Welcome to the Productivity Insights Network

LORD JIM O'NEILL

I am delighted to Chair the International Advisory Board of the ESRC-funded Productivity Insights Network led by the University of Sheffield. Raising productivity is arguably the central economic challenge in the UK, but to achieve this we need to better understand the drivers and inhibitors of productivity.

There are many different factors that influence productivity, ranging from skills, infrastructure, technology, migration, trade, and international investment as well as the regulatory and institutional environment. Each of these factors interact with each other in different ways to influence productivity growth.

Over the next three years the Productivity Insights Network will unpack these factors, how they interact and play out spatially across the UK. Alongside the academic expertise the Productivity Insights Network is committed to engaging with government, the private sector, and civil society to diffuse evidence and insights about productivity.

These are challenging times, and the Productivity Insights Network is an exciting initiative aimed at providing answers to some of our greatest societal challenges. I wish the network every success and I look forward to being part of these fascinating discussions over the coming years.

Productivity Project Funding

Through the Productivity Insights Network a new Productivity Project Funding is available to support new innovative and interdisciplinary directions in productivity research across the social sciences that engage partners and deliver impact. Applications will not be considered for less than £2,500, and the maximum small grant is £10,000 over six months and the pioneer grant is £50,000 over 12 months. Applications must be collaborative, with preference given for projects which are either, interdisciplinary, involve a non-academic partner, or which draw on evidence from different fields. International partners are welcome, provided there is a UK-based partner as lead applicant.

Funds are available to facilitate initial project planning and development; to support the direct costs of research; and to enable the advancement of research through workshops or visits by or to partners. Applicants may seek support for any combination of eligible activity and costs up to the overall limit of £10,000. The PIN will assess applications equally on their merits, with no preference as to mode of enquiry, although preference will be given to priority areas and innovative projects. All applications must demonstrate how the Productivity Project Funding will support a clearly defined piece of interdisciplinary social science research with an identifiable outcome which makes a contribution productivity research and engages with non-academic audiences.

For full details on the Productivity Project Funding, including the application process please see www.productivityinsightsnetwork.com/funding

University of Cambridge · cambridge econometrics · University of Essex · University of Leeds · SQW · Cardiff University · Durham University · GCU Glasgow Caledonian University · The University Of Sheffield. · University of Strathclyde Glasgow · University of Glasgow

Joining the Productivity Insights Network

If you have a stake in the productivity debate then we want to engage with you. The Productivity Insights Network is all about building capacity, developing new insights and sharing good practice. Whether you want to join our mailing list or pioneering new directions in productivity research, in order to change the tone of the debate in theory and practice the Productivity Insights Network is all about bringing partners together to identify the key questions and develop new insights together.

Our team

The core Productivity Insights Network team is led by **Professor Philip McCann** and **Professor Tim Vorley** at the University of Sheffield. All of the co-investigators are contributing to the programme of work through their thought leadership, by championing interdisciplinary research as well as promoting stakeholder engagement.

Professor Vania Sena
University of Essex

Professor Robert Huggins
Cardiff University

Dr Maria Abreu
University of Cambridge

Professor Richard Harris
Durham University

Professor Iain Docherty
University of Glasgow

Professor Gary Dymski
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Mr Benjamin Gardiner
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Mr Jonathan Cook
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Professor Kirsty Newsome
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Please contact any of our network partners or email **productivity@sheffield.ac.uk** for further information of queries about the Productivity Insights Network

productivity insights network

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

Changing the tone of the debate

Reviewing the Productivity Puzzle: What Now and Next?

Our team has been conducting a series of evidence reviews drawn from across the social sciences to inform the work of the Productivity Insights Network. The aim of the evidence reviews is to inform what projects will be commissioned via the Productivity Project Funding. The intention of the reviews are not to be prescriptive, but identify some of key areas to be addressed – we remain open to alternative and innovative ideas that will deliver new directions in productivity research. The Productivity Insights Network team will continue to review the evidence base across the duration of the project, but the intention is to encourage research and engagement activities that cut across these thematic areas.

KNOWLEDGE, INNOVATION AND TECHNOLOGY

- Knowledge diffusion and innovation systems are acknowledged as a vital component for improving productivity and economic development.
- There is a long tail of low productivity firms that need to be better understood in explaining the productivity puzzle in the UK.
- The productivity slowdown worldwide can be attributed to weakened demand post-crisis, the absence of ICT effects, and limited take-up of digital technologies.
- A sustained decline in patenting associated with R&D activity highlights how the productivity challenge is associated with lower levels of innovation.
- The interplay of knowledge, innovation and technology is not well understood within or between sectors and further research is required.

FDI, MARKETS AND INVESTMENT

- New manufacturing plants demonstrate much higher total factor productivity which has helped to offset the decline experienced by established plants.
- Finance was found to impact on long-run economic growth through capital accumulation and enhancing the productivity of factor inputs.
- Greater credit depth contributes to higher growth for only a handful of countries, one of which is the UK.
- The performance of plants located in cities generally performed better than plants in the same region outside of cities, while no city had significantly higher TFP levels than the South East.
- There is a future need to unpack the lack of consensus in the micro-econometric literature explaining the UK's productivity puzzle.

WORK AND THE WORKPLACE

- The workplace is critical to the understanding of the productivity puzzle, although there is a dearth of empirical research on social dynamics and performance outcomes.
- Policy debate has focused on modern work practices, highlighting the importance of job quality and decent work. However, future research needs to explore the relationship between job quality and productivity outcomes.
- Existing evidence shows low job quality to be higher in low productivity sectors, which represents a challenge for better job quality solutions as well as improving the regional dimension of job quality.
- The role of employee voice in promoting change and innovation is both is patchy and dated, and future research needs to better understand the nature of effective employee voice.
- Previous research has found there to be a positive relationship between union presence in the workplace and higher productivity, although this research needs to be revisited in contemporary workplaces.
- There is a growing focus on insecure work and productivity, although more evidence is required to explore this relationship, as well as how it is played out and measured across the so-called gig economy regionally and nationally.

SKILLS, EDUCATION AND LABOUR MARKETS

- There is significant variation in returns to schooling according to the measure of schooling used, but returns tend to be higher for higher income groups.
- There are persistent regional differences in the percentage of pupils achieving 5 A*-C GCSEs (including English and Maths) and these differences have increased since the 1970s.
- The UK Employer Skills Survey shows that the skill gaps reported by employers are lowest in London and the South East, and highest in the East and West Midlands, and Yorkshire and the Humber.
- The different implications for, and impacts of, international and interregional migration for productivity are considered to be important but are not well understood.
- Although job skill surveys have large sample sizes and are regionally representative, there is a need for further research at the regional level.

WELL-BEING AND INCLUSIVE GROWTH

- There is no evidence that higher levels of growth and productivity in certain sectors, are shared across the population as a whole.
- Individuals with fewer skills and poorer access to opportunities typically work in lower productivity sectors dominated by more precarious jobs.
- There is evidence that better managed firms deliver higher worker productivity, as well as recruiting and retaining workers with higher levels of human capital.
- Historically increasing productivity is associated with increasing wages, although this link is weakening due both to compensation inequality and reductions in labour's income share.
- Improving living standards and economic potential is contingent on improving the soft infrastructure of places.

SCALE-UP CHALLENGES OF SMES

- The UK has high numbers of small and micro businesses, but there is a widespread consensus that the UK lacks sufficient scale-up companies which serves to undermine UK productivity.
- An emerging line of enquiry has sought to conceptualise key 'growth triggers' to understand how and why some firms are able to capitalise on these to drive growth.
- In the UK various studies have reported that gazelles are much more prevalent in London and the South East than in other regions, although high growth firms can be found in all regions.
- Several barriers to scale-up have been identified, including access to markets, lack of entrepreneurial experience, although the two key ones are access to finance and access to management talent.
- A further explanation for the lack of scale-ups in the UK is that many entrepreneurial firms with the potential to scale-up get acquired at an early stage by larger businesses.
- Further research is required to better understand the infrastructure and support for scale-up businesses in the UK which has tended to focus on start-ups.

TRANSPORT AND INFRASTRUCTURE

- There is significant disagreement about the causal linkages between the outputs of transport and infrastructure investment on economic gains.
- Although quantifying the economic impact of transport investment is difficult, there is substantial empirical evidence that locations with weak transport infrastructures are at a disadvantage when compared with those places with strong transport infrastructure.
- There is a growing disparity between in connectivity of UK cities and the connectivity of cities across Europe.
- The cumulative impact of multiple small scale improvements in transport and infrastructure can have an effect at least as big as that of the larger 'megaprojects'.
- Further research on the additionality of infrastructure is required to better understand how threshold effects and system-design effects impact productivity.

AGEING AND DEMOGRAPHIC TRENDS

- US and European evidence suggests that an increase in the proportion of workers aged 55-64 is associated with an economically and statistically significant reduction in the growth rate of labour productivity and total factor productivity.
- Aspects of productivity, such as experience, leadership and managerial skills, and knowledge of human nature, usually improve with age but are hard to measure.
- Education and training can help to slow or even reverse the decline in productivity associated with ageing, although fewer training opportunities are offered to older workers because the beneficial effects of training occur for a shorter period.
- Young people have now replaced the elderly as the group most at risk of relative poverty, and the implications of this need to be better understood.
- How ageing populations influence the sectoral composition of demand and supply of services, especially low productivity-growth and labour intensive services, requires further research.

REGIONAL AND CITY PRODUCTIVITY DEBATES

- There is a persistent prosperity gap between the Northern regions and the rest of the UK, which is predominantly driven by a performance gap rather than an employment gap.
- Northern cities led productivity growth from 1971-91, and southern cities have led since 1991 - the rate of productivity growth has slowed across almost all cities.
- There is evidence of considerable structural convergence and reduced specialisation across cities, while the shift from manufacturing to services has also had a negative impact on productivity growth across almost all UK cities.
- The growth of employment accounts for just less than one-third of growth in Growth Value-Added.
- Spatial externalities associated with (non-London) city locations are not as important as the benefits of being situated in the London and South East region.
- There is a need for further research on the relative importance of tradeables and non-tradeables in understanding the productivity growth of different cities and regions.

GOVERNANCE, INSTITUTIONS AND ORGANISATIONS

- There is a need to further understand the extent to which the stagnation in UK productivity growth is a side effect of the sustained austerity policies.
- Budgetary demands have constrained demand, with aggregate 'output' figures reflecting demand-side constraints as opposed to capacity limits.
- There have been several distinct configurations of business-support nationally and regionally over the past two decades, although there is little definitive evidence about what works in supporting businesses to improve productivity and grow.
- In a period of rapid industrial change and technological advances, the instability in national and regional agencies and outdated regulation may be contributing to the productivity slowdown.
- There remains a need to review the provision of national and regional business support to understand how they relate, complement and/or compete with each other.

ENTREPRENEURSHIP, SMALL FIRM BUSINESS GROWTH AND PRODUCTIVITY

- There is no established connection between SME growth and productivity-enhancing improvements.
- The absorptive capacity of SMEs, or their ability to translate knowledge into performance, is highly heterogeneous and needs to be better understood.
- The issue of absorptive capacity has been under-researched by the mainstream analyses of productivity.
- Research examining productivity drivers in SMEs requires greater focus on both the firm and on the characteristics further research is required to understand how local norms and entrepreneurial culture affect the performance of small businesses.