

Productivity in the UK: Evidence Review

First report of the UK Productivity Commission

Published June 2022



The UK Productivity Commission (The Commission) has been established by the National Institute of Economic and Social Research (NIESR) as part of The Productivity Institute (TPI), which is funded by the Economic and Social Research Council (ESRC). The Commission's main purpose is to examine the UK's poor productivity performance and provide policy solutions to address the shortfall.

The objectives of The Commission are:

- to help understand and communicate the policy implications of new academic research related to UK productivity
- to collect evidence from key stakeholders and provide summaries of research and evidence with an emphasis on regions and the devolved nations
- to examine the implication of planned policies, respond to policy initiatives in Whitehall, elsewhere and overseas, provide policy advice and develop policy proposals.

Since it was launched on 16 September 2021, The Commission has held three oral evidence sessions and issued two calls for written evidence. This report is a summary of the evidence received so far. In its second year, The Commission will hold quarterly evidence sessions that will focus on specific policy issues. A report will be published after each evidence session making suggestions to the Government for how the UK can improve its productivity.



NIESR is Britain's longest established independent research institute. It operates as a charity, independent of all party-political interests and receives no core funding from government or other sources. Its mission is to "carry out research into the economic and social forces that affect people's lives, to improve the understanding of these forces, and the ways in which policy can bring about change"



TPI is a UK-wide research organisation exploring what productivity means for business, for workers and for communities – how it is measured and how it truly contributes to increased living standards and well-being.



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Contents

Foreword	4
Key Insights	5
1. Introduction	7
2. International and national	9
Sizing the problem	9
Measurement	12
3. Regional	14
Sizing the problem	14
Measurement	16
4. Productivity across and within sectors	17
Sizing the problem and measurement issues	17
5. Reasons for variation in productivity in the UK	21
Labour quality and allocation issues	21
Firm issues	23
Shocks and general economic environment issues	27
6. Potential policy priorities	31
Business support and governance	31
Investment	32
Levelling Up	32
Skills, training and management	33
Annex 1 – Background to the report	34
Annex 2 – Written evidence submissions	36
Annex 3 – Commissioners and Secretariat	37

Foreword

The UK Productivity Commission was established in 2021, as part of the ESRC's Productivity Institute. Hosted at the National Institute of Economic and Social Research, The Commission is marshalling evidence on the scale of our country's poor productivity performance. Our ultimate aim is to produce a set of policy proposals that address the significant shortfall in national economic underperformance and the worrying levels of regional fragmentation which accompany that.

We have been told that the shortfall since the global financial crisis amounts to some £5,000 per worker in the UK. This huge number, which is around 20% of average annual earnings, masks a considerable number of regional, sectoral and rural-urban factors that add up to this loss. We must however state that any answers require patience. The persistence and magnitude of this shortfall did not build up over one political cycle and cannot be addressed over such a short horizon. Ambition, honesty and institutional frameworks will be required to tie the hands of policymakers to the productivity tiller.

In our first year we held three evidence sessions. Our first evidence session assessed the scale of the problem internationally, nationally, regionally and sectorally. We then moved on to understand better the distance we are from the international best practice frontier and our third evidence session examined potential policy solutions. We have received over 20 pieces of written evidence and took oral evidence from 10 witnesses across three sessions. We are grateful to each of them for giving their time so generously.

This report summarises the written and oral evidence that we have received, together with material from other sources where relevant. The following pages first introduce the concepts of productivity and the UK productivity puzzle before discussing issues around 'sizing the problem' and 'measurement' at an international and national level (Chapter 2) and at the regional level (Chapter 3). We then discuss productivity across and within sectors (Chapter 4) before moving on to potential explanations of weak productivity growth in the UK (Chapter 5). We conclude (Chapter 6) with a selection of policy priorities that emerge from the evidence assembled.

Finally, I want to express my warm thanks to the Commissioners and all those who gave evidence but particularly to our secretariat Konstantinos Myrodiadis and Issam Samiri whose patience and quiet dedication has been humbling, as well as to our Head of Policy, Matt Panteli who is on secondment from the House of Commons Treasury Committee.

Jagjit S Chadha
Chair, UK Productivity Commission

Key Insights

In this report, we have summarised the written and oral evidence received by The Commission during its first year. We have also added material from other sources where relevant. Based on what we have found out so far, we will publish shortly a separate report focussed on what the Productivity Commission will do next.

Why is productivity important?

The evidence that we have taken underlines the importance of productivity, its impact on living standards, and the need to improve productivity growth in the UK. In the three decades since the Second World War, the average annual productivity growth rate (output per hour worked) was around 3.6 per cent. The following three decades saw this fall to around 2.1 per cent. From the start of the financial crisis in 2007 to 2019, this declined even further to 0.2 per cent. Demonstrating the importance of productivity for the economy and living standards, the Office for National Statistics (ONS) told us that if productivity had continued to grow at two per cent per year in the last decade, it would have meant an extra £5,000 per worker per year on average.

When did productivity growth in the UK begin to slow down?

It is important to understand when productivity growth in the UK began to slow down, so that we can identify the main factors that have caused the slowdown. There was some disagreement about whether the slowdown in UK productivity growth started before or after the financial crisis. However, the bulk of evidence indicates that it started circa 2007-08, around the time of the financial crisis. As reported by the ONS, there was a very sharp slowdown in output per hour worked in the UK after the financial crisis.

One view presented to The Commission is that productivity growth at the frontier, namely in the US, started to slow down around 2005, and it typically takes two to three years for the US trend to be followed by other developed economies, which puts the start of the UK slowdown in 2007-08. Alternative views were also presented to The Commission. In its future years, The Commission will examine the extent to which the UK's productivity performance is keeping pace with the frontier, and analyse the latest data on the productivity gap between the UK's frontier and non-frontier businesses.

Why has productivity growth in the UK slowed down?

The UK's productivity performance has been uneven across the country. There is a persistent gap between London and the South-East and the rest of the UK regions and cities. Human capital is highly concentrated in London and broader South-East.

A view presented to The Commission is that productivity growth has been held back by 'productivity laggards' in the long tail. The alternative view also presented is that the gap between the high- and low-productivity firms did not increase substantially since the financial crisis. Rather, it is frontier firms, which often export, that have struggled to bounce back and boost productivity growth.

The size, ownership and structure of a firm can affect its productivity, seemingly more so than the sector in which it operates. Much of the evidence suggests that the sectoral decomposition of the UK economy is unlikely to be the main reason behind the productivity slowdown in the UK, as slow labour productivity growth has been pervasive across all sectors. Rather, within-sector and within-firm factors should be examined as the gap between the most and least productive firms is about 16-fold in the UK compared to tenfold in other countries examined by the OECD.

How can productivity in the UK be improved and 'levelled up'?

Numerous policies were suggested to improve the UK's poor productivity performance by tackling structural problems, which include over-centralisation, weak and ineffective institutions and policy churn, institutional and policy silos, as well as short-termism and poor policy coordination. The Commission will publish a short paper later this year to set out the policy priorities on which it will focus going forward.

There were questions in the evidence around the precision of productivity statistics. The Commission welcomes the commitment of the ONS to update data sources and methods to reflect the changing economy and to improve our understanding of the UK's regional disparities, while ensuring consistency with international standards.

There were calls for more differentiated regional policies to 'level up' productivity in cities outside London and the South-East. Central government has been urged to work closely with local authorities by devolving decision-making powers and resources as local levels will be better equipped to identify local needs and interests. A new institutional framework may be required to improve coordination, cooperation as well as policy design and delivery across national and regional government. Policies aimed at enhancing productivity should be interlinked with other government priorities and be given sufficient time and resources to have an impact.

A greater focus on infrastructure both between and within cities will support the positive effects of agglomeration, such as attracting and retaining human capital to help drive productivity growth. Attracting the right mix of skills is crucial to the 'levelling up' of productivity across the UK, as research has suggested a strong correlation between local productivity and the skill level of the local workforce.

1. Introduction

Productivity 'is a way of describing how efficiently inputs are converted to outputs, i.e. how much output is produced for a given input'.¹ It 'acts as a proxy for technological change, especially in the long-run'.² 'Increasing productivity is widely seen as a key enabler for improving living standards, via higher real wages, in the long term and as a necessary condition for sustainable economic growth'.³ As Andy Haldane, former Chief Economist at the Bank of England, said, 'productivity is what pays for pay rises. And productivity is what puts the life into living standards'.⁴

The phenomenon that has come to be known as the productivity puzzle states that growth measured in productivity has fallen far behind previous trends and this has opened up a large gap between anticipated and actual income per head.⁵

Productivity can be measured in numerous ways, including labour productivity,⁶ capital productivity and resource productivity. The UK Productivity Commission prefers the term multi-factor productivity (MFP), rather than total factor productivity (TFP), which is the unexplained residual,⁷ representing technological progress, market frictions, and measurement errors, among other things. However, the term TFP is used by many witnesses and in evidence, so both TFP and MFP are used throughout the report.

Chad Syverson, Professor of Economics at University of Chicago Booth School of Business, told The Commission that because total factor productivity (TFP) is measured as a residual, all mismeasurements in inputs and outputs affect the measurement of TFP. He added, however, that mismeasurement is not the source of the recent productivity slowdown as it is unlikely that our ability to measure the economy has changed enough in a direction that leads to underestimating productivity growth in several advanced economies circa 2007.

He also noted that many intangible investments are hard to measure and are not fully captured by national accounts, while their accumulation uses measurable labour and capital inputs. This leads to understating output in the early stages of the adoption of new technology, thus implying an initial underestimation of productivity growth (both labour productivity and TFP). When unaccounted for intangible investments are fully used in the production process, they represent inputs that are ignored by the national accounts, which leads to overstated measures of TFP levels. Intangible investments can cause an underestimation of productivity growth at the cusp of the introduction of new technology and a later overstatement of productivity growth when the technology investment starts improving production.

In the context of the UK economy, Chad Syverson said that the presence of a large services sector could mean that intangibles' related mismeasurement issues may be worse in the UK than in other countries, as the intangible investments in the services sectors (especially in financial services) are particularly hard to measure.

The UK's productivity performance has deteriorated relative to other G7 economies throughout much of the post-war period, which seems to indicate a deep structural problem.⁸ Productivity fell significantly at the peak of the financial crisis in 2008. 'Since then, productivity has been growing, but at a significantly lower rate than its pre-crisis trend rate. And though this growth slowdown has been experienced by other advanced economies, it appears to be more accentuated in the UK'.⁹

In his submission to the Treasury Committee in October 2021, Huw Pill, Chief Economist at the Bank of England, said:

*'Before the global financial crisis, UK productivity growth averaged over two per cent per year. Since then, labour productivity (growth) has fallen considerably. Slowdowns in productivity growth have also been observed in other advanced economies, especially in Europe'*¹⁰

1 York & North Yorkshire LEP and West Yorkshire LEP submission

2 ONS submission

3 GLA Economics submission

4 <https://www.bankofengland.co.uk/speech/2018/andy-haldane-academy-of-social-sciences-annual-lecture-2018>

5 Chadha, J. S. (2017). "The Productivity Puzzle", Lecture delivered at Gresham College on 21st September 2017. <https://www.gresham.ac.uk/watch-now/productivity-puzzle> as part of the series, "Blueprint for Brexit Britain".

6 The ONS defines labour productivity as follows: 'It divides output, as measured on a gross value added (GVA) basis, by the quantity of one input factor (labour) to give the amount of output per hour worked, or sometimes per worker or per job.'

7 As opposed to the non-residual, which includes labour hours, labour composition, and capital services.

8 Innovation and Growth Think Tank submission

9 <https://www.bankofengland.co.uk/-/media/boe/files/speech/2018/the-fall-in-productivity-growth-causes-and-implications>

10 <https://committees.parliament.uk/publications/7480/documents/78491/default>

During The Commission's second evidence session, Commissioners Chris Pissarides and Rachel Lomax asked why the UK's poor productivity performance is often called a puzzle. John Fernald, Professor of Economics at INSEAD and the Federal Reserve Bank of Francisco, suggested that the UK has fallen back in terms of convergence towards the productivity frontier.

In a working paper published by The Productivity Institute,¹¹ John Fernald and Robert Inklaar, Professor of Economics at the University of Groningen, wrote that from the early 1990s to 2007, UK TFP growth largely converged to northern-European levels and closed the gap somewhat with the US frontier. After 2007, UK TFP modestly diverged from US levels, largely paralleling northern Europe.

John Fernald and Robert Inklaar's working paper states:

'Overall, the UK was converging towards US levels [of TFP growth] before 2007 because of rapid and essentially complete convergence in market services. [...] Since 2007, much of the modest shortfall of relative UK TFP growth appears idiosyncratic, reflecting factors such as mining and finance – both of which have measurement issues that suggest we should not overinterpret these shortfalls.'

Chiara Criscuolo, Head of the Productivity, Innovation and Entrepreneurship Division at the Organisation for Economic Co-operation and Development (OECD), said that Nordic countries including "Denmark, Sweden and Finland are at a higher productivity level than the UK, but also Germany and France". She added that in the UK, there has been a productivity slowdown across all sectors, perhaps slightly stronger in the services sector, but it's quite broad based, so sectoral factors can't be the main explanation of the UK's slowdown. She said that there is no average firm in the UK and that we have "huge heterogeneity, even within sectors" across UK firms, and the gap between the top and worst performing firms is much larger in the UK compared to other countries.

In the opening statements of the first the oral evidence session, the witnesses explained the importance of productivity and how it can be improved. Belén Zinni, Head of Productivity Statistics Unit at the OECD, said that "digital skills" and "definitely investment" should be high on the policy agenda to tackle the UK's productivity problem.

Louise Hellem, Director of Economic Policy at the Confederation of British Industry (CBI), highlighted the importance of "institutions working together", with the Government ensuring that "we have the framework and the infrastructure in place". She identified the importance of "the right skills infrastructure", "the right tax framework", Government investment in new markets, and "the right regulatory environment".

Josh Martin, formerly Head of Productivity at the Office for National Statistics (ONS), now an economist at the Bank of England, demonstrated the importance of productivity by stating that if productivity had continued to grow at around two per cent in the last decade or so, it would be 20 per cent higher today than it actually is, which would mean "about an extra £5,000 per worker per year on average".¹² He added that "productivity is exceptionally important for the economy and for people's lives".

Paul Swinney, Director of Policy and Research at Centre for Cities, told The Commission that as the South East "is one of the most productive parts of Europe", the UK's productivity problem "is to do with the underperformance of places outside the Greater South East", with Manchester, Birmingham and Glasgow "punching well below their weight". He said that conservative estimates suggest that this underperformance is costing the UK economy £50 billion per year. Paul Swinney also stated that London, which "pulled the rest of the economy along" prior to the financial crisis, has "absolutely flatlined" since, causing national productivity also to flatline.

11 <https://www.productivity.ac.uk/wp-content/uploads/2022/04/WP020-The-UK-productivity-puzzle-in-an-international-comparative-perspective-FINAL-010422.pdf>

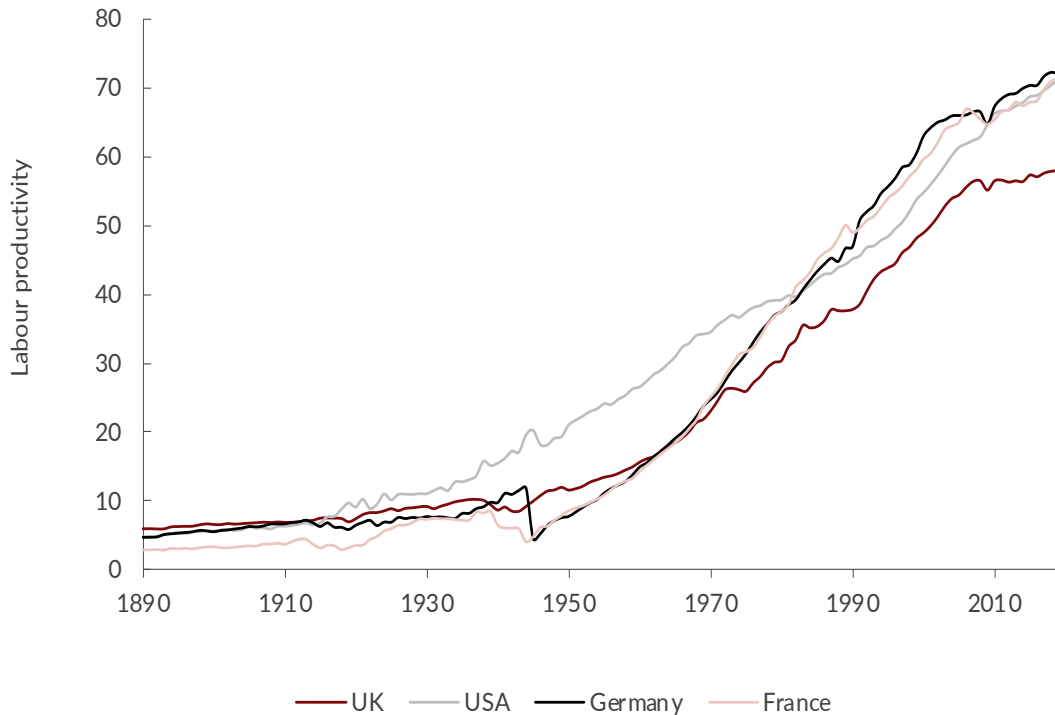
12 This is also discussed in the ONS submission

2. International and national

Sizing the Problem

Productivity slowdown in the UK

Figure 1 Output per hour in the UK and other advanced economies (\$US 2010 ppp per hours), 1890 - 2019



Source: Bergeaud, A., Cette, G. and Lecat, R. (2016): "Productivity Trends in Advanced Countries between 1890 and 2012," *Review of Income and Wealth*, vol. 62(3), pages 420-444 (available at <http://www.longtermproductivity.com/>) where the data runs beyond the 2016 publication..

There is more than one way to measure labour productivity. In this section, we refer to labour productivity measured as the gross value added (GVA) per hours worked.

Productivity growth in the UK has slowed substantially in recent years, although there has been disagreement amongst economists about whether it started before, during or after the 2007-08 financial crisis.¹ In the first oral evidence session, Commissioner Bart van Ark spoke about economists who have said that productivity started to slow down "before the financial crisis and even though the financial crisis may have worsened things, it's not where we're looking for the cause".

As was discussed in the previous section, John Fernald and Robert Inklaar have said that productivity growth at the frontier, namely in the US, started to slow down around 2005, and it typically takes two to three years for the US trend to be followed by other developed economies, which puts the start of the UK slowdown in 2007-08.² Alternative views to this were also presented to The Commission.

Josh Martin told The Commission that for the UK he "struggled to see a slowdown prior to 2007 in the official data", and that "the slowdown might even be later, so after the financial crisis". He added:

¹ The financial crisis impacted financial services and depressed business investment through austerity and demand uncertainty.

² <https://www.productivity.ac.uk/wp-content/uploads/2022/04/WP020-The-UK-productivity-puzzle-in-an-international-comparative-perspective-FINAL-010422.pdf>

“[The ONS] showed that between the end of the Second World War and 1974, the average annual [labour productivity] growth rate was around 3.6 per cent, which fell to about 2.1 per cent between 1974 and 2007, the onset of the financial crisis. [...] However, it seems to me that there’s a very sharp slowdown after the financial crisis.”

He added that a lot of the productivity growth after the war was associated with rebuilding.

Belén Zinni told The Commission that before the financial crisis, “the UK was performing comparatively well with other advanced economies”, so it appeared that the UK’s productivity slowdown “started with the financial crisis”.

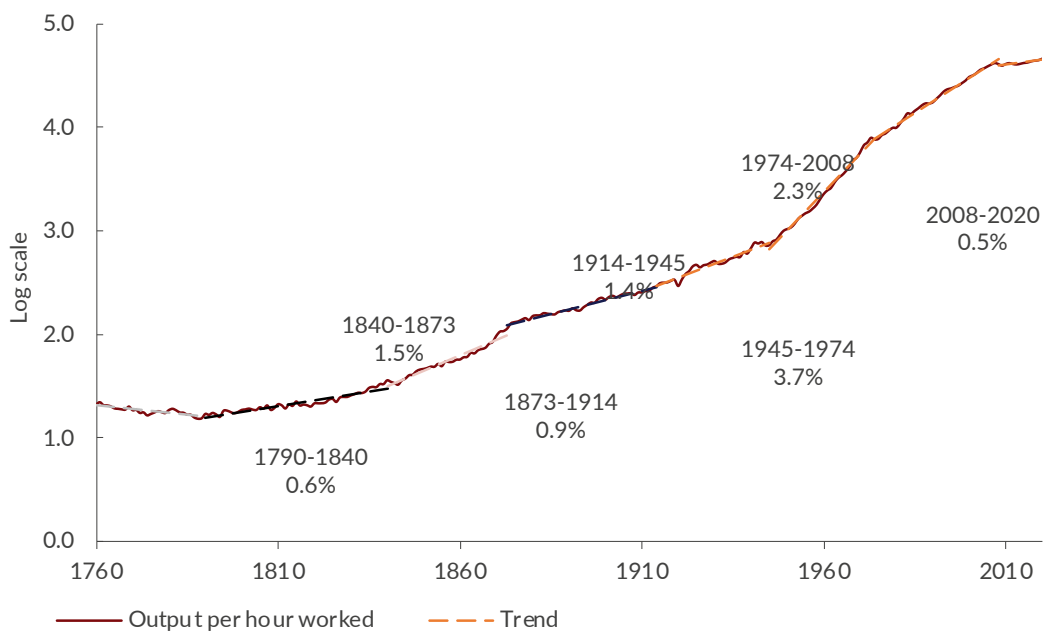
Table 1 shows labour productivity at the national level and living standards as measured by “median equivalised household disposable income”.³ It shows that the productivity slowdown has been accompanied by an equivalent slowing of the rate at which standards of living improve.

Table 1 Growth rates of the standard of living and of productivity, 1977-2019 (% p.a.)

	1977-1990	1990-2007	2007-2019
Standard of living	3.07	1.96	0.47
Productivity	2.35	2.34	0.21

Source: Nicholas Oulton submission

Figure 2 Output per hour worked, UK (and Great Britain), 1760-2020



Source: Thomas and Dimsdale (2017) – Bank of England Millennium of macroeconomic data, and ONS – labour productivity.

Note: Trend lines are through periods; period average growth are compound annual averages.

There has been a remarkably slow growth rate of labour productivity in the UK since 2007. Figure 2 puts the recent productivity slowdown into a longer-term historical context. It suggests that the current UK productivity slowdown is unprecedented since the age of the industrial revolution.⁴

³ The equivalised disposable income is the total income of a household, after tax and other deductions, that is available for spending or saving, divided by the number of household members converted into equalised adults; household members are equalised or made equivalent by weighting each according to their age, using the so-called modified OECD equivalence scale. For more information see: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Equivalised_disposable_income

⁴ For more on the long-term historical trends of productivity in the UK, the reader can refer to Crafts, N. (2021), THE SOURCES OF BRITISH ECONOMIC GROWTH SINCE THE INDUSTRIAL REVOLUTION: NOT THE SAME OLD STORY. *Journal of Economic Surveys*, 35: 697-709.

Productivity growth accounting

The standard productivity growth accounting framework decomposes the growth of GVA per hour worked into three components:⁵

- labour composition, predominantly representing the skills of the workforce.
- capital deepening, representing the availability of capital per hour worked.
- multi-factor productivity

The slowdown in the growth of labour productivity in the UK can be attributed to a combination of lower MFP growth starting from the 2007 economic downturn and less capital deepening since 2012.⁶ Using the standard growth accounting framework, ONS figures show that as of 2019, about half of the productivity slowdown can be explained by slower MFP growth with the other half being attributed to less capital deepening.⁷

International comparisons

The level of labour productivity in the United States had surpassed that in the UK by the end of the nineteenth century; the level of productivity in the UK was surpassed by France and Germany in the late 1960s.⁸

In the years leading to the global financial crisis, the UK was closing the gap on its international competitors; UK productivity was growing at a faster pace than the United States in the pre-2007 period. This has changed since 2007, with productivity growth rates collapsing in the UK, more so than in most advanced economies.⁹

Compared to other countries, Belén Zinni said that “countries like Finland, France, Japan, Italy, and to some extent [...] Germany” saw productivity slowing down prior to the financial crisis.

John Fernald drew on his paper with Robert Inklaar to present a view where the UK productivity slowdown is rooted in a broad slowdown that has affected advanced economies since 2007. He argued that the weaker investment in advanced economies since the Global Financial Crisis is endogenous and in line with the weaker TFP growth, thus attributing the bulk of the slowdown in labour productivity to weak TFP growth (measured UK labour quality has improved since 2007).

Borrowing from the analysis in Fernald and Inklaar,¹⁰ the UK’s market economy TFP was around 89 per cent of the US (frontier economy) TFP in 2007. By 2019, the UK’s TFP was about 85 per cent of the US. This means that the UK fell behind the US productivity frontier by four per cent in 12 years or a meagre 0.3 per cent per year. John Fernald argued that this is the size of the UK specific productivity puzzle and that such a small gap can be explained by the UK’s specific industrial composition or even by measurement errors.

Turning to the productivity performance at the frontier, John Fernald argued that TFP growth in the US has been relatively modest since 1970, with a temporary productivity boom between the mid-1990s and 2005 that coincided with the ICT revolution. According to this view, the slowdown of productivity in the UK from 2007 onwards is hardly surprising given the slowdown at the productivity frontier.

Chiara Criscuolo told The Commission that the UK productivity slowdown is not largely consistent with the performance of the productivity frontier. She argued that UK TFP has witnessed a substantial slowdown from 2.5 per cent in the 2000-2007 period to around 0.2 per cent after 2010 and that in addition to the US, other countries such as Canada, Germany, France and Spain have higher TFP growth than the UK. Turning to labour productivity as measured by output per hour worked, she noted that, in level terms, the UK has lower labour productivity than Germany, France and Nordic countries (Denmark, Sweden and Finland).

<https://doi.org/10.1111/joes.12349>

5 ONS submission

6 ONS submission

7 ONS submission

8 Nicholas Oulton submission

9 Nicholas Oulton submission

10 Fernald J. and Inklaar R., ‘The UK Productivity “Puzzle” in an International Comparative Perspective’, January 2022, working paper - <https://www.productivity.ac.uk/wp-content/uploads/2022/04/WP020-The-UK-productivity-puzzle-in-an-international-comparative-perspective-FINAL-010422.pdf>

Measurement

Josh Martin told The Commission that the ONS' official productivity statistics "rely on data from the National Accounts consistent with international guidance", and data for labour inputs for the ONS productivity measures "come from business and employee surveys". He added that "it is very difficult to put confidence intervals or any sort of traditional statistical quality measures around productivity estimates".

He added that the methodology and data sources used by the ONS to measure productivity are constantly updated "to keep pace with the changing economy". These data revisions have affected the sizing of the labour productivity slowdown in the UK since 2007. Despite the revisions, it is clear that there has been a slowdown in productivity growth in the UK (see Table 2).

Table 2 Average annual growth rates of output per hour worked, UK, various Blue Book vintages

Blue Book Vintage	Average annual growth: 1997 to 2007	Average annual growth: 2009 to latest year	Change in average annual growth
2011	2.10%	1.10%	-1.00%
2012	2.50%	1.30%	-1.20%
2013	2.40%	0.10%	-2.30%
2014	2.20%	0.50%	-1.80%
2015	2.20%	0.50%	-1.80%
2016	2.20%	0.40%	-1.80%
2017	2.10%	0.40%	-1.70%
2018	2.20%	0.50%	-1.70%
2019	2.30%	0.60%	-1.70%
2020	2.20%	0.50%	-1.70%
2021	2.00%	0.70%	-1.30%

Source: ONS submission

Labour composition measurement

Labour composition has an impact on the measure of MFP. The ONS labour quality measure is based on observable statistics of the UK's workforce (age, education, gender). It does not include important determinants, such as the skills mismatch and the adequacy of on-the-job training. Overestimating improvements in measured labour quality could lead to underestimating MFP growth.¹¹ A downward revision of the post-2006 labour quality growth would lead to higher estimated MFP growth post-2006, thus allocating less of the productivity slowdown to slower MFP growth.

Public sector productivity

Commissioner Bart van Ark asked in the first evidence session if better measurement of UK public services productivity has helped to explain a larger slowdown in the UK during the pandemic compared to other countries. In response, Josh Martin said:

"I'm sure you're aware of the differences between the measures in the national accounts between the UK and other countries with respect to measuring the volume of public sector outputs. And because of the way that the ONS does it, which is actually best practice, it does show a larger decline in public sector output during the pandemic, and consequently a larger recovery than in other countries. My understanding is that that doesn't explain all of the differences in the productivity in the relative change in output between countries. There's something more to the UK response to the pandemic than just that measurement point. But I think that's part of it."

¹¹ ONS submission

The ONS uses inputs as a measure of output for 40 per cent of the government fiscal expenditure. This means that there is little opportunity to measure productivity gains in these areas. Measured productivity has improved since the financial crisis in areas of public service where the ONS could adjust for the quality of the services provided. This suggests that the mismeasurement issues affecting public services are likely to introduce a downward bias to measured aggregate productivity growth.

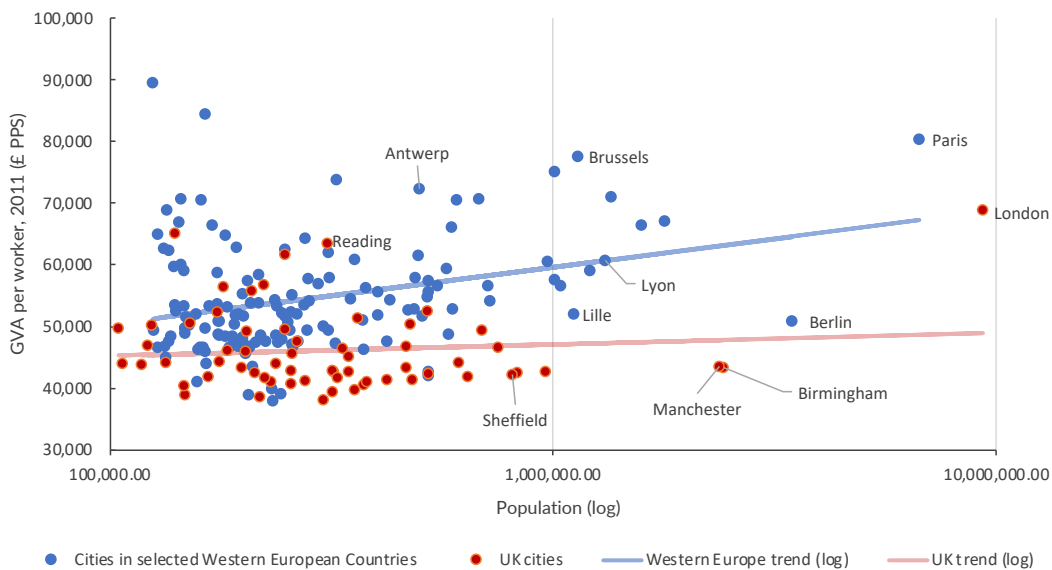
3. Regional

Sizing the Problem

A recent study by the OECD¹ found the following:

- While gaps in GDP per capita between countries have narrowed over the last two decades, within their own borders OECD countries are witnessing increasing gaps in GDP per capita between higher performing and lower performing regions.
- Leading cities and regions are increasingly competing with their global peers, rather than with others within national borders.
- The gap within countries between the top 10 per cent of regions with the highest labour productivity and the bottom 75 per cent has grown on average by almost 60 per cent over the last two decades, from \$15,200 to \$24,000.²
- Three-quarters of frontier regions in OECD countries are predominantly urban. Three-quarters of the regions that were catching up to their country's frontier regions between 2000 and 2013 are intermediate and rural regions.
- Tradable sectors emerge as a critical driver in regional catching-up dynamics, particularly tradable services, manufacturing and resource extraction and utilities. This is the case in both urban and rural regions, despite differences in their growth patterns.

Figure 3 Gross Value Added per hour worked



Source: Centre for Cities submission

While the UK lags behind other Western European countries in terms of productivity growth, the Greater South East is one of the most productive parts of Europe. The Centre for Cities' submission said that the UK's low productivity is a result of the poor performance of the rest of the country. The inequalities across the UK in terms of productivity represent a significant drag on the economy. Similarly, if the Core Cities³ had grown at the same rate as London between 1992 and 2015, they would have contributed at least an additional £120bn to the UK economy.⁴

1 OECD (2016), OECD Regional Outlook 2016: Productive Regions for Inclusive Societies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264260245-en>

2 GDP per employee in constant PPP (purchasing power parity) and constant prices 2010 USD

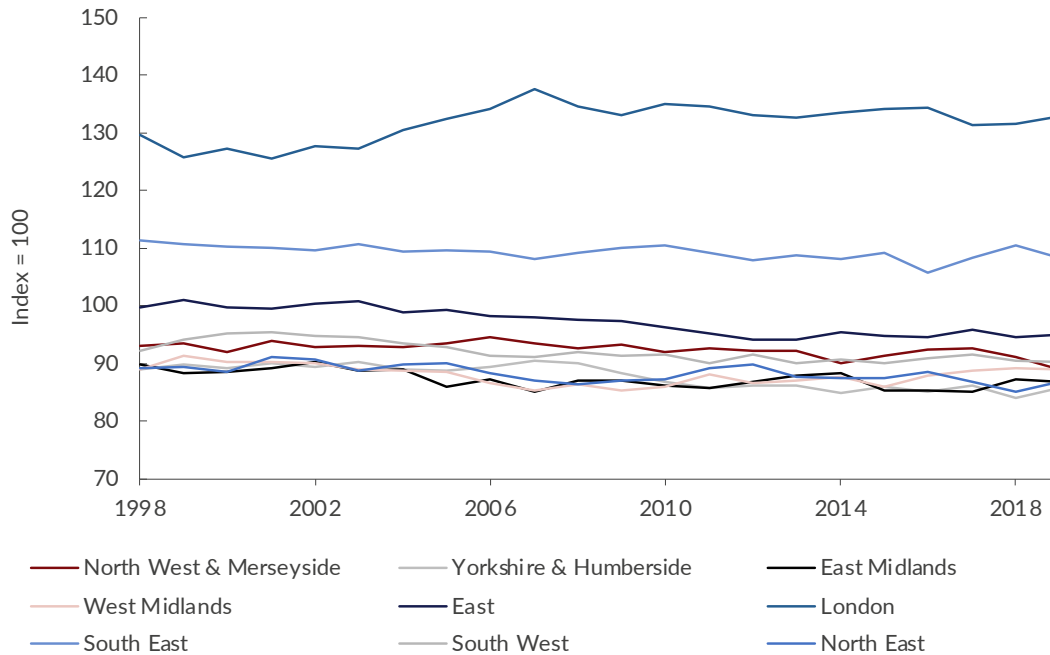
3 <https://www.corecities.com/>

4 UK2070 Commission submission

The submission by the UK2070 Commission said that ‘it is now accepted that the UK is the most interregionally unequal major high-income economy amongst the advanced OECD countries.’⁵ In his oral evidence, Paul Swinney cited France as a country where the lead city of Paris dominates more than others in the country in terms of productivity, but the second-tier cities in France perform much better than in the UK.

The uneven geographic distribution of productivity performance has been a long-standing issue for the UK economy. As Figure 4 shows, London is by far the most productive city in the UK with other regions lagging behind.

Figure 4 Gross Value Added per hour worked



Source: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/regionalproductivitytimeseries>

The variation in productivity performance across the UK is well-documented. The reasons behind such regional variation are complex and diverse. Evidence shows that human capital allocation and investment play an important role in explaining the current dynamics of productivity performance in the UK. As Figure 6 shows, human capital is unevenly distributed across the UK regions and cities. London is again far ahead of other regions as its human capital stock has been substantially increased in the last decade. Investment in human capital has been stagnant in almost all other regions with the exception of the South-East where it has slightly increased in the same period.

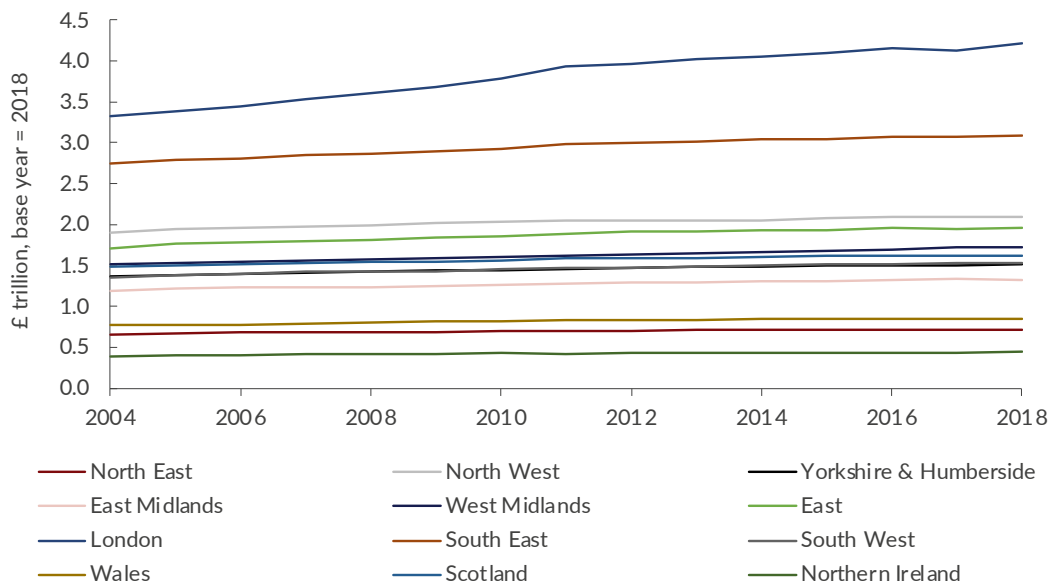
Whilst the London region is recognised as the richest region of Europe, in 2016 six of Europe’s 10 poorest regions also lie within the UK: West Wales and the Valleys, Cornwall and the Isles of Scilly, Lincolnshire, South Yorkshire, Tees Valley and Durham, and Outer London (North and North East).⁶

The UK economy has been dividing into ‘separated’ economies, with London and large parts of wider South East decoupling from the rest. It is important to consider potential positive spillovers from the high-productivity regions to the rest of the country. The consideration of the productivity gap in the UK needs to take account of the fact that these patterns of inequality are mirrored across a whole range of metrics (e.g.: income and wealth inequality, child poverty, life expectancy and social mobility). Inequalities are concentrated not only within neighbourhoods of towns and cities but also between nations and regions.⁷

5 Professor Philip McCann has written extensively on regional inequality, such as this post published by the UK 2070 Commission: <http://uk2070.org.uk/2019/01/22/professor-philip-mccann-publishes-think-piece-on-perceptions-of-regional-inequality/>

6 <https://fullfact.org/economy/does-uk-have-poorest-regions-northern-europe/>

7 UK2070 Commission submission

Figure 5 ONS Estimates of Regional full human capital stock

Source: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/humancapitalestimates/2004to2017>

Measurement

During the first oral evidence session, numerous witnesses said that there was a dearth of information on regional capital stocks, such as buildings, machinery and transport. This was also highlighted by Cambridge Econometrics, which called regional capital stocks “a missing piece in the productivity puzzle”.⁸

Josh Martin told The Commission that the ONS currently produces regional gross fixed capital formation estimates that are “not especially robust”, but they are looking to improve them to “allow us to make regional multifactor productivity estimates, which we hope will shed new light on what’s going on”.

He also said that the ONS is working on defining and measuring regional capital infrastructure, and how the ONS can “integrate capital into the production function on a regional dimension”.

Louise Hellem explained the importance of such a measure on improving the understanding of “the value of public and private investment”.

Paul Swinney added that the ONS is set to publish data that will, for the first time, “allow us to produce productivity estimates for city centres”. This will allow the relative performance of city centre economies to be measured.

On 10 May 2022, the ONS published new experimental statistics on regional capital investment.⁹ The ONS website states that ‘the main purpose of this project is to improve existing annual regional gross fixed capital formation (GFCF) estimates. These are intended to support delivery of the Government Statistical Service (GSS) subnational data strategy and support locally targeted policy making, such as the Levelling Up agenda. It also aims to pave the way for future improvements in measuring regional capital stock and regional productivity’. The Productivity Institute is funding a separate project for longer periods of time,¹⁰ which the ONS’ statistics don’t cover.

The UK’s regional dispersion of employee compensation decreased between 2009 and 2015. However, the regional dispersion of gross profits has increased in the same period. This is mainly driven by an increase in the rental income per London employee by 30 per cent between 2009 and 2015, more than twice as much as the average of the remaining regions. The perceived regional dispersion of productivity in the UK, therefore, is likely to be increased by higher rental income in London.¹¹

8 <https://www.camecon.com/blog/regional-capital-stocks-and-how-they-relate-to-productivity/#>

9 <https://www.ons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/articles/experimentalregionalgrossfixedcapitalformationgfcfestimatesbyassettype1997to2020/2022-05-10>

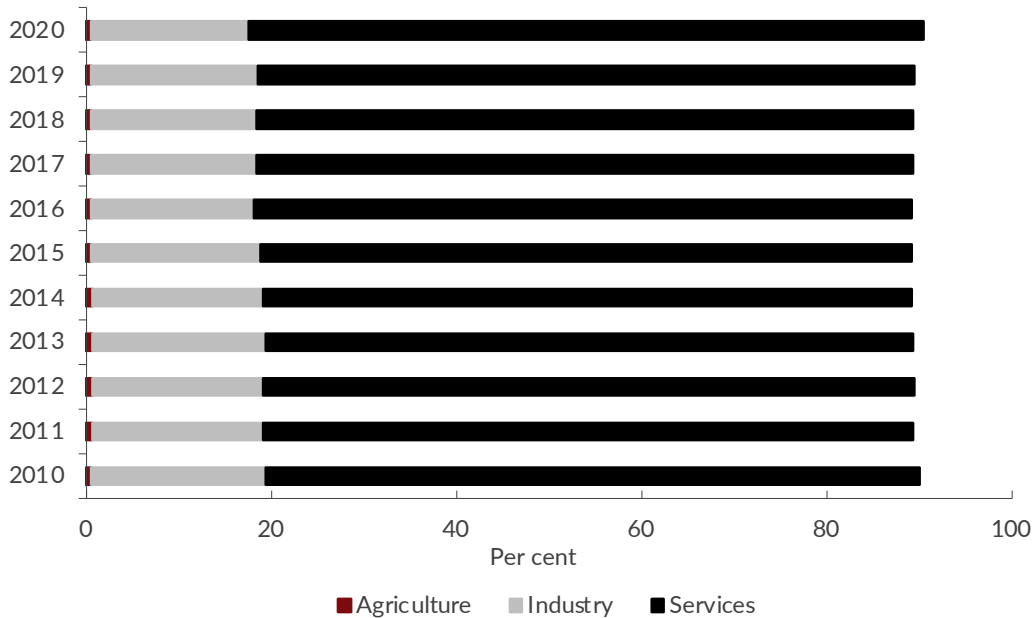
10 <https://www.productivity.ac.uk/research/geography-place/>

11 Monique Ebell (2017), “Regional inequality in productivity in the UK: A closer look”, NIESR General Election 2017 - Briefing No.2.

4. Productivity across and within sectors

Sizing the problem and measurement issues

Figure 6 The contribution of each sector to the UK economy, 2010-2020



Source: <https://www.statista.com/statistics/270372/distribution-of-gdp-across-economic-sectors-in-the-united-kingdom/>

A broad sectoral decomposition of the UK productivity slowdown indicates a large contribution to the post-2007 slowdown in the manufacturing, finance, and insurance sectors. At the broad sectoral decomposition, the shift of the UK's industrial composition from manufacturing to services represents a drag on the UK productivity.¹

A more granular sectoral analysis of the inter-industry allocation effects indicates that the manufacturing, ICT, and finance and insurance sectors are important contributors to the post-2007 slowdown. This more granular, more accurate, analysis also shows that the industry reallocation effect had an overall positive effect on productivity growth, reflecting a changing industrial composition where higher productivity service industries represent a larger share of the economy.²

The growth of public sector productivity has slightly increased post-2007.³ Productivity in the social care sector has been flatlining over the past decade. Social care is performing less well than the economy as a whole; adult social care is particularly affected.⁴

The low productivity issue in the UK is also manifested in the productivity of the low-wage sector. Forth and Rincon-Aznar (2018)⁵ compare the UK productivity in the low-wage sector⁶ to the US and several western European countries. Of the comparison countries, only Italy had lower productivity than the UK in the low-wage sector.⁷

The positive impact of manufacturing on productivity is well recognised. The gross value added per hour in

1 ONS submission

2 ONS submission

3 ONS submission

4 Bernard H Casey submission

5 Forth J. and Rincon-Aznar A. (2018), "Productivity in the UK's low-wage industries", Report to Joseph Rowntree Foundation <https://www.niesr.ac.uk/blog/mind-gap-productivity-uks-low-wage-sectors>

6 The report in the previous footnote defines a low-paid worker as 'one whose gross hourly wages are less than two-thirds of the median wage for all employees in the economy.'

7 Joseph Rowntree Foundation submission

manufacturing has been higher than in the wider economy across the OECD countries in the last two decades.⁸ Manufacturing consists of various sectors that have different impacts on productivity. Technology-intensive and capital-intensive sectors tend to be more productive than labour-intensive industries.⁹

Most advanced economies and some of the UK's competitors have promoted policies to boost high-end manufacturing, e.g., the 'High-Tech Industry Strategy 2020' in Germany, 'National Plan for Advanced Manufacturing' in the US, 'Modern Manufacturing initiative' in Australia, which could be seen as a signal for investors to turn towards advanced manufacturing.¹⁰ Policies to ensure that digital infrastructure and access to finance are provided to firms can accelerate the transition towards more productive manufacturing activities.

In oral evidence, Josh Martin told The Commission that it is within industry differences, rather than differences between industries, that "appear to be more substantial". He said that "we're not defining those industries narrowly enough", but the "slight challenge to that is that the industry granularity that we have in those sort of statistics is relatively modest; it's still quite a coarse industry breakdown".

The financial services industry division is the largest contributor to the post-2008 productivity slowdown.¹¹ This industry division includes disparate entities such as monetary intermediaries, holding companies, trusts and funds. In this case, the coarse definition of industry divisions makes it harder to isolate the exact area of weak productivity performance.

As well as within industry differences, Paul Swinney told The Commission about business differences within firms. He cited a large financial institution, which has more productive investment banking activity located in Canary Wharf, and the less productive back-office functions in Liverpool.

Belén Zinni added that businesses with multiple sites will often structure in such a way that has the headquarters in London or the South East and back offices in other parts of the UK.

Commissioner Stian Westlake asked the witnesses at the first oral evidence session whether we have an estimate of how intangible capital, an asset that is not physical in nature, such as patents, affects productivity.

Josh Martin said that there is a "lot more work to do even on the tangible assets", such as regional capital stocks, "let alone the intangible ones".

In the second evidence session, Chiara Criscuolo argued that productivity in the UK has suffered from a broad-based slowdown touching all sectors but was slightly stronger in the financial services and information technology sectors. However, the sectoral decomposition is unlikely to be the main reason behind the productivity slowdown in the UK, as most of the slowdown occurred within sectors.

John Fernald agreed with this view, noting that while financial services contributed to the drag on productivity growth, its overall contribution to the slowdown remains small.

Furthermore, Chiara Criscuolo argued that there is marked heterogeneity within the UK industries. To illustrate this, she explained that OECD studies in many countries show that the most productive firms within a particular industry are, on average, tenfold more productive than the worst performer in the same industry.

The UK Government's Industrial Strategy document¹² shows the productivity gap between the UK's frontier and non-frontier businesses (Figure 3). The Commission will examine more recent data in its future years.

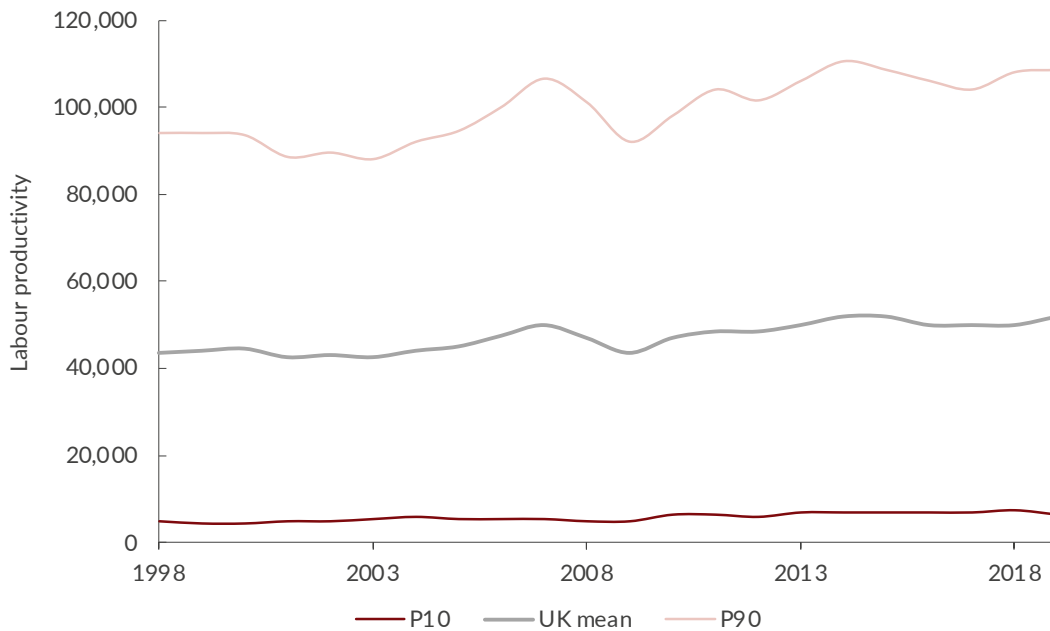
8 OECD (2021), OECD Productivity and ULC dataset

9 Monahan, E. and Balawejder, F. (2020), The Sectoral Landscape: An Evidence Review, Industrial Strategy Council, October 2020, available at: <https://industrialstrategyCouncil.org/sites/default/files/2020-10/The%20Sectoral%20Landscape%20-%20Research%20Paper.pdf>

10 Holloway, W. and Blagden, J. (2021), Making a comeback: How a manufacturing renaissance can level up the country, Onward, 12 July 2021, available at: www.ukonward.com/wp-content/uploads/2021/07/Making-a-comeback.pdf

11 ONS submission.

12 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf

Figure 7 UK firms' employment weighted GVA per worker mean, 10th centile and 90th centile (2019 prices). Source: ONS

Source: <https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/datasets/firmlevellabourproductivityestimatesfromtheannualbusinesssurveyabssummarystatistics>

Figures from the Resolution Foundation show that this measure of within-industry productivity dispersion raises to about 16-fold in the UK.¹³ These figures also show little increase in the within-sector dispersion of productivity in the UK and a decline in the productivity performance at the top of the productivity distribution. In addition, Chiara Criscuolo argued that research has so far shown ambiguous results regarding the effect of reallocation on the UK's productivity. She concluded that the slowdown is likely to be related to within-firm problems more than to a reallocation effect or an increase in the dispersion of within-sector firm productivity.

A paper for The Economy 2030 Inquiry¹⁴ states that increasing the job reallocation rate from lower to higher productivity firms could help to improve aggregate productivity. This rate has remained broadly stable in the past two decades in the UK, whilst many other countries have seen falls in recent years. With job reallocation set to increase, The Commission will examine the transition of workers and firms from the low end of the tail to higher productivity firms.

Furthermore, The Economy 2030 Inquiry noted that the 'low level of labour productivity is pervasive across sectors', and that 'there is little relationship between how big a sector is in the UK and how productive that sector is relative to other sectors'.¹⁵

John Fernald noted that the UK has space for complete convergence to the US TFP levels. He argues that while the UK's market services sector is roughly as productive as its US counterpart, more remains to be done to close the productivity gap in the UK's manufacturing sector.

The persistently weak productivity growth in many service industries is surprising. Quality improvements are probably under-reported in official data. This is likely to lead to underestimating the volume output growth and thus productivity growth in these sectors.¹⁶

13 J Oliveira-Cunha, J Kozler, P Shah, G Thwaites & A Valero, Business time: How ready are UK firms for the decisive decade?, The Economy 2030 Inquiry, May 2021. <https://economy2030.resolutionfoundation.org/wp-content/uploads/2021/11/Business-time.pdf> Note: The Business Time report argues that the productivity dispersion levels in the UK's manufacturing and services sectors are close to those in other OECD countries.

14 J Oliveira-Cunha, J Kozler, P Shah, G Thwaites & A Valero, Business time: How ready are UK firms for the decisive decade?, The Economy 2030 Inquiry, May 2021

15 J Oliveira-Cunha, J Kozler, P Shah, G Thwaites & A Valero, Business time: How ready are UK firms for the decisive decade?, The Economy 2030 Inquiry, May 2021

16 ONS submission

It is hard to measure productivity in the financial services sector because ONS has not constructed an adequate price index for this industry's output yet. An important part of the financial industry's output is an intermediate input for other industries (e.g., business loans). This means that mismeasuring the (real) output of the financial services sector could introduce bias when measuring the productivity of other sectors of the economy.¹⁷

¹⁷ Chadha, J., Kara, A., & Labonne, P. (2017). The Financial Foundations of the Productivity Puzzle. *National Institute Economic Review*, 241, R48-R57.

5. Reasons for variation in productivity across the UK

The Commission received numerous pieces of written evidence from across the UK that sought to explain poor productivity performance both nationally and across the regions. There were themes that emerged that were also discussed in the oral evidence sessions. This section will highlight some of these themes.

Labour quality and allocation issues

Education and skills

Research has found a strong association between regional productivity and the regional share of workers with tertiary education. There is also some evidence of this association getting stronger over time, suggesting human capital disparities are becoming more closely interlinked with that of productive performance.¹

Research has also documented a recent trend of decreasing internal labour mobility across regions in the UK. This can increase the mismatch between jobs and skills, thus reducing productivity growth.²

In the first oral evidence session, Paul Swinney said that there is a big variation in terms of skills across the UK, with the most successful places having a greater share of people with degree-level or higher-level education, compared to places with lower productivity having more people without GCSEs. As well as the difference between graduates and non-graduates, he also highlighted the impact that improving basic skills can have on a place, with less skilled people often less mobile than those with higher skills.

Belén Zinni echoed this, saying that basic reading comprehension skills and numerical skills are skills “that job applicants are lacking most in the UK”.

There were many calls in the written evidence for an improved skills ecosystem, with criticisms of the mismatch between the supply of and demand for skills. The Heseltine Institute for Public Policy, Practice and Place said that the supply of skills is made difficult by the complex and fragmented education system, and the demand for skills by the failure of employers to capitalise on the skills that are available.

The Heseltine Institute also said that lower GCSE grades result in a large amount of further education funding being spent on ‘catch up courses’, rather than the advanced skills that are in demand from employers.

The skills mismatch between supply and demand is also referred to by the Midlands Engine Observatory, which states that both SMEs and large companies often do not find the skills that they need, which “suggests a discrepancy between skills provision, career advice and the job market”.³ There is a short supply of STEM (science, technology, engineering, and maths) skills, which are required by industries, whilst skills that are less in demand continue to be taught.

In The Commission’s second evidence session, Beata Javorcik, Chief Economist at the European Bank for Reconstruction and Development (EBRD), said that “we need to tap into the female pool of talent, [...] encouraging girls to study STEM subjects”. She added that the UK has a bigger gap between boys and girls in maths scores than comparable countries in Western Europe, arguing that the UK’s system and culture actively discourages girls from studying maths and science.

1 Gardiner, B., Fingleton, B., & Martin, R. (2020). Regional Disparities in Labour Productivity and the Role of Capital Stock. *National Institute Economic Review*, 253, R29-R43. <https://doi.org/10.1017/nie.2020.28>

2 Clarke, S. (2017). Get a move on? The decline in regional job-to-job moves and its impact on productivity and pay. Resolution Foundation.

3 Midlands Engine Observatory submission

In The Commission's third evidence session, both witnesses highlighted the need to improve female participation in the STEM workforce. Jesse Norman, Conservative MP and former Treasury Minister, said that there is an "enormous shortfall" with STEM skills in the UK and spoke about the need for a cultural shift to encourage more girls to study such subjects by removing perceived prejudices.

Physical and mental health and wellbeing

There is a vicious cycle of economic inequality perpetuating poor health, and vice versa, that needs to be broken. Almost a third of people in Liverpool who are economically inactive are so due to ill health, which is particularly concerning as the area has high rates of long-term illness, lower life expectancy, and high rates of poor mental health.⁴

The North West Productivity Forum's evidence underlined the importance of physical and mental health, stating that 'people with ill health are much more likely to be out of work'. Their evidence also said that 'working people in the north of England who experience a spell of ill health also have lower wages and are more likely to lose their jobs in the future than similar individuals in the rest of England'. They cited the conclusion of the Greater Manchester Independent Prosperity Review:

*'Health needs to play a much greater part of the discussion around productivity.'*⁵

Reallocation and labour mobility

Chiara Criscuolo argued that there is currently a productivity slowdown across all sectors in the UK. She claimed that sectoral explanations for this productivity decline remain weak. Instead, the analysis of productivity performance within sectors and firms can provide us with a stronger explanation. The UK has high levels of heterogeneity in firms across various sectors. The frontier firms haven't done well since the Global Financial Crisis in 2008.

Some data show that the reallocation of resources across sectors and firms has improved, but other studies show that this reallocation has been stable in the last decade. Recent OECD data⁶ shows that the UK has done particularly well in reallocation, especially during the Covid-19 crisis (e.g., in entry and exit rates).

Chiara Criscuolo said that we can observe a change in the business model in some traditional sectors (e.g., retail sector) due to the use of more advanced technologies (e.g., online retail sectors). It is clear – as Chiara Criscuolo said – that the productivity slowdown in the UK has been related to 'within firm' issues, especially the innovation problem and skills issues, but it's not related to the reallocation process in the economy. The productivity slowdown has not happened because the resources do not go to the most productive firms.

Chad Syverson highlighted that reallocation and labour mobility are important for productivity in many ways. For instance, a new technology can be effective in increasing productivity only in an environment that facilitates the reallocation of resources and labour mobility.

John Fernald also argued that flexibility of output and input in markets is important to achieve productivity growth. He claimed that we know that productivity growth comes from a market that reallocates economic activity from less to more efficient producers. The flexibility and competitiveness of labour (e.g., hiring and firing) and product markets is important for productivity. Therefore, we should focus on how to make markets function well and make it easier for people to move to more productive regions.

Training

The Joseph Rowntree Foundation submission highlighted the importance of 'workers in training' and 'better management practices'⁷ on improving productivity, particularly in low-wage sectors. It also states:

"Differences in productivity in low-wage sectors between the UK and its competitors stem not from a lack of capital investment or workers' formal skills but how well we use workers in these sectors".

4 Heselstine Institute for Public Policy, Practice and Place submission

5 https://www.greatermanchester-ca.gov.uk/media/1826/gmis_reviewersreport_final_digital.pdf

6 OECD Enterprise Statistics, Indicators of Entrepreneurship, available at: <https://stats.oecd.org/index.aspx?queryid=74181>

7 Joseph Rowntree Foundation submission

A submission from Bernard Casey, which focussed on productivity in the adult social care sector, also describes the importance of training on productivity:

“Skills for Care, the body concerned with vocational training in the sector, describes how training increases skills, confidence, knowledge and behaviours that support the overall delivery of care, and how this can help reduce time in managing staff performance. In addition, by developing staff, the latter are likely to stay longer, which can save money by reducing the costs of recruitment. If, having been given training, employees feel more committed, they might deliver better care than otherwise.”

Josh Martin told The Commission that the volume of in-work training has fallen, with the reduction in training funded by employers potentially being an important factor in the UK’s productivity slow down. He said:

“It [in-work training] seems to be at a permanently lower level since the financial crisis than it was before.”

Belén Zinni also told The Commission about this lack of training, particularly for self-employed people. She cited Luxembourg as an example where the Government provides wage compensation when self-employed people decide to take leave for training or education, and Belgium where the self-employed receive training deduction expenses.

The submission from the Skilled Manager Productive Workplace states that training interventions targeted at sectors such as retail, hospitality and administrative services could improve their productivity to the levels of some of the UK’s main international competitors. Firms in these sectors are not currently encouraged to invest in training due to “high staff turnover rates and the loss of investment this implies”.⁸ The cost-saving implication of online training, rather than face-to-face, could help alleviate this hesitancy.

Firm issues

Business environment

Many submissions highlighted the importance of innovation on productivity. Gaps in innovation, such as poor ties between particular sectors and higher education, represent the latent potential for economic growth. Louise Hellem raised work that the CBI is doing to “bring knowledge leaders and universities and businesses together” to form knowledge hubs around the country.

Productivity growth that stems from firms developing new products, processes and organisation methods can come from “the involvement of firms in networks and other collaborative activities”.⁹ However, numerous pieces of written evidence stated that this open innovation is lacking, with many frontier firms relying on purely in-house effort.¹⁰

The submission from York and North Yorkshire LEP brings another insightful perspective arguing that the productivity problem is also due to the slow diffusion from the productivity leaders to laggards. The submission stated:

“There is evidence that the difference between firms within sectors, particularly in the service sector, is increasing over time, and that diffusion of ideas, technologies and business practices is not diffusing from the ‘best to the rest’ as quickly as it once was, meaning that the best firms are accelerating away from rest.”¹¹

The submission from the Midlands Engine Observatory said that high quality innovative assets are not effectively joined up, with businesses typically not engaging effectively with universities and each other. The Leicester and Leicestershire Enterprise Partnership’s submission raised an example of how such assets can join up more effectively called ‘Beacons and Bootstraps’, which will create a space for knowledge exchange and cross fertilisation of skills from Industry 4.0 sectors, such as space, artificial intelligence and cybersecurity, to those with a lower record of R&D.

8 Skilled Managers Productive Workplaces

9 Cardiff Metropolitan University submission

10 Scottish Council Development and Industry has been piloting Productivity Clubs in Scotland to encourage diffusion of good practice across business.

11 The OECD has made similar points in its 2015 report on the Future of Productivity and in this working paper.

As The Productivity Institute's Wales Productivity Forum's submission stated, productivity growth need not to rely "so much on the local production of knowledge, but on the dissemination and absorption of knowledge more widely into and across local businesses". The absorptive capacity – the ability of a firm to apply new information – of firms can significantly impact the productivity of a region.

Another issue raised was access to growth finance. Many areas have an underdeveloped provision of venture capital, limiting access to capital for firms, particularly SMEs, restricting productivity.¹² Fewer investment executives and venture capitalists are in part due to poor market demand for such skills, limiting capacity in terms of skills and expertise to research, engage and complete deals, particularly for early stage and angel finance. In her oral evidence, Louise Hellem said that the role of the British Business Bank is very positive at the moment as it is taking more of a regional approach to improving access to finance.

She also raised the importance of providing the right business environment to incentivise investments. For example, "50 per cent of business investment will be caught by business rates, so that's something that really holds firms back".

The GLA's submission stated that economic uncertainty in the UK since 2007, related to austerity, the Eurozone crisis and Brexit 'may have led firms to opt for labour recruitment over investments in new plant and machinery (since, with the UK's flexible labour market, hiring is usually more reversible than investment)'.¹³

Huw Pill, in a submission to the Treasury Committee, echoed this, stating that three recent major waves of economic uncertainty in the UK – the global financial crisis, the EU referendum, and the Covid-19 pandemic – have made firms cautious in their investment decisions. This "has contributed to lower investment growth and slowed efforts in innovation and research and development (R&D)".¹⁴

Recent data from the OECD contradicts this view for the Covid-19 crisis, which is the first time on record in which a global recession did not translate into a drop in R&D expenditures. This reflects how investments in R&D have been an integral part of the response to the crisis.¹⁵

Firm size

It has been generally found that larger firms have higher productivity than smaller firms. In his oral evidence, Josh Martin said:

"It seems that bigger businesses tend to be more productive. Although that's not universally true. There tends to be a sort of upward trajectory and then a bit of a plateau as you get too large. And older businesses seem to be more productive than younger businesses, although again, not universally".

A more recent study shows that, based on firm-level data across many countries, the role of the firm size on productivity differs between manufacturing and services.¹⁶ Further research is needed to understand the role of the size on productivity in the various sectors of the British economy.

Nicholas Oulton's submission stated that generally "large companies have higher productivity than smaller ones in the same industry".¹⁷ The Innovation and Growth Think Tank's submission stated that large firm density in the UK started to drop in the 1970s, a similar time as the start of the drop of UK's productivity. Its submission stated:

"[The] UK's share of large firm density is roughly a factor of 6-7 lower than the US large firm density as a share of GDP".

Whilst some SMEs tend to be nimble innovators, "larger firms have the deeper pockets for R&D and skills development to maximize returns from innovations and channel resources".¹⁸

12 See Kapitsinis, N., Munday, M. and Roberts, A. 2021. Exploring a low SME equity equilibrium in Wales. European Planning Studies "https://doi.org/10.1080/09654313.2021.1882945"

13 GLA industrial strategy submission

14 <https://committees.parliament.uk/publications/7480/documents/78491/default>

15 <https://www.oecd.org/sti/msti.htm>

16 Berlingieri, G., Calligaris, S., and Crisculo, Ch. (2018), 'The productivity-wage premium: Does size still matter in a service economy?', OECD Science, Technology, and Industry Working Papers, No. 2018:13, available at: <https://doi.org/10.1787/04e36c29-en>

17 Nicholas Oulton submission

18 Innovation and Growth Think Tank submission

SMEs often have low investment in skills and training, face difficulties in accessing finance for growth and innovation, and have lower levels of export trade, whereas large firms benefit from scale and economy, usually exporting more.¹⁹

Seeking to explain the productivity puzzle in a submission to the Treasury Committee, Huw Pill said that ‘the impact of restrictions to credit supply in the aftermath of the financial crisis [...] may have restricted the supply of credit to higher productivity new businesses’.^{20,21}

Foreign Direct Investment

Foreign direct investment (FDI) is a quick way to improve productivity in lagging regions. Some countries, regions and towns tend to receive higher levels of FDI and increase productivity in key industries. Such investment tends to have positive spillover effects to other firms and an overall positive role in productivity.

In the second oral evidence session, Beata Javorcik told The Commission that there are two types of spillovers; firstly, there are sectoral spillovers through the exchange of information and labour mobility across firms. Secondly, there are spillovers from multi-national corporations (MNCs) to suppliers through knowledge transfer and setting business requirements (e.g., certifications) or providing incentives to local producers and suppliers.

However, there is limited evidence of positive spillover effects across sectors in developing economies. The entry of MNCs increases competition in sectors pushing out the weakest firms. This leads to an improvement of aggregate productivity, but this is not knowledge transfer. In the UK, there is evidence from Jonathan Haskel, Sonia Pereira, and Matt Slaughter²² that shows positive spillover effects across sectors.

Beata Javorcik told The Commission that in advanced and sophisticated economies such as the UK, she hoped that such spillover effects “would happen organically. However, there’s scope for policy intervention” to promote those spillover effects. She said that in some developing countries, the state operates ‘supplier development’ programmes, which bring together MNCs and local firms to explain business practices and requirements to the local firms, providing 1-1 coaching and consulting services, and to educate local firms to work with MNCs.

She said that policy interventions should also take place to lower “information asymmetry”, especially when firms operate through new requirements or use new documentation. This is a way to lower the ‘cost of doing business’ for SMEs and local firms. If the state takes an active role in this process, firms can improve the methods whereby they access foreign markets. Finally, the state should also pursue policies to attract targeted investment from MNCs in specific sectors.

Beata Javorcik also argued that Brexit may affect FDI as new trade deals require firms to acquire information and adjust to new standards, regulations, and rules. The cost of acquiring such information is high and only larger firms tend to have the capacity to access new markets.

She added that the UK could promote policies for investment promotion, but not subsidies or tax holidays. The UK could pursue policies to lower the entry barriers for investors. The government can support infrastructure services that can have spillover effects for different industries. It can also ‘market’ a specific region as a location of high-quality infrastructure and lower the ‘cost for doing business’ to attract FDI to this region. Moreover, as the world is changing, hybrid work is decoupling where we work and live and allowing less productive areas to attract employees who live in other areas. This is opening a new window of opportunity to increase productivity in lagging regions.

19 Midlands Engine Observatory submission

20 <https://committees.parliament.uk/publications/7480/documents/78491/default>

21 For more on the impact of credit on post-Covid productivity growth see: Samiri, I. (2022), ‘Firm Indebtedness, Investment and Productivity’, in Paul Mortimer-Lee and Adrian Pabst (eds.), Covid-19 and Productivity, NIESR Occasional Paper LXII, The National Institute of Economic and Social Research: London.

22 Haskel, J. E., Pereira, S. C., and Slaughter, M. J. (2007). Does inward foreign direct investment boost the productivity of domestic firms? The Review of Economics and Statistics, 89(3):482–496.

Governance

Much of the evidence said that the main state levers of productivity, including industrial policy, tax reform, science and innovation, education and skills, infrastructure, and transport, are controlled centrally, which can stifle regional and local initiatives. Local and regional governments, therefore, have few powers and resources to respond effectively to locally identified challenges.²³

Central Government has been criticised for spending too much on dealing with the costs of low productivity, such as higher welfare and healthcare, and not enough on enhancing productivity into areas such as infrastructure, skills and innovation.

A single pot approach of Government funding, the spending of which is determined locally, rather than funding linked to specific projects, as well as a less short-termist approach to provide time and certainty to plans to tackle economic challenges, were suggested as potential remedies.

In his oral evidence, Paul Swinney said that if you match economic policy to the geography in which they operate, policies should be “more effective and more tailored”.

The issue of policy churn, which Commissioner Andy Westwood described as the ‘constant chopping and changing of policy approaches [and] also of the institutions that deliver them’ – was highlighted in The Commissions third evidence session. A report by the Institute for Government was cited, which highlighted the worst offenders in policy churn: IT skills, regional policy and industrial strategy.²⁴

Management

Management capacity and competence can prove a significant barrier to improving productivity. Service sector businesses have historically been focussed on billing for project hours. Management inexperience in such businesses “has led to managerial mistakes in pricing and in over-delivering on projects leading to lower performance”.²⁵ External mentors and investors have a vital role to play in improving management to help firms grow at scale and pace.

The submission from York and North Yorkshire LEP highlighted the importance of management practices as they ‘can influence the deployment of skills in the workplace’, with a significant correlation between practices relating to continuous improvement and employer management and productivity.

In the first oral evidence session, Louise Hellem spoke about how benchmarking and peer to peer learning can improve management and leadership practices within firms. Belén Zinni told The Commission that managers in the UK “tend to have a less formal education than in other countries”.

Ownership

Ownership, management, and firm practices seem to play a key role in firm-level productivity. Nicholas Oulton’s evidence said that foreign-owned firms, especially US-owned, have higher productivity than UK-owned firms, with US-owned companies operating in the UK being about 20 per cent more productive than UK-owned companies.

Josh Martin echoed this in oral evidence when he told The Commission that “foreign-owned businesses are 20 to 30 per cent more productive on average than UK firms”. Further research is needed to understand why locally owned firms are lagging behind foreign-owned companies.

Sectors: manufacturing and finance

Huw Pill, in his submission to the Treasury Committee, stated that “the most recent data suggest that much of the weakness [in productivity growth] relative to pre-crisis is concentrated in the manufacturing sector”, although Commissioners have noted that the latest ONS revisions show significant upward adjustments to the post-crisis period.²⁶

23 Heseltine Institute for Public Policy, Practice and Place submission

24 https://www.instituteforgovernment.org.uk/sites/default/files/publications/IfG_All_change_report_FINAL.pdf

25 Cardiff Metropolitan University submission

26 <https://committees.parliament.uk/publications/7480/documents/78491/default>

Silvana Tenreyro, an external member of the Bank of England's Monetary Policy Committee, states:

"Just two sectors, finance and manufacturing, can account for most of the fall in UK aggregate productivity growth".²⁷

Part of the first oral evidence session focused on the importance of financial services to the UK economy. Belén Zinni told The Commission that 10 per cent of the UK's exports are financial services. Since the financial crisis, Belén said that there has been a "pronounced decline" in what the sector contributes to productivity growth.

Businesses in the service sector tend to have fewer key performance indicators (KPIs), especially compared to those in the manufacturing sector, in which the "production of a tangible product allows these businesses to develop explicit cost structures and productivity measures linked directly to output".²⁸ However, many manufacturing firms do not benchmark their performance against other firms or link KPIs to finance and strategic planning.

With regard to the manufacturing sector, its fall in the UK has not been replaced with a modern manufacturing capacity due to low levels of investment, which has left "the UK economy with insufficient to sell abroad".²⁹

Shocks and general economic environment issues

Covid-19

It's unclear how Covid-19 will affect productivity growth in the long-term. "Enforced homeworking due to a lockdown can yield immediate benefits, such as time saved from commuting journeys and fewer interruptions from colleagues".³⁰ No fixed office may provide opportunities to work in "locations that are more conducive to thoughts and creativity".³¹ The Institute of Management Studies' (IMS) submission states:

"Avoiding start and end of day journeys to a workplace can open up new opportunities to contact people in a wider range of time zones".

The IMS' submission also highlights practical issues that may arise from full-time homeworking, including childcare and home schooling. These issues and others relating to Covid-19 may impact productivity, and there is a growing body of work on teleworking that The Commission is likely to examine in future evidence sessions.

Exports

The persistent narrative that the long tail of low-productivity firms is the root cause of the UK's productivity problem is called a 'red herring' in the Centre for Cities' submission. Their submission states that there are predominantly non-tradable businesses in the long tail, such as hairdressers and cafes, where the scope to increase productivity is limited. In his oral evidence, Paul Swinney from Centre for Cities said:

"I just don't see why a hairdresser or bar staff [in another country] will be radically more productive than what they are in the UK."

An opposing view to this is presented by the OECD in its investigation into firm level data in Belgium.³² Researchers showed more of a static view, in which underperforming hairdressers and cafes are replaced by others that tend to be more productive, moving the whole productivity distribution up.

One explanation for why the UK has seen weak productivity growth since 2007, as highlighted by numerous submissions, including those from the Centre for Cities, John Mills, and the Greater London Authority, is the constrained demand for UK exports. As the Centre for Cities explain:

27 <https://www.bankofengland.co.uk/-/media/boe/files/speech/2018/the-fall-in-productivity-growth-causes-and-implications>

28 Cardiff Metropolitan University submission

29 John Mills submission

30 Institute of Management Studies submission

31 Institute of Management Studies submission

32 <https://www.oecd-ilibrary.org/docserver/4ec8ab8b-en.pdf?expires=1652771747&id=id&acname=ocid84004878&checksum=A949E-A614BD0A15253BC9F843C24C8B1>

“Productivity of local and national economies is driven by tradable or ‘exporter’ businesses. These are the businesses that bring money into an economy by selling beyond its borders, and are able to absorb new innovations”.

As the Greater London Authority state in their submission:

“Firms that export benefit from scale economies, competition and integration into global supply chains and typically show higher levels of productivity than domestically-oriented firms, on average by a third”.

During the first oral evidence session, Commissioner Alan Barrett asked if exporting is a “spur to productivity”. Louise Hellem said that to start exporting, firms will already be operating at quite a competitive level, which is likely to increase with exposure to international markets.

Josh Martin told The Commission that ONS work has shown that “even after controlling for size, industry, ownership status and various other factors”, traders were more productive than non-traders. And that traders who traded with non-EU markets and more destinations were more productive than other traders. He concluded:

“It does seem to me that the act of trading is helpful for productivity, as well as being in a position to trade”.

Nicholas Oulton explains in his view that the UK’s poor productivity performance is “mainly due to weakness in aggregate demand which in turn is due to constrained demand for each country’s exports since 2007 [,] the time of the global financial crisis and the Great Recession”. The rate of hours worked in the UK rose at a similar rate post-2007 as before the financial crisis, which Oulton states was due almost entirely to immigration. With labour input increasing and growth of export demand falling, the result is that “the flip side of the UK’s “jobs miracle” is the productivity disaster”.³³

The Midlands Engine Observatory states that Brexit has reduced low-cost labour, which seems to have increased productivity as only high paying and high productivity jobs remain (their submission offered no supporting evidence of this statement). However,

“[...]it reduces productivity due to frictional trade losses and gaps in supply from care to HGV drivers”.

Another explanation for the constrained demand of UK exports offered in John Mills’ submission is that the UK’s export prices are too high to be competitive, resulting in insufficient export-led demand to stimulate growth. In his submission, Mills argues that lowering the exchange rate for sterling would improve the international competitiveness of UK manufacturing firms, thus increasing exports.

Rather than blame the ‘red herring’ of low productivity firms for the UK’s poor productivity growth since the financial crisis, the Centre for Cities’ submission states that it “results from the poor performance of tradable businesses in London in particular – the opposite end of the ‘long tail’”.³⁴

As the distribution of exporting businesses across Great Britain is uneven, with London accounting for almost half (47 per cent) of Great Britain’s service exports,³⁵ the capital’s faltering productivity growth has resulted in national productivity growth faltering too.³⁶

Infrastructure and agglomeration

Poor infrastructure, particularly transport, housing and broadband, were raised in various pieces of evidence as contributing factors to weak productivity. In his submission, Liam Byrne MP stated that housing and transport issues make it difficult for people in regions to access hubs of growth around core cities. The cost of exclusion is reduced productivity and output. An area with poor quality housing, and a poor variety of housing, will struggle to attract and retain a talented workforce.³⁷

33 Nicholas Oulton submission

34 The Centre for Cities submission also states that ‘the UK’s low productivity performance is a result of the poor performance of the rest of the country [referring to areas that aren’t the Greater South East].’

35 GLA Economics submission

36 Centre for Cities submission

37 Heseltine Institute for Public Policy, Practice and Place submission

Connectivity within and between towns and cities, particularly in the north of England, was highlighted in numerous submissions. Car congestion and poor and costly train and bus services limits the jobs that are available within reasonable commuting time, restricting the pool of employees available to employers.³⁸ The Heseltine Institute for Public Policy, Practice and Place's submission said that this may be limited with more people working from home due to Covid-19, but greater investment in broadband in the area would be needed to make this feasible.

Paul Swinney told The Commission that the important factor in terms of transport systems within large cities in the UK is how far one can travel in half an hour. He said that "UK cities are much less dense than large European ones, so there are literally fewer people living closer to the centre, which makes it more difficult to get them into the centre".

Louise Hellem told The Commission that "there's still quite a lot of investment that needs to happen within the UK" when it comes to local connections, and not just transport links down to London and the South East. This relates to agglomeration, which the North West Productivity Forum's submission said there is a lack of outside Manchester and Liverpool as the region's population is spread out across poorly connected areas, limiting access to opportunities and skilled labour and holding back productivity growth. Industries in a peripheral location have restricted the potential to create productivity-enhancing spillover effects.

In the first oral evidence session, Commissioner Chris Pissarides spoke about the importance of building infrastructure to attract skills. He cited Ayia Napa in Cyprus and Canary Wharf in London as examples where the demand side has been focussed on first, with the infrastructure fixed, to then attract the skills. He added:

"There is no point in fixing the skills first because the skills will move in the time it takes to fix the infrastructure".

During the second evidence session, Commissioner Cecilia Wong asked if there are any intrinsic place or space related factors that are important in explaining poor productivity. John Fernald said that place-based policies are challenging, so dispersing more research funding to regions to create new university and innovative cores to foster new businesses will attract people. Chad Syverson said that "agglomeration mechanisms are really powerful". He said that "little agglomerations" in areas that have been left behind that gather from the local area can become the economic centre of a region.

Structure

A common theme from the written evidence that has been submitted to The Commission is that the sectoral structure of an economy is less of a determining factor of the level of productivity than the differences within sectors. As the Midlands Engine Observatory stated in their submission,

"It is the nature of activities and productivity within sectors that accounts for the majority of the change in productivity, rather than the sectoral composition of the Midlands economy. Research has shown that the sectoral mix (i.e. sector shifts, for example from manufacturing to services) is much less important than what occurs within sectors (i.e. shifts in tasks and functions)".

The argument made in many submissions is that the focus should be on firms that are under-performing in productivity terms within certain sectors, rather than attempting to change the industrial structure of an economy. However, the view of sectoral differences may be skewed by the lack of data for finer industry decompositions. As Josh Martin said, "we're not defining those industries narrowly enough".

Cardiff Metropolitan University's submission stated that the characteristics of a firm that are influential on its productivity include:

"The stability of firm ownership; the link between scale of operation and improvements in management performance; the characteristics of managers; and the lack, or availability of technical skills".

³⁸ Heseltine Institute for Public Policy, Practice and Place submission

The long tail

Nicholas Oulton's submission states:

"There is a widespread³⁹ view that the UK is distinctive in having a particularly long tail of low productivity companies which drags down the overall average. This morphs into the view that large British companies are excellent but are let down by their smaller counterparts, unlike in competitor countries like Germany".⁴⁰

Empirical evidence suggests a long tail of countries and companies with low, slow productivity growth. These productivity laggards have been unable to keep-up, much less catch-up, with frontier countries and companies.⁴¹ This gap between the highly productive frontier firms and the less productive tail-end firms is what we are charged with seeking to explain.

Contrary to this finding that the long-tail of non-frontier firms is holding back UK productivity, Nicholas Oulton's submission states that the evidence is not clear on whether the so-called 'productivity laggards' can explain the post-2007 productivity slowdown. He cites a study⁴² that finds that the UK's post-2007 productivity slowdown was concentrated in the upper tail of the productivity distribution, without much change to productivity growth at the other end of the productivity distribution.

Despite this, in the manufacturing and services (excluding financial services) sectors, Belén Zinni told The Commission that the productivity gap between the top performing firms and the bottom performing firms has been increasing in the UK, as compared with other advanced economies.⁴³ The Commission will continue to examine both the so-called productivity laggards and frontier firms to see how best to improve productivity growth.

39 Although not universal. For Example, the OECD has not made such comparisons.

40 Nicholas Oulton submission

41 <https://www.bankofengland.co.uk/-/media/boe/files/speech/2017/productivity-puzzles.pdf?la=en&hash=708C7CFD5E-8417000655BA4AA0E0E873D98A18DE>

42 Schneider, Patrick (2018). "Decomposing differences in productivity distributions". Bank of England Staff Working Paper No. 740.

43 [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP\(2020\)37&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2020)37&docLanguage=En)

6. Potential policy priorities

Numerous suggestions to improve the UK's productivity have been suggested to The Commission. They have been summarised briefly in this section. This is by no means an exhaustive list of policy priorities, merely a summary of potential priorities heard in evidence that The Commission may choose to examine in detail in its future years.

Business support and governance

In addition to government and other business support efforts, the involvement of firms in networks and other collaborative activities is shown to help firms develop new products, processes, and organisational methods that result in productivity growth. The term 'open innovation' has been coined to describe these relationships.

As well as firms sourcing external knowledge (i.e. outside-in), open innovation also includes companies looking for ways to generate additional revenue from in-house innovations (i.e. inside-out) when a technology has future potential but is not part of the firm's core strategy. This can happen in a variety of ways, including divestment, spinouts and spin-offs.¹

There is evidence of a growing acceptance among what may be termed 'frontier firms' that innovative activity may need a more open and collaborative approach rather than attempting to rely on purely in-house effort.²

Creating new global centres of excellence would harness increased investment in research and development. These centres would form part of 'hub and spoke' networks of excellence across the country to complement London and the wider South East.³

The UK system of governance is highly centralised with state power to remain largely concentrated to London and the South-East with weak institutional capacity to improve productivity in other regions and cities.⁴

The spending decisions are also taken in an over-centralised way by the Treasury with poor cross-ministry consultation and co-ordination with devolved administrations. On top of this, insufficient financial institutions in regions leaves investment and innovation lagging behind outside the South-East. In a top-down governance system, the central government fails to learn from regions and co-shape effective policies for regional and local levels, holding back regional growth.

The over-centralised governance is combined with a short-term approach in policymaking especially on industrial policy where new institutions and policies to be created, renamed, or abolished following the electoral cycle (e.g., the transition from BEIS Industrial Strategy to HM Treasury's 'Plan for Growth').⁵ Such short-term policies impede higher productivity growth across the country .

Higher devolution of power, effective co-ordination between central government and regions, and transfer of powers from the Treasury to regions is needed to provide regional and local institutions with powers and resources to promote and implement regional strategies and policies. A more effective institutional framework based on expertise, central-local interaction, and institutional memory is required to ensure consistency and long-term in policymaking for productivity and higher living standards.⁶

1 <https://www.oecd.org/sti/openinnovatinglobalnetworks.htm>

2 Creative Leadership and Enterprise Centre, Cardiff Metropolitan University submission

3 UK2070 Commission submission

4 Pabst, A. and Westwood, A. (2022), Governance, Institutions, and the Policies of Productivity, at Mortimer-Lee, P. and Pabst, (2022), Covid-19 and Productivity: Impact and Implications, Occasional Paper LXII, The National Institute of Economic and Social Research, online at <https://www.productivity.ac.uk/wp-content/uploads/2021/12/WP015-Politics-of-Productivity- FINAL-131221.pdf>

5 Myrodias, K. (2022), 'UK Industrial Policy in the era of Covid-19', in Paul Mortimer-Lee and Adrian Pabst (eds.), Covid-19 and Productivity, NIESR Occasional Paper LXII, The National Institute of Economic and Social Research: London.

6 Pabst, A. and Westwood, A. (2021), The Politics of Productivity: institutions, governance and policy, Working Paper No. 015, The Productivity Institute, online at <https://www.productivity.ac.uk/wp-content/uploads/2021/12/WP015-Politics-of-Productivity- FINAL-131221.pdf>

Investment

Nicholas Oulton suggested that there is a need for investment of all types to grow more rapidly for a lengthy period. He argued that the cost of capital can be reduced by tax breaks.⁷ He also suggests two other ways. First of all, a long-term infrastructure plan that provides a high and rising level of public investment in roads, railways, broadband, R&D, etc, financed by borrowing. Provided that these investments are socially useful, they will spark additional private investment, driving up GDP and generating tax revenue sufficient to service the debt incurred. It is important to quantify the level of investment needed for this 'long-term infrastructure plan', identify investment priorities, and the role of public and private investment to improve infrastructure across the UK. Secondly, he argued that the British Government should pursue faster growth of UK exports through trade deals.⁸

Louise Hellem echoed the need to increase investment. She told The Commission that we need to make sure that the Government sets the right tax environment and also that it provides "catalytic investment", particularly on things like infrastructure, but also on new areas, such as green projects.

Delivering a connectivity revolution by creating a transformed public transport network between cities, within cities and beyond cities would allow more efficient and less costly transportation of the workforce.⁹ It may also improve mobility across regions with positive productivity spillovers to the UK economy.

Belén Zinni told The Commission that one thing the UK should not look to change is its low barriers to investment and trade.

Levelling Up

The UK Government published its White Paper 'Levelling Up the United Kingdom'¹⁰ on 2 February 2022 to set out how it 'will spread opportunity more equally across the UK'. A House of Commons research briefing called it 'an extensive document, providing a history and analysis of the causes of economic and social disparities across the UK. Plans to address and narrow these differences are introduced, covering numerous areas of government structures and public policy'.¹¹ The White Paper includes 12 missions that fall under four objectives, which include a focus on living standards, R&D, transport infrastructure, digital connectivity, education, skills, health and wellbeing.

The UK2070 Commission's submission said the to deliver increased local economic growth and wellbeing, the foundations of local economics to empower local leadership in towns and local communities must be strengthened.¹²

Also critical to addressing economic underperformance in the UK is improving housing choice, quality and supply. Providing the right mix of housing types and tenures to meet demand will be important to ensure that the UK can attract and retain both the talented workforce and private sector investment, which are necessary to sustain the UK's long-term economic prosperity.¹³

Fundamentally, the UK's poor productivity performance will not improve until national, regional and local government together with private sector businesses and third-sector organisations tackle four structural problems: (1) over-centralisation; (2) weak, ineffective institutions and policy churn; (3) institutional and policy silos; (4) short-termism and poor policy coordination.

7 Nicholas Oulton submission

8 Nicholas Oulton submission

9 UK2070 Commission submission

10 <https://www.gov.uk/government/publications/levelling-up-the-united-kingdom>

11 <https://researchbriefings.files.parliament.uk/documents/CBP-9463/CBP-9463.pdf>

12 UK2070 Commission submission

13 UK2070 Commission submission and Heseltine Institute for Public Policy, Practice and Place submission

Skills, training and management

The skills gap was first identified more than a century ago. According to Nicholas Oulton, the skills gap should be fixable but continued failure is likely if we try to rely on business to pay for it. He argued that government funding is essential to improve the skills gap in the UK.¹⁴

According to Bernard Casey, the provision of high-quality training is necessary to ensure that staff will stay longer, and it can also save money by reducing the costs of recruitment. By undertaking high-quality training, employees feel more committed and might deliver better than otherwise.¹⁵

The London Challenge, which helped to improve educational outcomes in the capital during the 2000s, demonstrated the results that can be achieved if education interventions are targeted at the right areas and in partnership with local leaders.¹⁶ It is important to consider to what extent colleges and firms can offer high-quality skills training and who should provide the resources for it.

In oral evidence, Louise Hellem told The Commission that “we need to make the skills system much more agile” to respond to ongoing needs. Paul Swinney said that despite not knowing what sectors will drive growth in the future, “we’ve probably got a reasonable idea that it’s going to be knowledge-based”, so there should be a focus on skills in that area.

Kitty Ussher, Chief Economist at the Institute of Directors, and former Labour MP and Treasury Minister, told The Commission about what’s happening with children who pursue apprenticeships rather than A-levels, where apprenticeships that lead to higher salaries “are much more likely to be taken by the boys and the ones that lead to lower salaries are much more likely to be taken by the girls.” She added that careers advice for those who pursue a non-academic route “is not something that is necessarily a priority, or even properly understood by many schools”, but “we need really good evidence as to what the problem is” in terms of matching the skills that are needed with those that are studied.

When asked by Commissioner Eileen Harkin-Jones what areas The Commission should focus on to deliver the greatest long-term impact on UK productivity, Kitty Ussher said that the focus should be on lifelong learning; “incentives for workplaces reskilling and upskilling [done] very simply through the tax system”.

In response to the same question, Jesse Norman said that advertising all jobs as “full time or part time or job share” would help to continue to train and upskill women in the workforce, which could “begin the process of moving the dial upwards in productivity because that’s an incredibly underutilised resource in our political economy”.

On management, the lack of a strong strategic orientation among a number of businesses highlights the need for more effective leadership. Previous research has shown that the channels for improving productivity are at their most effective when employees have more autonomy to decide how to do their jobs, more supportive line management, more meaningful appraisals, and when employee views are heard. Improving employee engagement is therefore an important leading indicator of upgrades in firm performance. Consequently, leadership skills development programmes should have a focus on employee engagement. Targeted initiatives to improve the skills of SME owner-managers in this area could have a positive impact on productivity at both the level of the individual firm and the wider networks in which firms operate.¹⁷

14 Nicholas Oulton submission

15 Bernard Casey submission

16 The Heseltine Institute for Public Policy, Practice and Place submission

17 The Creative Leadership and Enterprise Centre, Cardiff Metropolitan University submission

Annex 1 – Background to the report

This report is based on two calls for written evidence (see Annex 2) and three evidence sessions, which are listed in chronological order below. All past sessions can be viewed on the NIESR website: <https://www.niesr.ac.uk/research/our-partners/productivity-commission-past-sessions>

20 September 2021

The first call for written evidence focused on sizing the productivity problem from international, national, regional and sectoral perspectives. The terms of reference were:

- What is the scale of the UK’s productivity problem, and how has this changed since 2008?
- Is productivity measured correctly in the UK, and is it measured differently across countries?
- How does the UK’s productivity compare on a regional basis?
- Why do some regions have better productivity growth than others?
- How does the UK’s productivity compare on a sectoral basis?
 - Why do some sectors or firms have better productivity growth than others?
- Are the higher-performing companies a “tightly-knit bunch” geographically and sectorally, and how have they bucked the UK trend?
- Are the lower-performing companies confined to particular regions or sectors?
- What, if anything, is preventing lower-performing companies from learning how to be more productive from the higher-performing companies?
- How does the productivity of large companies compare with SMEs?
- How has the Covid-19 pandemic affected the UK’s productivity performance?
- What role has technology adoption and penetration played in productivity growth?
 - How is the change in working habits (e.g. working from home, flexible working) affecting UK productivity?
 - Have large city centres been affected with commuters and tourists staying away?

23 November 2021

The first oral evidence session, which focussed on the size of the productivity problem, was with the following witnesses:

- María Belén Zinni, Head of Productivity Statistics Unit, Organisation for Economic Co-operation and Development (OECD)
- Louise Hellem, Director of Economic Policy, Confederation of British Industry (CBI)
- Josh Martin, formerly Head of Productivity at Office for National Statistics (ONS), now an economist at the Bank of England
- Paul Swinney, Director of Policy and Research, Centre for Cities

7 December 2021

The second call for written evidence focused on the international best practice of productivity. The terms of reference were:

- Which sectors and firms in which countries are at the global frontier of productivity?
- How can international best practice in relation to productivity be best defined? What are the standards by which we can measure it?
- What are the main drivers (e.g. capital, labour, technology, institutions) of internationally excellent productivity performance?
- How does the UK's productivity performance compare internationally?
 - Is the so-called 'long-tail problem' worse in the UK than in other comparable economies?
 - How does the level of capital investment in the UK compare to other countries?
 - How does the quality of the UK workforce compare internationally?
 - How does evidence on R&D investment and spillovers (domestic and international) compare?
 - Which other intangible sources of productivity differentials can be identified?
- How does the dispersion of firm-level productivity in the UK compare to other countries?
- What role has the state played in countries that have successfully improved productivity?
- What specific policies have been implemented around the world to improve productivity that the UK could also implement, and what policies should the UK avoid?
- What role have organisations like productivity boards and UK Productivity Commissions played in different countries?
- How can the state encourage knowledge diffusion from productive firms to those that are less productive?
- How does knowledge diffusion in the UK compare to other countries?
- What can the UK learn from countries with better diffusing outcomes?
- How have the public and private sectors interacted in countries that have successfully improved productivity?
- How does public/private interaction in the UK compare to other countries?
- What has been the role of local/regional institutions/policies, like regional innovation systems and smart specialization policies?
- What effect can trade have on productivity, and how does the effect of the UK's trade policy on productivity compare internationally?
- What effect can migration have on productivity, and how does the effect of the UK's migration policy on productivity compare internationally?
- What meso-level institutions do other countries have in place to improve productivity and how do they function?

17 February 2022

The second oral evidence session, which focussed on the international best practice of productivity, was with the following witnesses:

- Chiara Criscuolo, Head of the Productivity, Innovation and Entrepreneurship Division, OECD
- John Fernald, Professor of Economics, INSEAD and the Federal Reserve Bank of San Francisco
- Beata Javorcik, Chief Economist, European Bank for Reconstruction and Development
- Chad Syverson, Professor of Economics, University of Chicago Booth School of Business

16 March 2022

The third oral evidence session focused on what policies should be implemented to improve UK productivity. The witnesses were:

- Jesse Norman MP, Conservative MP and former Treasury Minister
- Kitty Ussher, Chief Economist at the Institute of Directors, former Labour MP and Treasury Minister

Annex 2 – Written evidence submissions

The written evidence submissions that have been submitted to The Commission are available to read on here.

1. Bernard H. Casey
2. Centre for Cities
3. Creative Leadership and Enterprise Centre, Cardiff Metropolitan University
4. David Harold Chester
5. Dr Judy Stephenson and Alexandr Kulakov (Bartlett School of Sustainable Construction)
6. Greater London Authority Economics
7. Heseltine Institute for Public Policy, Practice and Place
8. Innovation and Growth Think Tank
9. Institute of Management Studies
10. John Mills
11. Joseph Rowntree Foundation
12. Leicester and Leicestershire Enterprise Partnership
13. Liam Byrne MP
14. Midlands Engine Observatory
15. Nicholas Oulton, Centre for Macroeconomics, LSE and NIESR
16. North West Productivity Forum
17. Office for National Statistics
18. Professor Andrew Henley (The Productivity Institute's Wales Productivity Forum)
19. Professor Paul Stoneman, Warwick Business School
20. Skilled Managers – Productive Workplaces
21. UK2070 Commission
22. York & North Yorkshire Local Enterprise Partnership (LEP) and West Yorkshire LEP

Annex 3 - Commissioners and Secretariat

Commissioners¹

Biographies of each of the Commissioners below are on The UK Productivity Commission website.²

- Bart van Ark, University of Manchester
- Alan Barrett, Economic and Social Research Institute
- Gillian Bristow, University of Cardiff
- Jagjit Chadha, NIESR (Chair)
- Dawn Holland, Moody's Analytics
- Diane Coyle, Bennett Institute of Public Policy, University of Cambridge
- Eileen Harkin-Jones, Ulster University
- Rachel Lomax, Formerly HMT and BoE
- Stephen Millard, NIESR
- Anton Muscatelli, University of Glasgow
- Adrian Pabst, NIESR
- Dirk Pilat, OECD
- Chris Pissarides, LSE
- Tony Venables, University of Manchester
- Jackline Wahba, University of Southampton
- Stian Westlake, Royal Statistical Society
- Andy Westwood, University of Manchester
- Cecilia Wong, University of Manchester

Secretariat

- Matt Panteli, Head of Policy, UK Productivity Commission
- Issam Samiri, ESRC Postdoctoral Research Associate (Macroeconomics and Productivity), NIESR
- Konstantinos Myrodias, ESRC Postdoctoral Research Associate (Governance and Institutions), NIESR
- Nicholas Oulton, Special Advisor, Centre for Macroeconomics, LSE and NIESR

¹ The Commission would like to thank Hande Kucuk and Paul Mortimer-Lee, who were previously Commissioners, for their contribution.

² <https://www.niesr.ac.uk/productivity-commission-commissioners>