contribution to productivity.

This is motivated by the urgent need to address four economic puzzles that characterise trends and patterns of human capital and productivity, with specific reference to the UK:

- High skill demand lags behind high skill supply
- Real wages are not keeping up with the higher skill supply
- The assumed skill bias of new technologies is uneven and possibly even absent
- Multiple organisational factors make the skill-technology-productivity equation highly contingent and uncertain.

The literature suggests shifting the frame of analysis away from a transactional approach towards improving knowledge about the use, development and transformation of human capital within organisations and sectors and its contingent relationship with productivity.

### Future focus

- **The effect of digitisation**  
Greater attention is needed to the possible upskilling and deskilling effects on employees
- **What skills are in demand**  
There is a lot to learn about the various effects of new technologies on the demand for skills, including the role of employers in re-bundling old and new tasks.
- **Further and vocational education**  
The institutional context for education and vocational training. Unless skills in the UK are developed and utilised appropriately, they will produce limited effects on productivity.
- **The effect of lean production**  
The over-reliance on workers and lean production as the drive for productivity growth



## KNOWLEDGE CAPITAL



**The institutional structure of research in the UK seems not to provide the coordination necessary for success, particularly in high technology and high value-added areas. There is a need to better understand and measure the impact of knowledge capital and other types of intangible capital created by the public and private sectors on productivity.**

### Theme lead

Professor Diane Coyle

### Co-investigators

Dr. Chander Velu  
Professor Richard Jones  
Professor Vasco Carvalho  
Dr. Richard Allmendinger

### The idea of productivity

Ideas fundamentally drive productivity, and hence living standards, over the long term. Ideas can contribute to innovative products and services, or to new ways of organising production and consumption. Knowledge capital, or the accumulation of ideas and know-how, therefore plays an important role in productivity growth, from research and inventions that are ultimately commercialised, to the way firms are organised and interact in markets, to the flows of knowledge in society. The production of knowledge itself is part of this wide scope of knowledge capital, which creates endogeneity, or feedback loops.

This means there is the potential for significant increasing returns to scale when new technologies are implemented. It also underlines the potential barriers created by coordination problems. A knowledge-based economy is one of virtuous or vicious circles, with policies playing an important co-ordinating role.

### Future focus

- **A new way of measuring productivity**  
Total Factor Productivity usually measures labour productivity, but that doesn't fully recognise the role of knowledge capital.
- **Using new technology to combat the potential impact of climate change**  
Changing weather patterns, flooding and droughts may reduce the productivity of existing infrastructure, causing related issues of resilience and productivity.
- **More insight into links between productivity and well-being within firms**  
There is evidence at firm level that worker well-being contributes to firm productivity but how can this be measured and proven further, and how is affected by new technologies?
- **A better way to measure the output of services**  
The UK economy largely consists of services, which requires an accounting for time as well as money, and particularly in the case of digital services where consumers' time is at the heart of the business model.





## ORGANISATIONAL CAPITAL



**Stagnant long-term productivity growth in UK firms has been linked to low levels of investment, failures in technology diffusion, short termism, and a general decline in business dynamism. As the UK seeks to develop a more activist industrial strategy, key questions arise on barriers to entry, obstacles to innovation in SMEs, and the resilience of supply chains.**

### Theme lead

Professor Nigel Driffield

### Co-investigators

Professor Stephen Roper  
Dr. Irina Surdu  
Dr. Elvira Uyarra  
Professor Janet Godsell  
Professor Mark Hart

### Understanding productivity: Organisational Capital perspectives

Factors which helped explain productivity differences between firms in the past are becoming less and less relevant. Research suggests that the most marked slowdown in productivity growth is in those sectors which experienced the strongest productivity growth prior to the recession – with more than half of the productivity gap accounted for by five sectors: telecommunications, finance, mining and quarrying, electricity and gas, pharmaceuticals and computer programming.

What are the origins of these diverse trends? Are these the consequence of intra-firm issues linked to leadership and management or technology or sector specific factors? How will coronavirus and Brexit, the climate emergency and increasing digitisation shape firms' future options for increasing productivity and competitiveness?

### Future focus

- **Trade and UK productivity**  
How can firms become more productive through exporting and what's the best way those benefits can be spread?
- **Governance and productivity**  
Looking at the effects of different types of corporate governance to discover which has the greatest impact on productivity.
- **Business Dynamism**  
Exploring the nature of the complex relationships in entrepreneurial ecosystem to identify the distinctions between those that perform well and those that don't.
- **Supply chain productivity**  
Global frontier firms are all competing on supply chains but supply chain productivity has yet to be properly defined or measured.



## GEOGRAPHY AND PLACE



**The low productivity levels of some regions or areas of the UK, and the consequent disparities in income and broader wellbeing, are widely documented. There are lessons to be learned concerning the effectiveness of local economic development strategies, infrastructure investment, land use and housing policy, educational and social interventions, and their interactions with productivity.**

### Theme lead

Professor Philip McCann

### Co-investigators

Professor Tony Venables  
Ana Rincon Aznar

### Geography and Place: The UK Regional and Urban Productivity Experience

The UK exhibits both high inequalities over very short distances, and one of the most centralised, top-down and largely space-blind governance systems of any industrialised country. The weaker parts of the country offset many of the productivity advantages of the more prosperous parts, thereby limiting overall national productivity growth.

In addition, there is evidence that the weaker parts of the country respond to economic shocks differently to the more prosperous parts of the country, an issue which will likely become even more important in the light of Brexit and the post Covid-19 landscape.

### Future focus

- **International comparison**  
Why do many UK cities under-perform in terms of productivity compared to international peers?
- **Regional differences**  
Investigating the role of agglomeration and regional technological and sectoral profiles on productivity growth. Looking at how the long tail of low productivity firms can be galvanised in weaker regions.

- **Investment**  
Exploring why angel investments and venture capital are spatially truncated and why Foreign Direct Investment is spatially concentrated. How does real estate finance and investment shape regional productivity and resilience responses?
- **Governance**  
How legal and financial relationships between sub-national and national governance frameworks and systems influence local growth and the effect of planning frameworks on economic development.
- **Skills and innovation**  
Investigating the skills landscape in the regions and how they can be adapted to local needs and determining if knowledge diffusion or knowledge absorption the principal problem of core-periphery growth patterns, and why.
- **Changing landscapes**  
The role of Brexit and the aftermath of the Covid-19 pandemic in reshaping regional productivity growth patterns.





## MACROECONOMIC TRENDS AND POLICY



**Productivity performance is shaped by economy-wide forces. It depends on macro-economic stability, public sector fiscal, spending, and monetary policies, the financial system, and on the UK's international relationships.**

### Theme lead

Professor Jagjit Chadha

### Co-investigators

Professor John Tsoukalas  
Dr. Garry Young  
Dr. Hande Küçük

### Macroeconomic trends, policy and productivity

Productivity varies with the business cycle and with long-term international trends. It is important to track these trends and disentangle UK-specific and international movements in productivity. The macro-economic environment is a key determinant of investment levels in the economy, operating through many channels. It shapes the return to investment and the cost of financing it.

### Future focus

- Tracking productivity; how is UK productivity changing, how does it compare with international trends, and what are the contributions of capital growth and labour quality to these trends?
- The international context; how do UK's trading relationships and international movements of capital and labour shape productivity?
- Finance and investment; do UK financial institutions support long-term investments?



## INSTITUTIONS AND GOVERNANCE



**UK productivity suffers from overcentralised decision making, top-downism, short-termism, silos, and the absence of effective joined-up government. The geographical concentration of power may stifle local initiative and innovation. A crucial research theme is the need to better recognise the interactions between those taking the decisions and those affected by them.**

### Theme leads

Professor Andy Westwood  
Professor Adrian Pabst

### Co-investigators

Professor David Richards  
Professor Mike Kenny  
Dr. Claudine Bowyer-Crane

### The Politics of Productivity

State or government failures have received little attention in relation to the UK's poor productivity performance, especially in political science where there is a dearth of research on the topic. Political economy should provide an overarching framework for analysing both the economics and politics of productivity, yet its scope is diminished by disciplinary divides and research specialisation.

The ensuing silos are not only barriers to a better understanding of how economic and political factors interact but also risk leading to the absorption of politics into economics or vice versa. Since productivity is the engine of prosperity, this paper argues that it matters to politics as an academic discipline, an object of study and a sphere of practice.

### Future focus

- Changing geopolitical context  
The reality of Brexit
- Government spending and strategies  
Including a focus on the white papers on Levelling Up and Innovation as well as Industrial Strategy, Net Zero, R&D and infrastructure investment.
- Pandemic recovery  
How will Covid recovery policies and 'building back better' help productivity? Will there be a change to the way that it's delivered through government reform?
- Governance and Institutions  
The workings of government on multiple levels – the UK as a whole, its four nations and at local and regional capacity and arrangements
- Skills  
What skills does the UK need and how can further and higher education institutions help provide them?





## MEASUREMENT AND METHODS



**Productivity is fraught with measurement issues, notably to do with output in service sectors, regional price and productivity differentials, intangible inputs and environmental capital, and knowledge. New techniques and novel data sources, including administrative data and 'big-data' at granular levels, can help to gain deep understanding of regional, national and firm-level productivity drivers.**

### Theme lead

Professor Rebecca Riley

### Co-investigators

Professor Mary O'Mahony  
Professor Jian-Bo Yang

### Re-examining the production function: measurement from micro to macro

At its core, productivity measures the rate at which "inputs", such as our time spent working, are transformed into "outputs", such as goods and services. For the last 15 years or so productivity growth in the UK and other advanced economies has slowed significantly but there is little understanding of how to remedy it. In part this reflects the myriad of factors that influence productivity, arising with its near interchangeability with the concepts of economic performance and growth.

At the same time, globalisation and digitalisation have changed fundamentally the way in which inputs are transformed into outputs, affecting our ability to measure, analyse and understand productivity and therefore our ability to prescribe effective policy for enhancing it. And, despite the centrality of productivity to living standards over centuries, there is increasingly a sense that current discourse around productivity is off-topic as it typically ignores critical inputs and outputs such as the environment.

### Future focus

- **Consistent methods of measurement**  
An international comparison of measurement methods to facilitate consistency (methods for measuring labour inputs, prices and quality adjustment).
- **Welfare economics**  
Better ways to measure how to achieve beneficial social and economic outcomes for all of society, in the public sector and through accounting frameworks
- **Human capital measurement**  
Human capital is not listed on a balance sheet, but needs to be recognised through new data sources
- **Making intangibles count**  
Creating value from intangible assets that don't exist in physical form through case studies, innovation accounting and data driven methods
- **Micro-data infrastructure**  
Improve this information infrastructure through productivity analysis such as data linkage and business data spine, collaborative research and geographical granularity.



## SOCIAL, ENVIRONMENTAL AND TECHNOLOGICAL TRANSITIONS



**Coming decades will see major transitions as the UK adopts new technologies and responds to climate change. There are both opportunities and risks for productivity, jobs and the distribution of the gains emerging from digital transformation and green growth. These transitions will require transformative changes in business models, skills needs, infrastructure, regulatory policies and markets.**

### Theme lead

Professor Frank Geels

### Co-investigators

Professor Bart van Ark  
Professor Jonatan Pinkse  
Professor Bridgette Wessels

### Productivity opportunities and risks in a transformative low-carbon and digital age

The transition to a low-carbon, resource efficient economy together with the digital transition (the adoption of digital technologies like artificial intelligence-AI, machine learning, big data, the internet of things, to transform services or businesses, through replacing non-digital or manual processes) are two structural developments that are likely to define the economy of the next half century.

They are likely to have substantial implications for national and firm level productivity and competitiveness. It is likely that the transition to low-carbon and the adoption of the digital economy will have a major impact on both productivity drivers for the UK. Governments seeking to sustainability boost productivity must strategically design and steer, rather than passively forecast, the future.

### Future focus

- **Comparative empirical research**  
Along with lessons from previous waves of technological change and productivity, examining productivity effects in different sectors, scaling-up, transition strategies, policy and financial issues.
- **Policy and governance**  
Understanding how this affects low-carbon and digital transitions and their productivity effects by way of cross country and historical comparisons to help counter inevitable conflicts and power struggles.
- **Analytical tools**  
Creating a richer and more valuable understanding with which to guide decision-makers in policy making, modelling, psychology dynamics and spatial approaches as well as interdisciplinary analysis.



# BUSINESS AND POLICY ENGAGEMENT

The Productivity Institute’s ambition is to build a research model that fully engages with practitioners and policy makers from the outset. Our approach will ensure that academic research and knowledge is used to help create practical solutions to transform UK productivity and in turn ensures that our research community learns from business leaders & policymakers to fully inform our research agenda. To help deliver this we are focusing on a select number of strong partnerships at a national, regional and devolved nation level.

### Regional Productivity Forums

Our priority during the launch phase has been to establish our Regional Productivity Forums (RPFs) and build in engagement with the business and regional policy and research communities from the start. We successfully recruited 8 academic leads and chairs for the RPFs as well as 130 individuals who have agreed to provide time and expertise to work with the Institute in solving the UK’s productivity puzzle. The respective Forums have spent time assessing the productivity issues in their region/ devolved nation and their strengths, weaknesses, opportunities and threats. We will shortly be publishing these ‘insight summaries’ and are using this intelligence to drive forward our business innovation activities and research & engagement agenda for 2021/22.

Each forum has provided a preliminary list of key topic areas that are relevant for the productivity performance of their region and industries. Research projects in the areas of strengthening management competencies (Northern Ireland) and organisational strategies and tactics to become more productive, especially in the digital age (Scotland) are already underway. Other RPFs are in the process of prioritising their areas of research focus and methodology. These initiatives are supported by our business innovation fund.

### Productivity Commission

As the UK does not have a formal governmental Productivity Commission (as is the case in many other advanced economies) The Productivity Institute has established an entirely independent Productivity Commission to help understand and communicate the policy implications of new insights related to UK productivity obtained from the Institute and elsewhere.

The Commissioners, who are mainly independent academics and policy researchers, will set their own agenda with an eye on the critical policy dossiers relevant to productivity. Managed by our partner NIESR, and chaired by its Director Jagjit Chadha, the Commission will prioritise key topics and collect evidence from experts, develop summaries with an emphasis on policy implications at the national, devolved nation and regional level, and examine the (potential) implications of current and newly planned policies. Matt Panteli has joined as Head of Policy to run the quarterly meetings and arrange for regular feedback sessions with relevant entities at all levels of government.

### Engaging at a sectoral and national level

Business and policy engagement is multi-dimensional and partnerships with national organisations who represent key stakeholders are vital to the success of the Institute’s work and impact. During the launch phase, we have had fruitful exchanges with many organisations, including the Office for National Statistics, Be the Business, The Confederation of British Industry and many others to identify opportunities for collaboration ( specific projects or joint events). In the coming year, we will create formal partnerships with a limited number of strategic partners to align parts of our research and engagement agenda and execute those jointly.



**Nicola Pike**  
Engagement & Operations Director  
The University of Manchester





# OUR COMMUNITY

The Institute is an opportunity to build a new, world-class centre of excellent interdisciplinary research that will make a significant contribution to advancing knowledge, informing and influencing policy and improving outcomes. In order to better understand, measure, and enable improvements in productivity, we need to build an extensive community of the world’s best researchers and promising early-career researchers and practitioners and policymakers who bring different perspectives and insights.

## OUR PILLARS

### Research

#### World’s best researchers

Our 10 partner institutions include 8 Russell Group universities, the National Institute of Economic and Social Research and the Economic Statistics Centre of Excellence (established by the ONS in 2017). This gives us immediate access to some of the world’s best academic minds. The Institute has 40 plus Co-Investigators representing many different academic disciplines – ensuring that we take an interdisciplinary approach to productivity. Our Members initiative is the way that other leading academics (from our partner universities and other institutions) can undertake research activity on behalf of The Productivity Institute.

### Business

Through our Regional Productivity Forums and strategic partnerships we are ensuring that we hear different perspectives and understand the productivity challenges and opportunities of different sectors, roles and regions that impact on the UK productivity puzzle. Our RPFs have representatives from SMEs and multinationals, start-ups to established brands, business-to-business and business-to-consumer organisations and straddle many different sectors. In addition, we work closely with umbrella organisations and large organisations through our RPFs and at a national level to help shape our agenda.



#### Early-career researchers

Early-career researchers are vital to the success of The Productivity Institute and through Research Fellows and PhD students, we will nurture and develop this talent to help us deliver research today and produce the world’s best researchers of the future.



### Policy

The Productivity Commission has been set up to help understand and communicate the policy implications of new academic research related to UK productivity. It will collect evidence from key stakeholders, provide summaries of research and evidence with an emphasis on regions and the devolved nations, examine the implication of planned policies, respond to policy initiatives in Whitehall, provide policy advice and develop policy proposals.

Through our Policy Fellowship programme, we have secured Matt Panteli from the House of Commons Treasury Committee to work as Head of Policy at the Productivity Commission. Our Regional Productivity Forums will work closely with The Productivity Commission to provide perspectives and evidence from the UK regions and devolved nations.



## OUR CONNECTORS

### Fellowship Programme

Our Fellowship programme has been designed to co-deliver research and analysis, forge lasting relationships and connections between academia, practitioners and policymakers & support international collaborations. The programme comprises 4 key parts 1) UK academics, 2) International academics, 3) Policymakers, 4) Practitioners.

### Business Innovation Programme

Our business innovation programme will enable businesses to benefit from academic research on productivity growth in different ways. In addition, practitioner engagement will help shape our academic research agenda and help us to create and deliver research informed interventions to help UK firms address their productivity challenges.

### Productivity Lab

The Lab will be based at Alliance Manchester Business School and will process, categorise and aggregate data from research projects to inform impact activities and identify opportunities for further research.

### Strategic Partnerships

Building relationships with organisations that represent key stakeholders at a local, regional, national and international level are vital to our success and impact. So far, we have developed links with the Office for National Statistics, Be the Business, The Confederation of British Industry and a number of others through our Regional Productivity Forums to identify potential collaboration for specific projects or joint events.



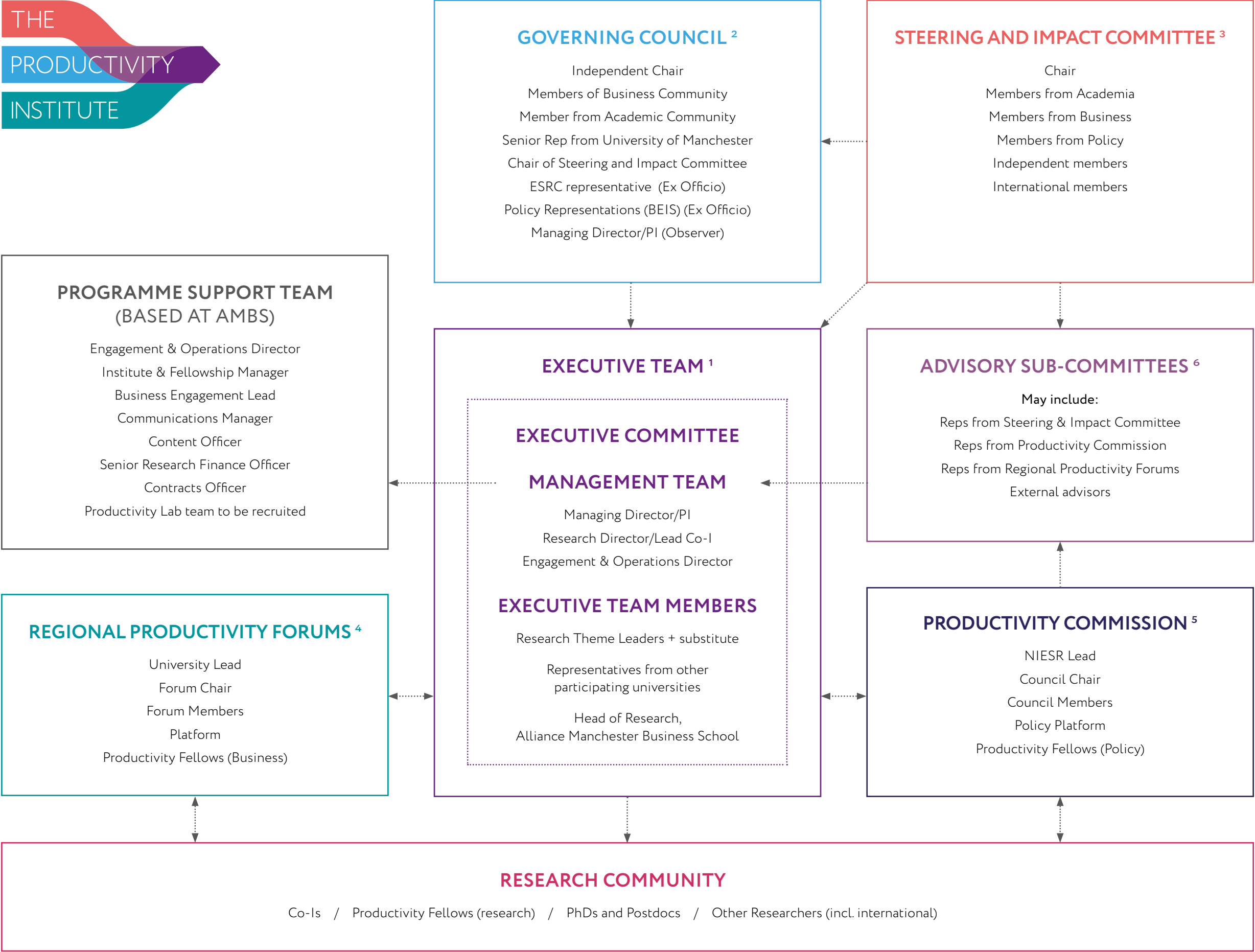
## SUPPORT

### TPI Headquarters

Supporting this vast network is The Productivity Institute’s HQ, based at Alliance Manchester Business School.



# STRUCTURE AND GOVERNANCE



## 1. Executive Team

Is responsible for Institute strategy and strategic decisions; Executive Committee is responsible for operational decisions; Management Committee is responsible for daily management and tactical execution (support by programme staff).

## 2. Governing Council

Oversees the strategic direction of Institute, signs off on financial decisions for unallocated budgets; oversees performance of three members of management team; oversees dispute resolution (and advises ESRC where needed); represent Institute at occasions.

## 3. Strategy and Impact committee

Advises Governing Council and Executive Team on any strategic issues (research agenda, engagement and implementation agenda) at request of Executive Team or Governing Council or at its own initiative; can advise and staff formation of ad-hoc committees; Chair can represent Institute at specific occasions.

## 4. Regional Productivity Forums

Oversees engagement and impact at regional/devolved nations level; provides input into research agenda; initiates regional innovation activities; represents regions in Productivity Commission; collaborate across regions to develop a comprehensive regional agenda on productivity.

## 5. Productivity Commission

Oversees policy engagement at national levels and represents Institute at policy level; develops policy proposals and provides policy advice; provides input to research agenda.

## 6. Advisory Committees

Can be set up at initiative of Executive Team, Governing Council, Steering and Impact Committee, Regional Productivity Forums or Productivity Commission, and include any members from those groups. Committees need a charter and operational. To be approved by Executive Committee.



# OUR TEAM

Management Team	HQ Team	Executive Committee	Governing Council	Productivity Commission	Executive Team	Steering and Impact Committee	
<p><b>Professor Bart van Ark</b> TPI Managing Director, The University of Manchester</p> <p><b>Professor Tony Venables</b> TPI Research Director, The University of Manchester</p> <p><b>Nicola Pike</b> TPI Engagement and Operations Director, The University of Manchester</p>	<p><b>Michael Livesey</b> Institute and Fellowship Manager</p> <p><b>Michelle Davies</b> Business Engagement Lead</p> <p><b>Krystyna Rudzki</b> Communications Manager</p> <p><b>Elizabeth-Jayne Lambley</b> Institute Administrator</p> <p><b>Content Officer</b></p> <p><b>Head of Productivity Lab</b></p> <p><b>Senior Research Finance Officer</b></p> <p><b>Contracts Officer</b></p>	<p><b>Professor Bart van Ark</b> TPI Managing Director, The University of Manchester</p> <p><b>Professor Tony Venables</b> TPI Research Director, The University of Manchester</p> <p><b>Nicola Pike</b> TPI Engagement and Operations Director, The University of Manchester</p> <p><b>Professor Diane Coyle</b> University of Cambridge</p> <p><b>Professor Jagjit Chadha</b> NIESR</p> <p><b>Professor Stephen Roper</b> Warwick Business School</p> <p><b>Professor Nikolay Mehandjiev (2021-22)</b> The University of Manchester</p> <p><b>Professor Ken McPhail (2020-21)</b> The University of Manchester</p>	<p><b>Dame Kate Barker (chair)</b> UK government advisor</p> <p><b>Professor Bart van Ark</b> TPI Managing Director, The University of Manchester</p> <p><b>Sir Charlie Mayfield</b> Be the Business</p> <p><b>Baroness Ruby McGregor Smith</b> UK government advisor</p> <p><b>Dr. Dan Mawson</b> UK Department for Business, Innovation and Skills</p> <p><b>Professor Nicholas Crafts</b> University of Sussex</p> <p><b>Damien Smith</b> Economic and Social Research Council</p> <p><b>Professor Keith Brown</b> The University of Manchester</p> <p><b>Sarah Thiam</b> Scottish Council for Development and Industry</p>	<p><b>Professor Jagjit Chadha (chair)</b> NIESR, Chair</p> <p><b>Professor Bart van Ark</b> TPI Managing Director, The University of Manchester</p> <p><b>Professor Alan Barrett</b> ESRI</p> <p><b>Professor Gillian Bristow</b> Cardiff University</p> <p><b>Professor Diane Coyle</b> Bennett Institute of Public Policy, Cambridge</p> <p><b>Professor Eileen Harkin-Jones</b> Ulster University</p> <p><b>Dawn Holland</b> NIESR</p> <p><b>Rachel Lomax</b> Formerly HMT and BoE</p> <p><b>Paul Mortimer-Lee</b> NIESR</p> <p><b>Professor Sir Anton Muscatelli</b> University of Glasgow</p> <p><b>Professor Adrian Pabst</b> NIESR</p> <p><b>Dr. Dirk Pilat</b> OECD</p> <p><b>Professor Sir Christopher Pissarides</b> LSE</p> <p><b>Professor Tony Venables</b> TPI Research Director, The University of Manchester</p> <p><b>Professor Jackie Wahba</b> University of Southampton</p> <p><b>Professor Stian Westlake</b> Royal Statistical Society</p> <p><b>Professor Andy Westwood</b> The University of Manchester</p> <p><b>Professor Cecilia Wong</b> The University of Manchester</p> <p><b>Mike Keoghan (Observer)</b> BEIS</p> <p><b>Matt Panteli (Secretariat)</b> Head of Policy, NIESR</p>	<p><b>Professor Bart van Ark</b> Managing Director</p> <p><b>Professor Jagjit Chadha</b> NIESR</p> <p><b>Professor Diane Coyle</b> University of Cambridge</p> <p><b>Professor Nigel Driffield</b> Warwick Business School</p> <p><b>Professor Frank Geels</b> The University of Manchester</p> <p><b>Professor Damian Grimshaw</b> King's Business School</p> <p><b>Professor Andrew Henley</b> Cardiff University</p> <p><b>John Holden</b> The University of Manchester</p> <p><b>Professor Philip McCann</b> Sheffield University</p> <p><b>Professor Adrian Pabst</b> NIESR</p> <p><b>Nicola Pike</b> Engagement &amp; Operations Director</p> <p><b>Professor Jonatan Pinkse</b> The University of Manchester</p> <p><b>Professor Rebecca Riley</b> King's Business School &amp; ESCoE</p> <p><b>Professor Stephen Roper</b> University of Warwick</p> <p><b>Professor John Tsoukalas</b> University of Glasgow</p> <p><b>Professor John Turner</b> Queen's University Belfast</p> <p><b>Dr. Chander Velu</b> University of Cambridge</p> <p><b>Professor Tony Venables</b> Research Director</p> <p><b>Professor Andy Westwood</b> The University of Manchester</p> <p><b>Professor Nikolay Mehandjiev (2021-22)</b> The University of Manchester</p> <p><b>Professor Ken McPhail (2020-21)</b> The University of Manchester</p>	<p><b>Professor Nicholas Crafts (Chair)</b> University of Sussex</p> <p><b>Dr. Gilbert Cette</b> Banque de France</p> <p><b>Professor Gerard Hodgkinson</b> The University of Manchester</p> <p><b>Professor Dale Jorgenson</b> Harvard University</p> <p><b>Professor Andrew Oswald</b> University of Warwick</p> <p><b>Professor Chad Syverson</b> University of Chicago</p> <p><b>Dr. Martin Baily</b> Brookings Institution</p> <p><b>Professor Niko Wolf</b> Humboldt University</p> <p><b>Professor Sunita Sah</b> University of Cambridge</p> <p><b>Professor Maria Savona</b> University of Sussex</p> <p><b>Professor Lynda Gratton</b> London Business School</p> <p><b>Professor Reinhilde Veugelers</b> KU Leuven</p> <p><b>Dan Andrews</b> OECD</p> <p><b>Paul Bailey</b> BEIS</p>	<p><b>Jonathan Coppel</b> Australia Productivity Commission</p> <p><b>Jeff Johnson</b> ILO</p> <p><b>Dr. Geeta Nathan</b> Innovate UK</p> <p><b>Alison Stuart</b> Bank of England North West</p> <p><b>Tera Allas</b> McKinsey</p> <p><b>Spencer Dale</b> BP</p> <p><b>Mike Emmerich</b> Metro-Dynamics</p> <p><b>Irene Graham</b> Scale Up Institute</p> <p><b>Antony Impey</b> Be the Business</p> <p><b>Rain Newton-Smith</b> CBI</p> <p><b>Mark Hughes</b> The Growth Company</p> <p><b>Linda Timson</b> HM Treasury</p>



**The Productivity Institute**

Room 1.008

Alliance Manchester Business School

Booth Street West

Manchester

M15 6PB

United Kingdom

[tpi@manchester.ac.uk](mailto:tpi@manchester.ac.uk)

[www.productivity.ac.uk](http://www.productivity.ac.uk)

 [@TPIProductivity](https://twitter.com/TPIProductivity)

ANNUAL  
REVIEW  
2020/  
2021