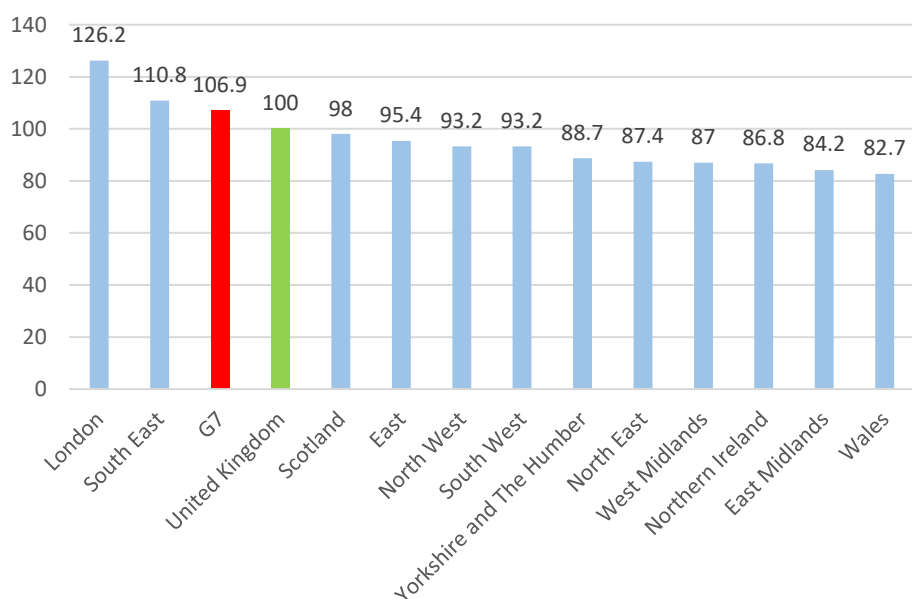# Productivity Scorecards Categories and Drivers
ANNEX

The second edition of the Productivity Scorecards is created for the UK's devolved nations and England's regions to show the current state of productivity performance for the UK International Territorial Level (ITL1).

Output per hour worked, 2022
UK = 100

Source: For UK regions: ONS (2024) Subregional productivity. For G7: OECD (2022) Level of GDP per capita and productivity Comparison. Comparison with G7 made using GNI per hour worked (USD, current prices, current PPPs).

The most recent data shows that productivity measured as output per hour worked in most of the UK regions was below the UK's average in 2022. The chart on this page illustrates each region's position relative to the UK's average (UK=100). Compared to the G7 value of productivity, the UK lags behind by 6.9%.

Adapted from the productivity dashboards by the Northern Ireland Regional Productivity Forum that focuses on Northern Ireland, the TPI Data Lab's scorecard series cover the UK's twelve ITL1 regions. The TPI Productivity Scorecard has been a useful assessment tool for regional policymakers to explore issues of productivity gap. While some drivers of productivity can be specific to a particular region, the cornerstones of regional policy include export, innovation, skills, investment, and governance. The regional scorecards measure how each ITL1 area performs across key productivity drivers and indicators relative to the UK median, and over time. Colour codes indicate whether its performance is better (green), worse (red), or equal to the UK's value (orange). Green indicates performance higher than 105% of the UK ITL1 median. Orange shows a value of a performance indicator between 95% and 105% of the UK ITL1 median. Red indicates performance lower than 95% of the UK ITL1 median. Using the median as the reference value for each productivity indicator reduces a potential bias towards London, the area with the highest productivity in the UK. The UK median and regional data for comparison are 2022 for consistency across all twelve regions; however, for a small number of productivity indicators the reference year is either 2021, 2023 or 2024 due to different availability of statistics as indicated in each productivity driver description. Performance across short-term (1-year) and long-term (5-years) periods shows whether there has been an improvement (green), worsening (red), or no change (orange) over time. The key for 'no change over time' is based on an assumption that changes between -0.5% and 0.5% from the base year values constitute no significant change. There is variation between indicators for the years used for short and long term estimates, these are given for each indicator. The method, data sources and reference year for each productivity indicator are provided below.

Business performance & characteristics

Exports as % of GDP
Higher regional export intensity is important as local firms which export tend to have higher productivity. Comparison to the UK median is based on a combination of ONS data on subnational trade in goods and subnational trade in services measured as percentage of ONS subnational GDP. Change over time (short-

term) is estimated based on the same ONS data as it is available for 2020 and 2021. Change over time (long-term) measured using HMRC regional trade data for consistency, as ONS subnational data for trade in goods and trade in services is not available prior to 2019. This indicator measures the short term from 2020-2021 and the long term from 2016-2021.

Sources: [ONS (2023) Subnational trade in goods](#); [ONS (2023) Subnational trade in services](#); [ONS (2024) Regional gross domestic product](#); [HMRC (2020) Regional trade data, 2016-2021](#)

R&D per job
Levels of R&D expenditure are linked to productivity levels. ONS data on BERD provides a breakdown of R&D performed in UK businesses by country/region. Real R&D per job is estimated as R&D expenditure relative to regional jobs and using GDP deflator. This indicator measures the short term from 2021-2022 and long term from 2017-2022.

Sources: [ONS (2024) Business enterprise research and development, UK: 2021](#); [Productivity Jobs – ONS (June 2024) Subnational productivity](#); [HM Treasury (2024) GDP deflators at market prices, and money GDP October 2024 (Autumn Statement)](#)

Innovation active businesses
Being innovation active measures businesses' approach to continual improvement, which is an important driver of productivity growth. This measure of innovation includes introducing a new or significantly improved product or process; engaging in innovation projects; improving organisational structures, practices, and strategy; and/or generating or acquiring knowledge or equipment linked to innovation activities. This indicator measures the short term from 2020-2022 and the long term from 2018-2022.

Sources: [Department of Business and Trade Survey](#)

% of SMEs where finance is a major obstacle
Access to finance can place a constraint on a firm's growth, creating a barrier to improving productivity. The percentage of SMEs who rated access to external finance as a major obstacle to running their business over the next 12 months exceeded UK's 7% in all regions, except North East, South West, East Midlands and East of England where it was lower than the UK value indicating that businesses in these three regions had better access to external finance. This indicator measures the short term from 2022-2023 and the long term from 2018-2023.

Source: [BVA BDRC (2024) SME Finance Monitor 2023 Annual Report](#)

Business births as % of all active enterprises
The rate of new enterprises being created is an indicator of the level of entrepreneurial activity in the local economy. The UK median for 2023 was 10.7%, however this was a decline from 2022 where this was 11.5%. Over the long term, business births remained lower than 2018. This indicator measures the short term from 2022-2023 and the long term from 2018-2023.

Source: [ONS (2024) Business demography, UK](#)

Skills & training

% of population with tertiary education (NVQ4+/RQF4+)
Represents a percentage of working age population (aged 16-64) with qualification at NVQ4+/RQF4+. Only three regions, London, South East and Scotland have a rate of highly-skilled population higher than the UK median of 43%. All other regions show either equal to or lower than the UK value. The latest 2024 Annual Population Survey data is used to compare regions to the UK median, 2022-2023 (short-term), 2018-2023 (long-term). From 2021, NVQ levels have been replaced with RQF levels. These definitions are available [here](#).

Source: [Nomis (2024) Annual Population Survey](#)

% of population with no or low skills (NVQ1/RQF1 or lower)
Represents a percentage of working age population (aged 16-64) with qualifications at NVQ1/RQF1 only or no qualifications. London, South East, Scotland, East of England and South West have levels of no or low skills working age population (aged 16-64) lower than the UK median of 10%. The other regions are equal to or above the UK median. The latest 2024 Labour Force Survey data is used to compare regions to the UK median, 2022-2023 (short-term), 2018-2023 (long-term). From 2021, NVQ levels have been replaced with RQF levels. These definitions are available [here](#).
Source: [Nomis (2024) Annual Population Survey](#)

<u>% of employers providing training in past 12 months</u>
Only 47% of employers in the UK provided training within the last 12 months in 2022. This has decreased by 3% for the UK median where this was 50% in 2019. Latest Employer Skills Survey data for 2022 is used to compare regions to the UK median, 2019-2022 (short-term), 2017-2022 (long-term).
Source: DfE(UK) (2023) Employer Skills Survey 2022; 2019; 2017; Scottish Gov. (2021) Scottish Employer Skills Survey 2020;

<u>% of vacancies which are skill shortage vacancies</u>
The proportion of vacancies which are skill shortage vacancies was 10% for the UK in 2022. Over the long-term, skills shortage vacancies in the UK have worsened from 5.5% of total vacancies in 2017. Latest Employer Skills Survey data for 2022 is used to compare regions to the UK median, 2019-2022 (short-term), 2017-2022 (long-term).
Source: DfE(UK) (2023) Employer Skills Survey 2022; 2019; 2017; Scottish Gov. (2021) Scottish Employer Skills Survey 2020;

Policy & institutions

<u>% of SMEs where political uncertainty & government policy is a major obstacle</u>
In 2023, 21.5% of SMEs in the UK rated political uncertainty and government policy as a major obstacle in running their business in the next 12 months. In London, South West, Yorkshire and The Humber, Northern Ireland and Wales, this was higher than the UK median. There has been a sizeable increase over the long-term in all UK regions as only 18% of SMEs in the UK rated this as a major obstacle in 2018. This indicator measures the short term from 2022-2023 and the long term from 2018-2023.
Source: BVA BDRC (2024) SME Finance Monitor 2023 Annual Report

<u>% of SMEs where legislation & regulation is a major obstacle</u>
In 2023, 21% of SMEs in the UK rated legislation and regulation as a major obstacle in running their business in the next 12 months. There has been a sizeable increase over the long-term in all UK regions. 19% of SMEs rated this as a major obstacle in 2018. This indicator measures the short term from 2022-2023 and the long term from 2018-2023.
Source: BVA BDRC (2024) SME Finance Monitor 2023 Annual Report

Health & wellbeing

<u>Economic inactivity rate</u>
Rates of economic inactivity are mixed across the UK economy. For those in the working age population (aged 16-64), the inactivity rate was 22.88% in 2024. Over the long-term the situation has remained relatively static from 21.32% in 2019. High rates of economic inactivity may mean labour is not allocated efficiently within the economy, creating a barrier to productivity growth. This indicator measures the short term from 2023-2024 and the long term from 2019-2024.
Source: Nomis (2024) Labour Force Survey

<u>% of economic inactivity due to long-term ill health</u>
Of all economic inactivity in the UK in 2021, long-term ill health (estimated as the median of the UK ITL1 regions) was 29.3% in 2022. For the long-term period, this has become worse in all the UK regions. This indicator measures the short term from 2022-2023 and the long term from 2018-2023.
Source: Nomis (2024) Annual Population Survey

<u>% of population aged 16-64</u>
The working age population (aged 16-64) currently accounts for around 61.93% of the UK population. This indicator measures the short term from 2021-2022 and the long term from 2017-2022.
Source: Nomis (2024) ONS Population Estimates

Investment, infrastructure & connectivity

<u>FDI per job</u>
The UK's median of total inward foreign direct investment in 2021 was £31,127.89 per job (calculated as total inward FDI position divided by the total number of jobs in the economy). The median value does not include FDI not allocated to a region and is less skewed by London. Consequently, only London (536%) and South East (248%) significantly exceed this level. North West (115%) and West Midlands (110%) also enjoy a higher level of FDI per job. South West, Yorkshire and The Humber and Wales demonstrated levels equal to the

median value. FDI per job in all other regions were lower than the median value. In the long-term, the UK median of ITL1 regions for real FDI per job has improved by 14% compared to 2016. This indicator measures the short term from 2020-2021 and the long term from 2016-2021.
Source: ONS (2022) Foreign direct investment involving UK companies by UK country and region: inward

Gross fixed capital formation per job
This measures the total amount of investment into tangible and intangible assets, such as buildings, structures, roads, transport equipment, machinery, ICT equipment, and intellectual property products. In 2022, the median of UK ITL1 regions for gross fixed capital formation (GFCF) per job was £7,602.7. In the long-term, the UK as a whole and most regions have seen improvements in GFCF per job, apart London, Scotland, South East and Wales where there has been no change over time. This indicator measures the short term from 2021-2022 and the long term from 2017-2022.

Source: ONS (2022) Experimental regional gross fixed capital formation (GFCF) estimates by asset type

Access to Gigabit-capable internet services
In 2024, 79.41% of premises in the UK had access to Gigabit capable services. Only 2024 data is provided so, data is compared between latest release and previous release (2021). No long term comparison has been produced since Ofcom has only recently started to collect information on gigabit-capable availability and does not hold data as far back as 2019 to estimate changes.
Sources: Ofcom (2024) Connected Nations update: Spring 2024; Ofcom (2021) Connected Nations 2021: Main report; House of Commons Library (2024), Constituency data: broadband coverage and speeds

5G Mobile Coverage
In 2024, 76.62% of the UK had access to 5G mobile coverage (calculated as the ITL1 median). 5G data was limited for this indicator as data was only available for England, Scotland, Wales and Northern Ireland but no data was available at the regional level within England. Since 5G is a relatively new measure, data was not available to compare with the long term as the introduction of 5G connectivity happened after 2017.

Source: Ofcom (2024) Connected National Update: Spring 2024