Productivity Commission. Sizing the productivity problem: international, national, regional and sectoral aspects

Submission from the North West Productivity Forum

15th October 2021

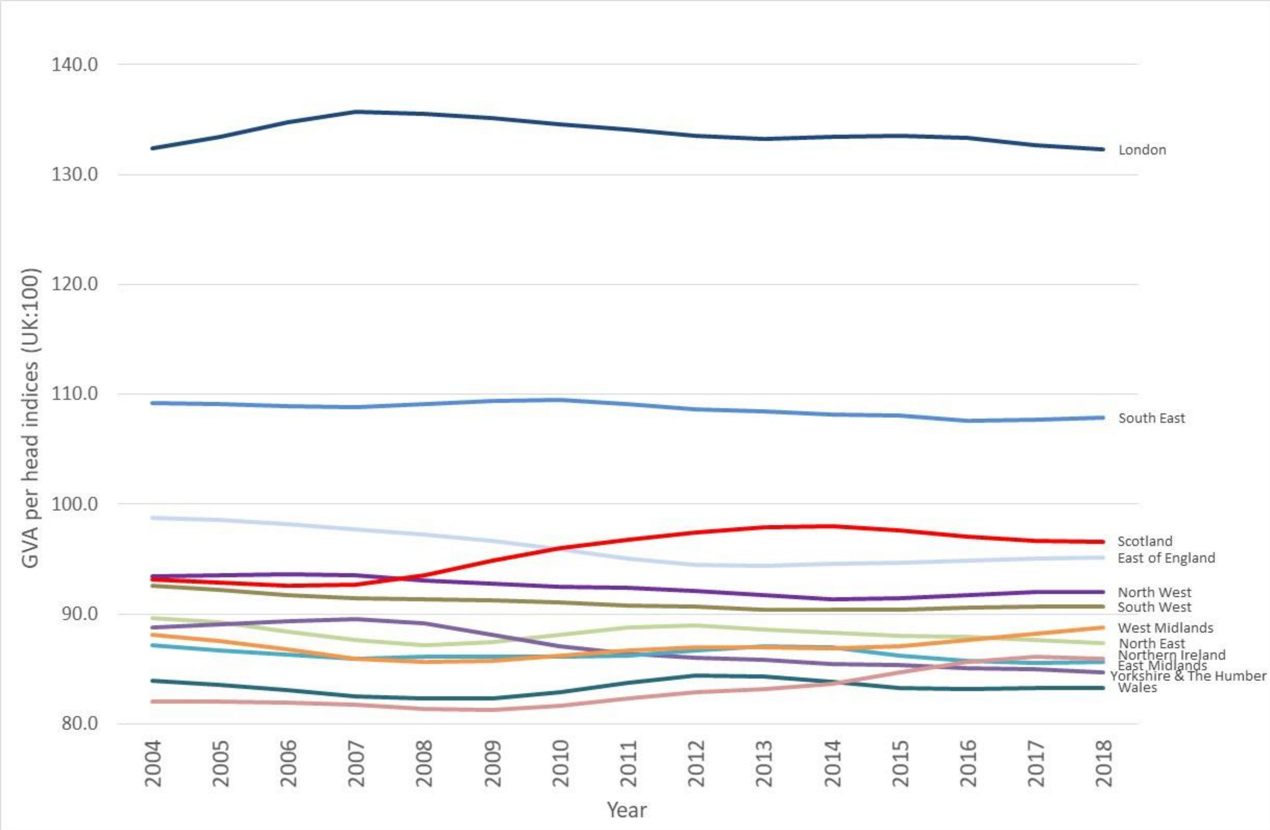
Introduction

- This is a submission by the North West Productivity Forum (NWPF). Established in 2020 alongside the UK's new Productivity Institute, the NWPF brings together 20 senior business and policy leaders covering all major sectors and geographical areas of the North West of England. The NWPF aims to set the productivity agenda in the North West, identifying key topics that have important implications for regional productivity performance and bringing stakeholders together to debate the issues and identify solutions.
- We welcome the Productivity Commission's emphasis on the regional aspects of the UK's productivity problem. Despite the long-term discrepancies in productivity performance between UK regions, there is still too little analysis and understanding of what drives poor or high productivity in specific places. This submission focuses on addressing the Commission's question "How does the UK's productivity compare on a regional basis and why do some regions have better productivity growth than others?" with an emphasis on the particular issues affecting the North West region, though we also end with a short comment on data and measurement which does speak to the second question posed by the Commission, namely "Is productivity measured correctly in the UK?".

How does the UK's productivity compare on a regional basis? The case of the North West of England

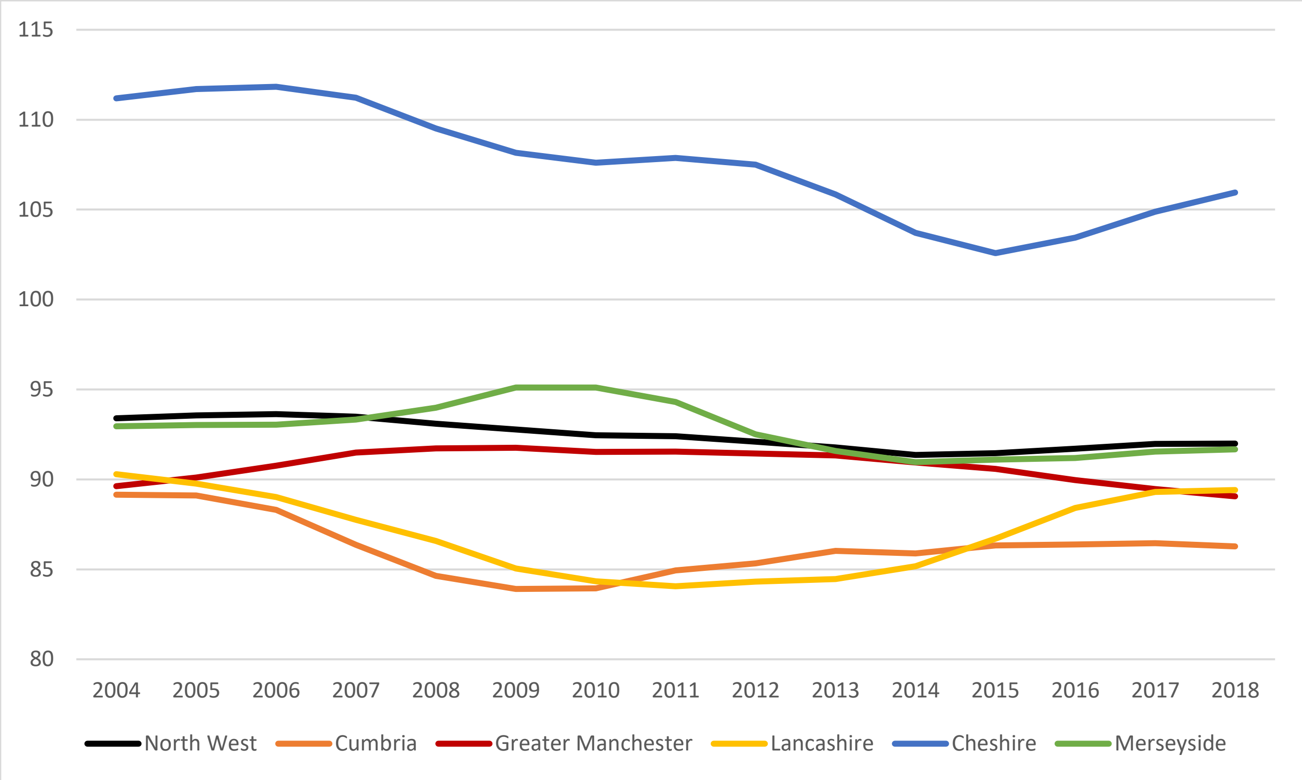
- The UK's productivity challenges are well documented. Since the 1960s there has been a persistent gap in levels of productivity compared to other countries at similar stages of development. In the wake of the 2007 to 2009 global financial crisis and subsequent recession, the UK has experienced one of the most extreme slowdowns in productivity growth in the developed world (van Ark and Venables, 2020).The North West is a lagging region in a lagging nation. Productivity, as measured by Gross Value Added (GVA) per hour worked, stood at £32.10 in 2018 which was 8% below the UK average. This is a significant gap: had GVA per hour matched the national average, the North West would have contributed an additional £17bn to the UK economy.
- The North West's productivity gap with the UK average has widened over the past 15 years, as shown in Figure 1, with the region slipping back from being 93.4% of the national average in 2004 to 92% in 2018. London and the South East are the only regions in the UK that consistently, and very substantially, outperform the UK average.
- These regional disparities are not a new phenomenon with estimates showing a consistent productivity gap between London and the South East and the rest of the country for more than a century – in 1901 London and the South East's GDP per worker was 122.5% of the Great Britain average and the North West's was 96.7%. Only for around three decades following the end of World War II have regional productivity differentials fallen consistently and regional disparities have been widening more or less consistently since the mid-1970s (Geary and Stark, 2016). As Harding and Nevin (2015) note, the "causal links may be difficult to discern, but the evidence of the last fifty years suggests that periods of relatively high public investment at least coincide with decreases in spatial economic disparities, and periods of low investment with growing performance gaps."

Figure 1: UK regions nominal (smoothed) GVA per hour worked indices, 2004–2018 (UK=100)



- There are also marked differences in productivity performance *within* UK regions. As Figure 2 illustrates for the North West, Cheshire performs relatively well (though its level has decreased relative to the UK over the last 15 years), whereas Merseyside, Lancashire, Greater Manchester and Cumbria all lag behind. At a lower geographic level the differences in performance are even more striking: Cheshire East, with its high value cluster of life sciences and chemicals, is the 19th most productive of the UK's 170 NUTS3 areas, whereas north-east Greater Manchester, within the same travel-to-work area but still grappling with post-industrial decline, ranks 160th.
- The 2007 to 2009 global financial crisis and subsequent recession stands out as a turning point for the region (Sensier and Devine, 2020). Between 2005 and 2010 GVA per hour increased by 1.1% per annum on average across the North West, but the growth rate fell to just 0.4% per annum from 2010 to 2018. Up until the global financial crisis, productivity in Greater Manchester and Merseyside was improving relative to the national average, but it has subsequently fallen back. After seeing productivity erode relative to the rest of the UK in the lead up to the global financial crisis, in its aftermath Cumbria and Lancashire have started to close the gap, substantially so in the case of Lancashire. Cheshire's relative productivity advantage to the UK has been declining since 2007, although in more recent years it has started to bounce back. This submission provides some explanations for these regional and sub-regional discrepancies in performance, but it is an area where additional research will be required to get a more comprehensive understanding of the dynamics observed in difference places.

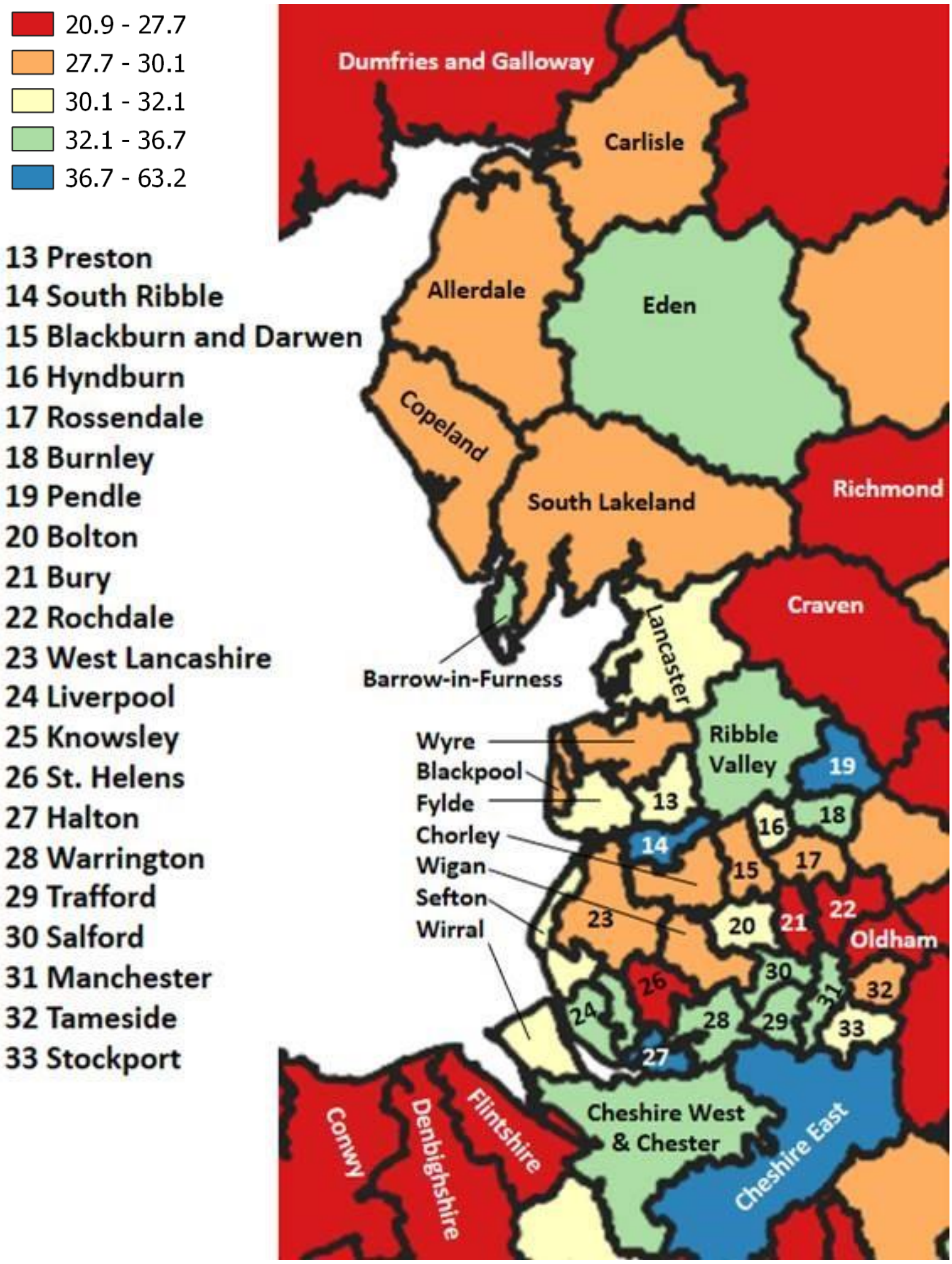
Figure 2: North-west sub-regions nominal (smoothed) GVA per hour worked indices, 2004–2018 (UK=100)



Source: ONS (2020b), Sub-regional productivity: labour productivity indices

- It is striking that differences in productivity within the North West, as with the UK as a whole, do not conform to international patterns of large productivity gaps between high performing cities and lagging towns and rural areas (McCann and Vorley, 2021). Map 1 highlights how high and low productivity areas are distributed across the region and frequently sit side by side with each other. In what is a highly fragmented economic geography, the key features to note are:
  - The most productive local authority districts in the North West are in semi-rural and urban fringe locations – Cheshire East, South Ribble, Halton, and Pendle – which are areas with concentrations of very high value but relatively low employment advanced manufacturing, life sciences, aerospace and chemicals industries. The location of these industries reflects the presence of natural resources, economic and strategic legacies, and a legacy of contingent past decisions, though they have diversified from these initial starting points. Often this high productivity performance can be ascribed to a small number of highly productive companies that masks underperformance in other sectors and SMEs.
  - There is a large band of medium to high productivity activity running east-west broadly along the path of the Manchester Ship Canal, covering central and southern Greater Manchester, large swathes of Cheshire and Warrington, and southern Merseyside. This captures many of the region's industrial strengths in chemicals, life sciences and advanced manufacturing, as well as the concentrations of high productivity services in and around the cities of Manchester and Liverpool.
  - All four of the region's worst performing districts in productivity terms are within the boundaries of the major city regions of Greater Manchester and Merseyside. Together with parts of southern Lancashire, these districts form a parallel east-west band of low productivity post-industrial towns and semi-rural areas that stretches from Oldham in the east to West Lancashire on the coast.
  - Coastal areas in the North West tend to have medium to low levels of productivity, with the very notable exception of Barrow-in-Furness where the submarine and naval building industry pulls up overall productivity levels.

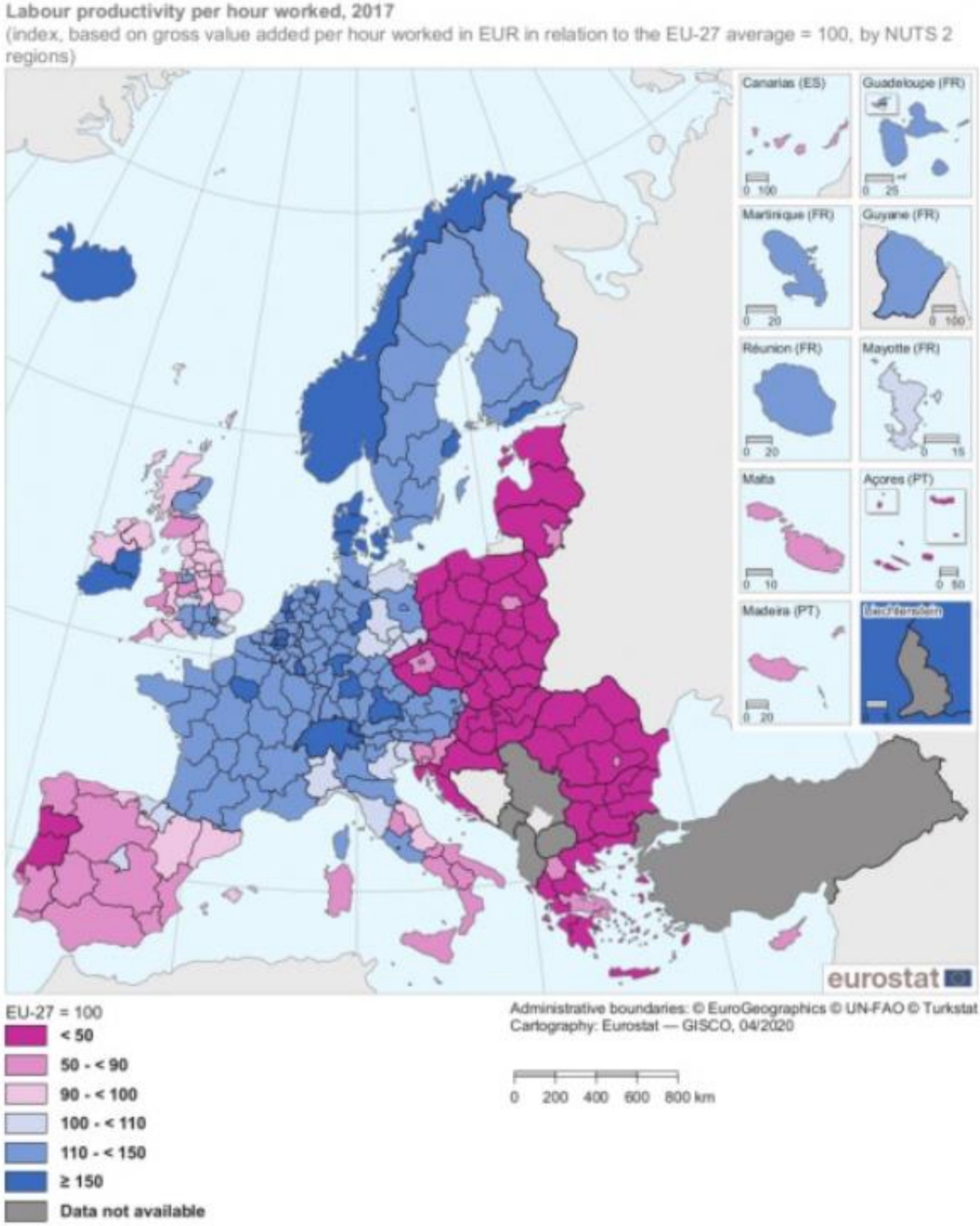
Map 1: Productivity per hour (£), 2018



Source: ONS (2020c)

- While the UK's inter- and intra-regional disparities are not unusual in historical terms, they are by international comparison. Map 2 highlights the level of geographic disparity in the UK, which is not seen to the same extent in other European countries apart from Italy. Outside London and the South East, only southern Greater Manchester and Cheshire and parts of Scotland have productivity above the EU27 average. This is important because international evidence suggests that this spatial inequality hampers national economic growth (Carrascal-Incera, et al, 2020).

Map 2: GVA per hour worked, 2017 (Source: Eurostat)



Why do some regions have better productivity growth than others?

- The analysis undertaken by the NWPF highlights that the primary reason for low productivity in the North West is the same as for the UK as a whole – chronic under-investment in key growth drivers such as hard and soft infrastructure, R&D activity, and human capital. The harder question to answer is why the North West is more affected by these national challenges than other parts of the UK.
- There are a number of plausible explanations, although it is difficult to disentangle directions of causality with many factors being both a cause and consequence of low productivity:
    - **Long-term scarring effects from the North West's industrial decline**. Deindustrialisation led to an exodus of skilled people (particularly young people) and financial and commercial institutions, stripping out critical parts of the region's economic base, as well as leaving a legacy of long-term worklessness, ill-health and deprivation. As a result, the region's relatively recent economic revival has been built on weak fundamentals. One manifestation of this is that there are relatively few headquarters of major national or international companies in the region with, for example, just four FTSE 100 companies headquartered in the region. Moreover, while it is difficult to directly measure, it is also thought the activities of national and international firms in the region are disproportionately in lower productivity 'back office' type functions and are more likely to serve regional rather than national or international markets (Transport for the North, 2016), which have lower productivity enhancing spill-over effects to proximate industries.
    - **Lack of access to growth finance**. The Northern Powerhouse Independent Economic Review found that the 'investment gap' (measured by per capita fixed capital expenditure in the public and private sectors) between the north and the rest of the UK had widened notably since 2008. The Review found an under-representation of investment executives and venture capitalists in the region, in part because market demand is insufficient to attract and support these activities (Transport for the North, 2016). Research undertaken in 2021 by the North West Business Leadership Team came to a similar conclusion highlighting that, while most national institutions such as retail banks have a presence in the North West, providing a sufficient supply of capital, there is more limited capacity in terms of skills and expertise to research, engage and complete deals, particularly for early stage and angel finance (NW BLT, 2021).
    - **Public sector investment not crowding in private sector investment.** The extent of the discrepancy in the level of public investment between regions is contested. Data released by HM Treasury show that in terms of overall public spending per head, the North West sits behind the three devolved administrations and London at £10,204 per head in 2019-20. Total public spending per head in the North West was 3% above the UK average. However, there is a much wider discrepancy in capital spend between the regions, with capital spend in the North West falling below the UK average and being around a third lower than that seen in London and Scotland. Other approaches to allocating spending, focused on transport and R&D, identify even greater discrepancies, particularly between London and the other English regions (see Coyle and Sensier, 2020; Forth and Jones, 2020). The reasons for the different spending levels seen between regions are complex, but there is a very plausible case that government spends too much on dealing with the costs of low productivity in the North West (through higher welfare and healthcare costs in particular) and not enough on productivity enhancing investments into areas such as infrastructure, skills, and innovation.
    - **Mismatches between skills supply and employer demand.** Using qualifications as a proxy for skill level, the region has fewer people trained to level 4 and above (the equivalent of a first year of a degree) than the national average (36.1% compared with 40.2%). Conversely, it has a higher number of residents with no qualifications (8.7% compared with 7.9%). Issues exist on both the supply-side (education and skills systems that are complex, fragmented and do not coordinate with demand from employers) and the demand side (the business model choices made by employers and failures to effectively capitalise on the skills that are available to them). The UK's centralised education and skills system means that the same supply-side issues are seen across both high and

low productivity regions, and are not unique to the North West or other underperforming regions (see D'Arcy et al, 2019). Alongside mounting evidence of underemployment in the north of England (see Rafferty et al, 2013) this strengthens the argument that the skills issue in the region is likely to be more on the demand-side than the supply-side.

  - **Physical and mental health:** There is increasing recognition of the role of poor physical and mental health on productivity in the region. It has long been known that people with ill health are much more likely to be out of work, but recent research by the Northern Health Science Alliance has shown that working people in the north of England who experience a spell of ill health are also have lower wages and are more likely to lose their jobs in the future than similar individuals in the rest of England (NHSA, 2018). There is also evidence of a more adverse effect to the northern population from COVID-19 (UoM, 2020a). This aligns with the conclusion of the Greater Manchester Independent Prosperity Review that health needs to play a much greater part of the discussion around productivity (GMCA, 2019).
  - **Economic geography:** Manchester and Liverpool, as with second tier cities across the UK, lack the economic mass to drive growth across the region in the same way that London does for the South East. Proximity to 'economic mass' is a key factor in explaining regional variations in productivity in the UK, accounting for up to two-thirds of the variation seen between areas (Rice and Venables, 2004). Outside the two major cities, this lack of agglomeration is compounded by the region's population being spread out across a number of poorly connected smaller cities, towns and settlements, limiting access to opportunities for residents and restricting access to skilled labour and markets for employers – both of which hold back productivity growth. Moreover, many of the North West's most highly productive industries are located in relatively peripheral locations that restrict their potential to create productivity-enhancing spill-over effects to the rest of the region.
  - **Over-centralisation**: The highly centralised nature of the UK state means that the implicit regional impact of mainstream national policies 'drowns out' the impact of explicit regional policies and the marginal improvements that local government can make in their delivery of policies and services (see e.g. Uyarra and Flanagan, 2010, who explore this for the case of the North West). This is a decades old issue in the English regions, but one that has been exacerbated by local government being disproportionately affected by austerity since 2010 (McCann 2016). The result is that the main levers the state has over productivity in the North West (including policies around industry, tax reform, science and innovation, education and skills, infrastructure, and transport) are heavily centrally controlled. At the same time, the UK's centralised policy making is fragmented functionally, with a poor track-record of being able to join up decisions and programmes across government departmental boundaries. This over-centralisation stifles regional and local initiative and means that policies pay too little attention to local circumstances (van Ark and Venables, 2020). Recent research by the OECD has found that further devolution has the potential to significantly improve labour productivity in the UK (Jong et al, 2021 and Gal and Egeland, 2018).

- It is important to note that the region's poor productivity does not primarily arise from its sectoral structure: differences in productivity *within* individual sectors matter much more. This can be illustrated with a 'shift-share' analysis: if the North West's sectoral structure (as measured by the number of hours worked in each sector as a proportion of total hours worked) was the same as the UK average, the region's GVA per hour worked would increase by 2.2%. If, on the other hand, the North West retained the same sectoral structure as it has now but increased productivity in each sector to the UK average then its overall GVA per hour worked would increase by 6.5%, almost three times the effect. Efforts to improve productivity therefore need to focus not only on growing high productivity 'frontier' industries such as manufacturing, digital or financial services to improve the sectoral mix, but also on how productivity can be improved across all sectors of the economy.

A closing comment on regional productivity data

- Finally, the analysis in this submission has relied heavily on Gross Value Added (GVA) per hour worked as a measure of productivity. The availability of GVA per hour worked at a local level represents a marked improvement in sub-national productivity data, however it does have a number of important limitations. Principal amongst these are that: differences in regional prices for non-traded outputs and costs of living may overstate differences in productivity and the 'headquarters' effect may overstate London's contribution to GVA (and by extension underestimate the effect of other parts of the UK). Further, measures of capital inputs, which would allow an analysis of total factor productivity which would be preferable, are not available at the sub-national level. Progress is needed to further strengthen sub-national productivity issues in response to these challenges and ensure that policy makers and businesses have confidence in the productivity data being used to base decisions on.

Next steps

- To discuss anything related to this submission please contact Kieron Flanagan (kieron.flanagan@manchester.ac.uk) and John Holden (john.a.holden@manchester.ac.uk) at the North West Productivity Forum. We would be very happy to discuss the issues raised in this paper further with the Commission.

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