Productivity in the Northern Powerhouse

BETWEEN 2004 AND 2022

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By Lord Jim O'Neill, Chair of the Northern Powerhouse Partnership

Like most economists, I subscribe to the view that productivity is a pretty crucial central variable to all our lives, even though it is very hard for most people to identify with it in the same way that GDP growth, unemployment, or consumer prices can. But for our welfare and well-being, especially our incomes, stronger productivity is central to sustained income growth. In this regard, it is no coincidence that the world's most prosperous countries tend to be those with the strongest productivity performance, as well as quite often, more equally shared amongst the population than others.

I have always been at pains to point out that all efforts to boost the Northern economy needed to not come at London's expense. It is important for me as the current Chair of the Northern Powerhouse Partnership to point out that while it somewhat pleasing that the huge level of outperformance of London relative to the rest of the country - including but not limited to the North - seemingly peaked in 2008, it is certainly not pleasing that some of this and, at times, much of it is because of a sudden weakness in London's productivity. It appears to have been especially marked since the outbreak of Covid-19, and one can think of the possible explanations. While some observers from around the country might find some odd contentment with London having a more challenging period, that is a mistake, because from an overall national perspective, the weight of London, is such, that this means the national growth and productivity performance is undermined despite some evidence of improvements in other parts of the country.

It has always been a crucial tenor that from the beginnings of the Northern Powerhouse concept some ten years ago, boosting the productivity performance of the North, to get closer to that of London and the South East, and to get rid of our underperformance relative to the English or UK average is central to all the ideas that the Northern Powerhouse Partnership focuses on. This is true, whether it be school education, the skills agenda, transport and other infrastructure, the issue of devolved policies and, of course, more successful business.

So, one hopes that the London period of weakness is temporary, and certainly one would imagine the vigour that has driven our capital city to be one of the few truly global cities will soon re-establish itself.

This notwithstanding, this report focuses on some of the more encouraging trends that the data appears to hint at, in some parts of the North since 2004, which this most recent annual data update show, might be accelerating in some places. As a proud Mancunian, it is especially pleasing that Greater Manchester, the city itself and some of its boroughs, continue to be at the forefront of these better trends. Indeed, as shown in the paper, Greater Manchester's performance in the past 5 years has been amongst the absolute strongest in the country, helping to narrow its underperformance gap as well as helping the overall North West to be a stand out performer. There are other pockets of improvement across the North too, notably the underlying and persistent strength of Cheshire as well as, pleasingly, across the M62 on the Humber.

What is especially important for me to suggest in closing this foreword is that, given Greater Manchester's early path to determined, focused and quite stable leadership and ambition, including the first to get a devo deal, is that other areas reflect on what they may have done, that can be replicated in their area, and in some, hopefully not so distant years, we will be seeing their improvements reflected in their productivity data also. Because then, the country will increasingly start to feel a better more successful, wealthier and perhaps even happier country.

/03. Introduction

The productivity challenges in the UK are well known; we perform below most of our G7 country group peers, have done for a long time, and the relative performance has got worse since the 2008 financial crisis. For a number of decades, this weakness has been accentuated by particularly weak productivity experienced in most of our city regions outside London. The core premise of the Northern Powerhouse Partnership since we were established is to promote initiatives and momentum behind ideas that, at least for the North, would succeed in narrowing the relative gap to London (and the South East). As shared by others interested in this area there are six different areas of devolution, transport, education, skills, investment and leadership which define the mechanisms for doing so. As outlined by the original Northern Powerhouse Independent Economic Review we have our different "prime" capabilities of manufacturing, energy, health innovation and digital which, if the North excelled at, we believe the productivity gap could be closed, for the benefit of the North, and as a consequence for the country as a whole.

Following much discussion of the efforts made in the years since the Rt Hon George Osborne CH delivered the speech which launched the concept of the Northern Powerhouse, this is our stock take on what direction of travel we are now heading in based on the success, and areas of underperformance, still are.

/04. Methodology

This section outlines the methodology used to analyse the productivity performance of various regions in the UK. Given the complex nature of productivity measures, this section will justify our methodological choices and provide an explanation of the terms and measures used in this paper.

The data used in this paper is the Office for National Statistics' Subregional productivity dataset (2023). Productivity is measured as Gross Value Added (GVA) per hour which represents the value generated by a unit of labour input. It is calculated by dividing the GVA by the total number of hours worked. This measure allows us to assess the productivity of a region. However, there are a range of variables which can impact the nominal value of GVA. The most common of which is price levels and inflation can distort data and make it appear as though a region has achieved productivity gains when, the increase is due to higher prices and inflation. This is particularly significant when comparing regions as there is often variation in how they are affected by changes in prices and inflation.

Therefore, to ensure robust regional comparisons, we primarily utilise the Chained Volume Measure (CVM) of productivity. CVM adjusts for inflation, enabling us to compare productivity over time in real terms. This approach provides a more accurate picture of which regions are making genuine productivity gains. Current price data will be used as an auxiliary source to contextualise analysis and provide insights into various regions absolute levels of productivity.

It is, of course important to note that significant improvements in the rate of productivity growth is not the same as high absolute productivity levels. High growth rates can be reflective of a low starting point, and one must consider whether this level of growth is sustainable dependent on the drivers of growth. For this analysis, we have assessed growth over time from 2004-2022 to discern which regions have progressed, how much they have progressed, or conversely, which are falling behind relative to their counterparts.

Throughout the paper, caveats will be made to outline which data we consider more indicative, and the productivity measure used will be clearly signposted.

/05. Regional productivity

While London still clearly remains the most productive region of the UK (as measured by Gross Value Added per hour worked) with productivity around 27% higher than the UK average in 2022, this ‘gap’ has narrowed from 33% in 2004. While this is not a huge shift, on one level it is progress in the right direction all the same. On another, alas, the gap has closed greatly in recent years, apparently since 2019 especially, according to the data, with productivity in London performing rather poorly. While this has helped the relative productivity gap to narrow, this is not what we aspire to at the NPP because, of course, it has added to the overall productivity weakness of the country. Figure 1 below shows that London had the second lowest productivity growth rate of all UK regions over this period. In order to boost the country’s growth performance through stronger productivity, especially if the country is choosing to reduce the number of immigrants contributing to the labour force, it is extremely important London starts to perform again.

Notwithstanding this development, it is the case that some parts of the North, notably Greater Manchester, Cheshire and some other areas have showed some signs of improving productivity, not only obviously relatively, but also compared to their earlier trend.

As can be seen clearly in Figure 1 below, a number of English regions have seen considerably stronger productivity growth than London, including the South East.

It is useful to compare regional productivity growth to England’s average of 13.7% as shown in Figure 1. Three regions outperformed the English average: the North East (15%), North West (16%) and the South East (22%). Meanwhile, six other regions underperformed in terms of growth such as Yorkshire and The Humber (12.4%), South West (10%) and London (7.5%). as previously mentioned, is important to remember that a high growth rate doesn’t equate to higher absolute productivity levels. For example, in 2022 London’s GVA per hour worked was the highest in the country at £50.6 with the South East following closely behind at £44.4, despite London’s recent weak performance. Therefore, despite underperforming in terms of growth London and the South East lead the UK’s absolute productivity levels. As previously mentioned, the overall productivity weakness of the country is concerning and ensuring places like London start to perform again is vital. Despite the seemingly improved productivity story for the North East and the North West their absolute productivity levels still paint an underlying story of underperformance due to the longer period historically of weakness. It is worth noting, that it is not uniform with these two regions, as within the overall regional data, there are some areas bucking this trend. Cheshire for example, is one of the highest 10 areas of productivity in all England.

For our purposes at the NPP, the performance of various regions within the North are where we wish to focus more.

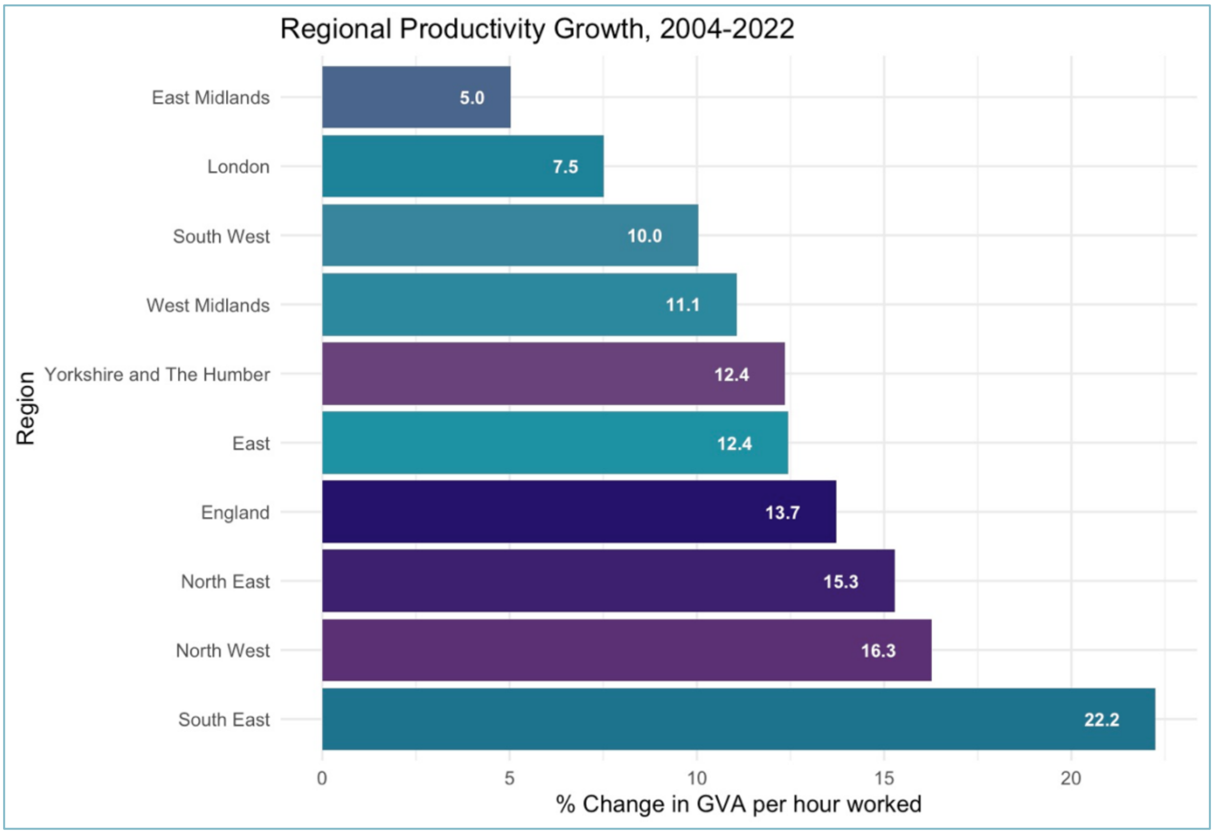

Figure 1 Regional Productivity Growth, 2004-2022

/06. City region growth trends

Over the last two decades, the city regions of the North of England have, with the exception of Cheshire, experienced absolute levels of productivity below the UK average.

If we wish to narrow these productivity gaps, those areas with lower productivity need to experience higher rates of growth. As mentioned above, although productivity in London remains higher in absolute terms than other parts of the country, its low growth in recent years has allowed parts of the country to catch up. Taking Greater Manchester as an example, productivity in London was 38% higher in 2022 but had narrowed from 50% in 2004 due to Greater Manchester being the highest growth ITL2 region in the North of England as presented below in Figure 2. Greater Manchester led the way with a percentage change in GVA per hour worked of 26.4% between 2004-2022. It was accompanied by 4 other subregions which outperformed England (13.7%) in terms of growth. The other outperformers as shown in Figure 2 are East Yorkshire and North Lincolnshire (20%), West Yorkshire (16.9%), Northumberland and Tyne and Wear (16.1%) and Tees Valley and Durham (14.2%). However, 52% of the North's subregions underperformed when compared to England's average productivity growth. The lowest of which was North Yorkshire which experienced a productivity decline of –2.3% between 2004-2022.

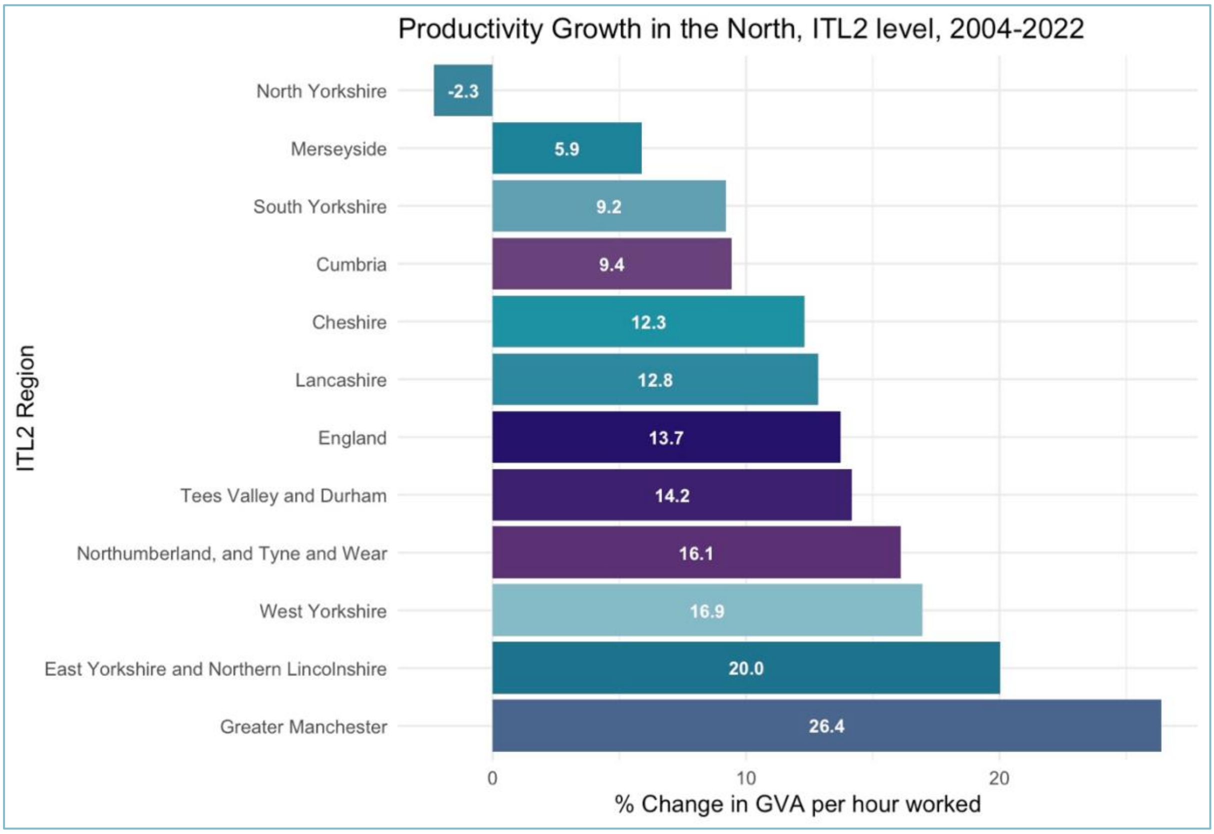

Figure 2 Growth between 2004 – 2022 for the North of England

Figure 2 shows the subregional productivity trends within the wider regions of the North . as can be seen there are significant differences. Figures 3 and 4 above show the growth rates of each ITL3 area in the North from 2004 to 2022, the level of geography below that used in Figure 2 and the lowest level we can obtain statistics for.

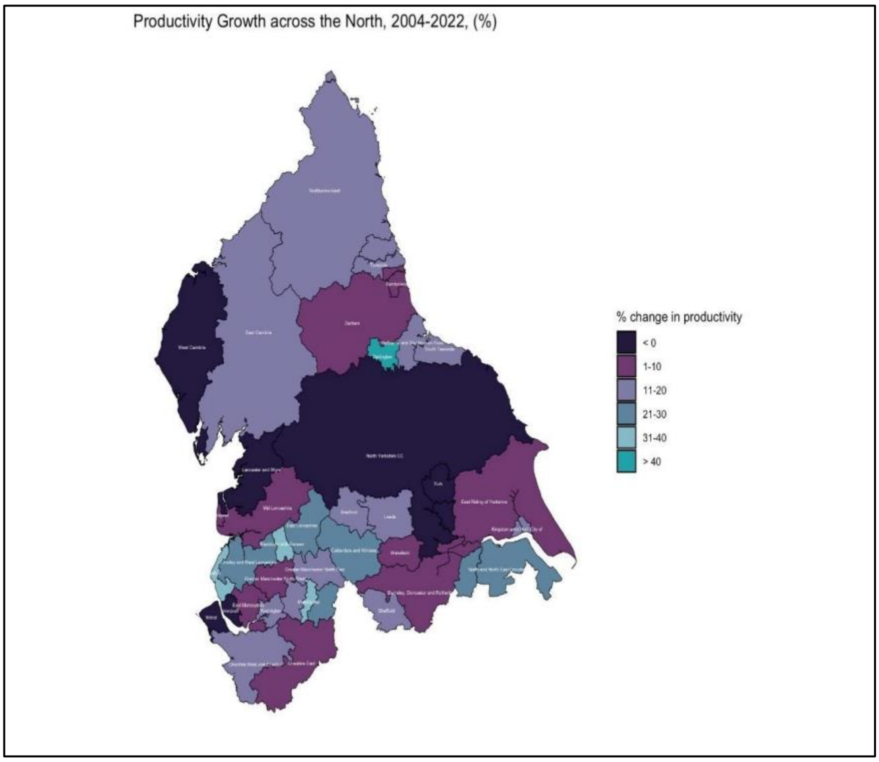

Figure 3 Growth between 2004-2022 for the North of England's ITL3 subregions

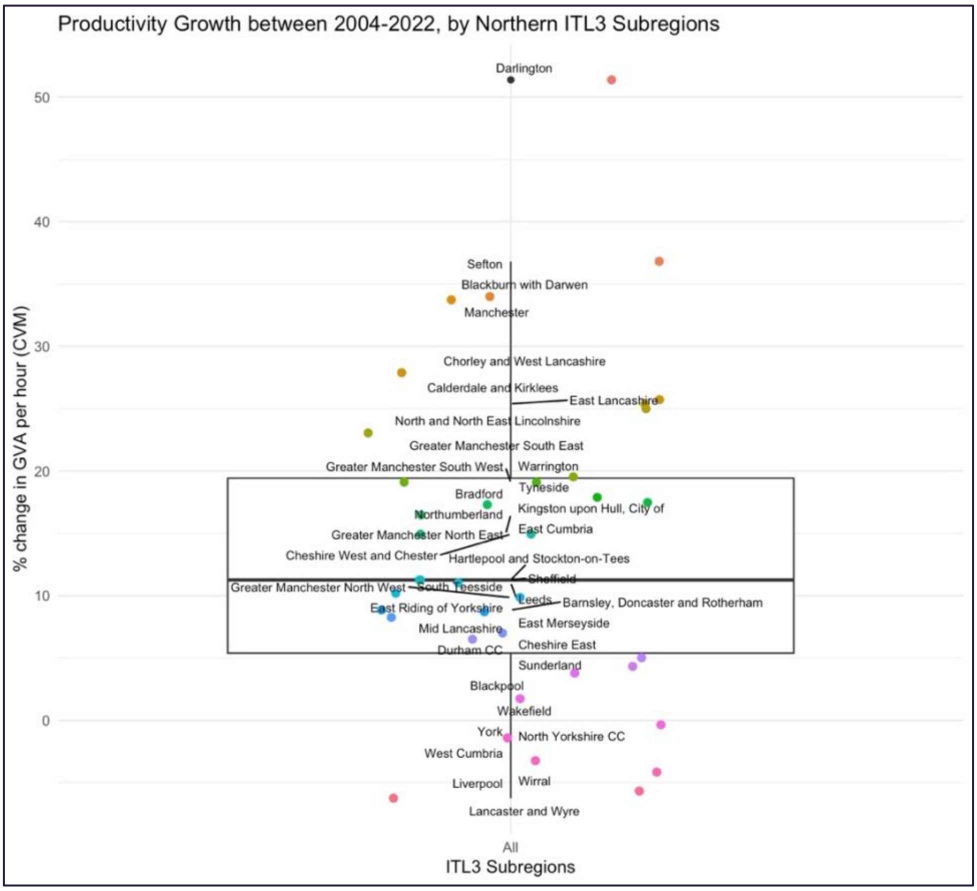

Figure 4 Distribution of Growth between 2004-2022 for the North of England's ITL3 subregions

Both figures present a mixed picture of productivity growth in the North of England. The upper, best performing quartile is at 37% whilst the lower quartile is, in contrast, a weak -6%. Several local economic geographies in the North West have significantly increased their productivity rates during this period. Leading the way are the Manchester (+34%), Blackburn with Darwen (+34%), and Sefton (+37%). Given Manchester's pivotal role in the Greater Manchester city region, this substantial growth is not surprising. Sefton is home to the Port of Liverpool, and maybe more of a surprise, given the performance of the overall Liverpool region, but highlights the importance of this unique asset. Sefton is also within reach of Liverpool City Centre. Although Blackburn experienced strong growth, it still remains 23% below the UK average. And its starting point in 2004 Blackburn's productivity was significantly lower than the majority its Northern counterparts. This is a similar story for Darlington which appears as a positive outlier also however this might also be largely accounted for by a significantly low starting point in 2004. It is apparent from the data that, Calderdale and Kirklees, East Lancashire, and North and North East Lincolnshire along with other parts of Greater Manchester performed above average relative to their Northern counterparts. As will be discussed later, the performance of these areas could be representative of pockets of productivity progress which extend beyond Greater Manchester. Conversely, six of the North's ITL3 regions experienced a decline in productivity between 2004-2022. Some of the more notable areas which experienced a decline are Liverpool (-5.7%), North Yorkshire CC (-1.4%) and York at (-0.35%).

Meanwhile, the central box in Figure 4 displays the distribution of the central half of the subregions it spans from around 5% to 20%. The median of these values is 11% and is represented by the horizontal line across the box. At least half of the subregions therefore experienced productivity growth below 11%.

To understand the picture further, we decided to look at the performance within three of the city regions within the Northern Powerhouse megaregion.

Greater Manchester

The Greater Manchester Combined Authority was the highest performer in terms of productivity growth looking at functional economic geographies across the North, experiencing a 26.4 per cent increase in productivity up to 2022 (see Figure 2 above).

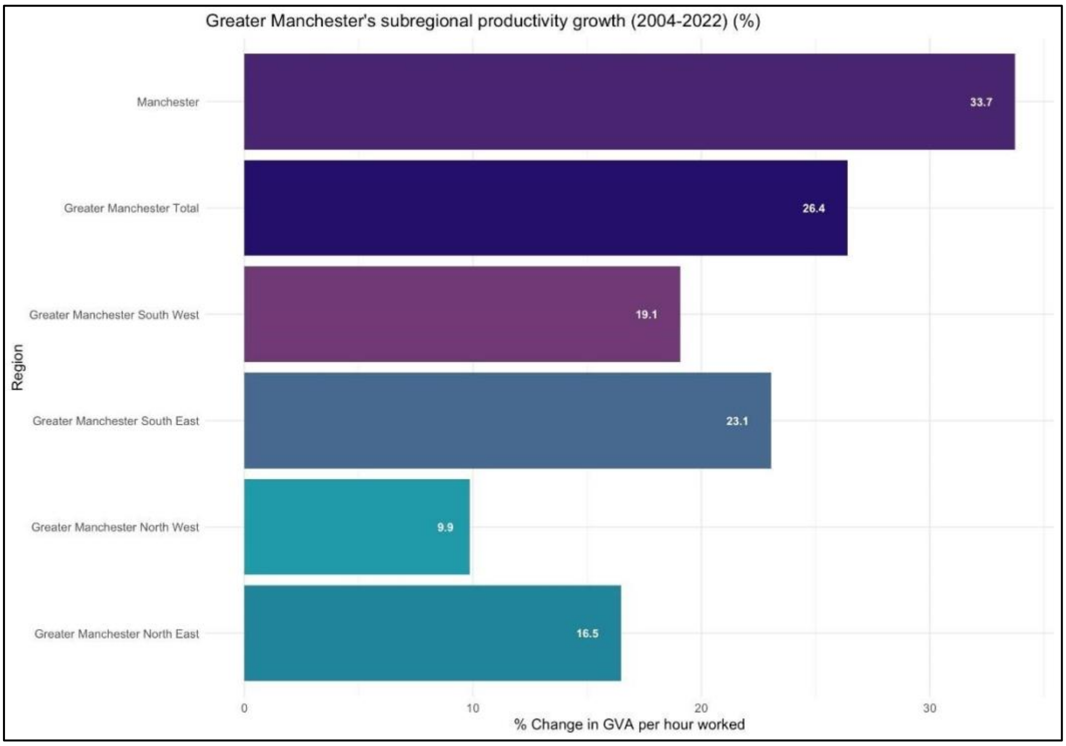

Figure 5 Growth between 2004-2022 in Greater Manchester's ITL3 subregions

Last year MetroDynamics undertook analysis of the trends in the different economic geographies within Greater Manchester. These updated figures do show similarity in the trends first identified in that work, notably the North West quadrant which has underperformed over the last two decades and has the worst transport connectivity of the conurbation (being outside the Greater Manchester tram network).

However, the latest data, suggests that growth has bucked this trend, with the North West of Greater Manchester showing the highest rate of growth since 2019 outside of Manchester city centre. This could be seen as a counter to the theory put forward about the impact of the tram network.

There are two potential encouraging explanations that are worth considering beyond it just being a possible random countertrend period; on one hand, it could be the case that in fact there is another explanation beyond transport, such as a differing mix in sectors, which has had an impact in recent years. Alternatively, that the delayed electrification of the line to Bolton, which is part of the quadrant, and the Leigh Guided Busway which have been completed in the period immediately preceding this uplift. This latter explanation is an extension of the previous tram hypothesis. In its defence, compared to the first tram line to Bury, completed decades ago, the more recent time horizon of projects in the North West quadrant makes this line of reasoning consistent with the timing of events.

The Humber

The Humber, which includes the city of Kingston upon Hull, East Yorkshire and North/North East Lincolnshire on the South Bank is very different from Greater Manchester. They represent the two extremes of the continuum of the travel to work areas across the North. The former, a traditional industrial city and surrounding mill towns which have been transformed by city centre led regeneration and a knowledge intensive economy with a concentration of universities and knowledge intensive businesses. The latter, the UK's largest carbon intensive industrial cluster with significant ports servicing the wider North, not least nearby cities like Sheffield and Leeds.

The productivity growth of the wider region stands at 20% with North and North East Lincolnshire surpassing this at 25%. Meanwhile, Kingston Upon Hull increased its productivity by 17.9%. The lowest performer of the region is East Riding of Yorkshire whereby productivity increased by 8.3%.

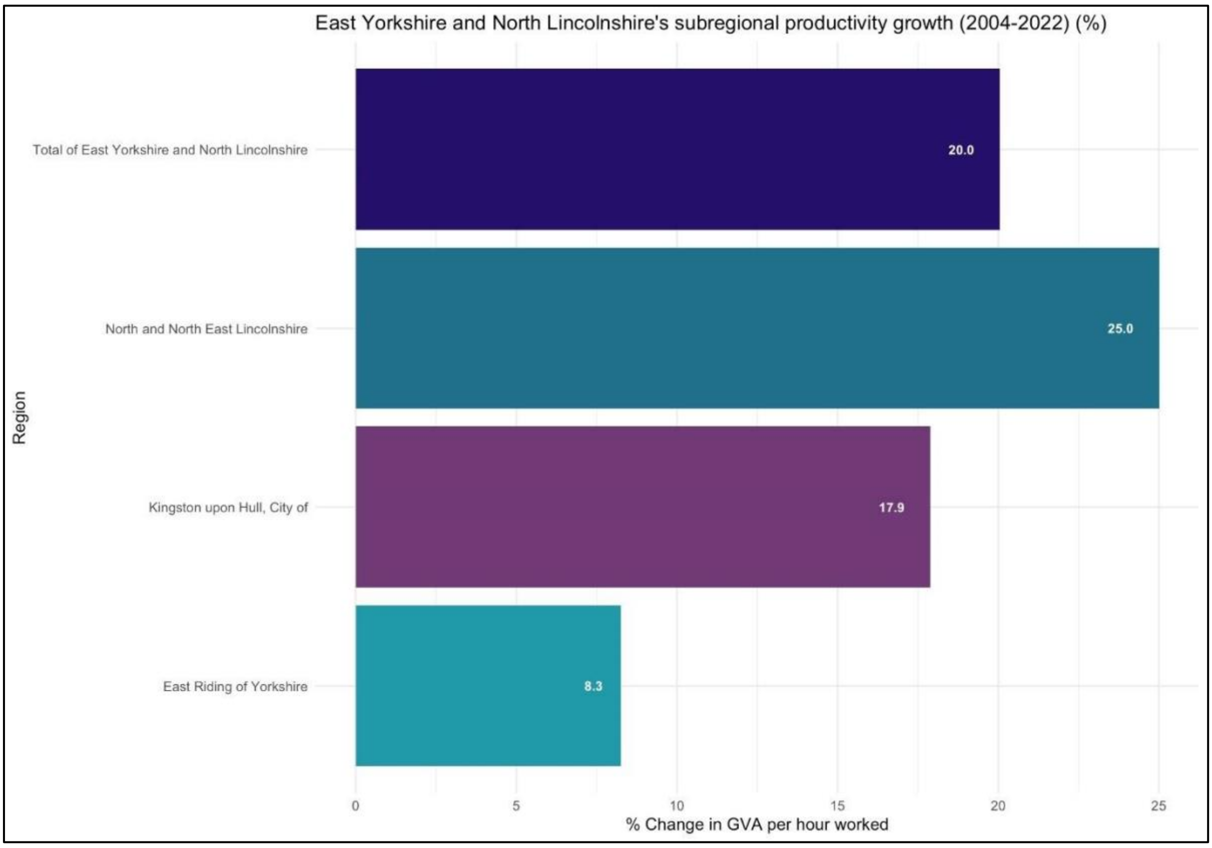

Figure 6 Growth between 2004-2022 in East Yorkshire and North Lincolnshire's ITL3 subregions

The position of the Humber region, with strong productivity growth overall, is based on a different economic model to Greater Manchester. It is the most carbon intensive industrial cluster in the UK, including on the south bank the Scunthorpe steel works and Phillips 66 oil refinery, as well as growing importance of Grimsby as a base for servings and maintaining offshore wind turbines. On the North bank, Green Port in Hull is home to the Siemens Blade factory which is an example of the UK capturing a supply chain opportunity in the Net Zero transition.

Under Lord Haskins' leadership, there was a strong business led consensus on the needs and opportunities for the Humber region. However, some of the Local Authorities have on the south bank in recent years favoured a political alliance amongst fellow local Conservative leaders within Lincolnshire; despite the county as a whole sharing little functional economic geography. This led to the winding up of the Humber LEP which disrupted previous successful efforts at public sector convening an integrated economic strategy.

However, the Humber Freeport and Humber Energy Board, both business led, have been established despite these local political choices. In many ways, the approach of these businesses has mirrored the real estate and wider business people in Greater Manchester under the leadership of the late Sir Howard Bernstein. However, in stark contrast, this Humber example required individuals to step outside traditional local government to work in this way, whereas in Greater Manchester local authority and business leadership has and remain closely united, through previously the Local Enterprise partnership and its successor, the GM Business Board.

Looking forward, the recent cross-party consensus between local leaders on the North Bank of the Humber to work together, one Conservative and the other Liberal Democrat controlled, is rather encouraging, and not surprisingly been so broadly supported by business in response to their devolution proposals when consulted on. Also as result it is attracting higher levels of responses when compared with previous similar consultations. There is a need for the Mayoral model with urgency to be implemented with the Metro Mayor election next May. The legacy of Humber success over the last two decades, now supported by some independent data suggests it must be based on the genuine economic geography if the previous efforts of pan Humber working under Lord Haskins are any guide, and current business led partnership delivery, is not to be undermined.

The Humber

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West Yorkshire

The conurbation, centred around Leeds and Bradford, has the third highest productivity growth rate in the North.

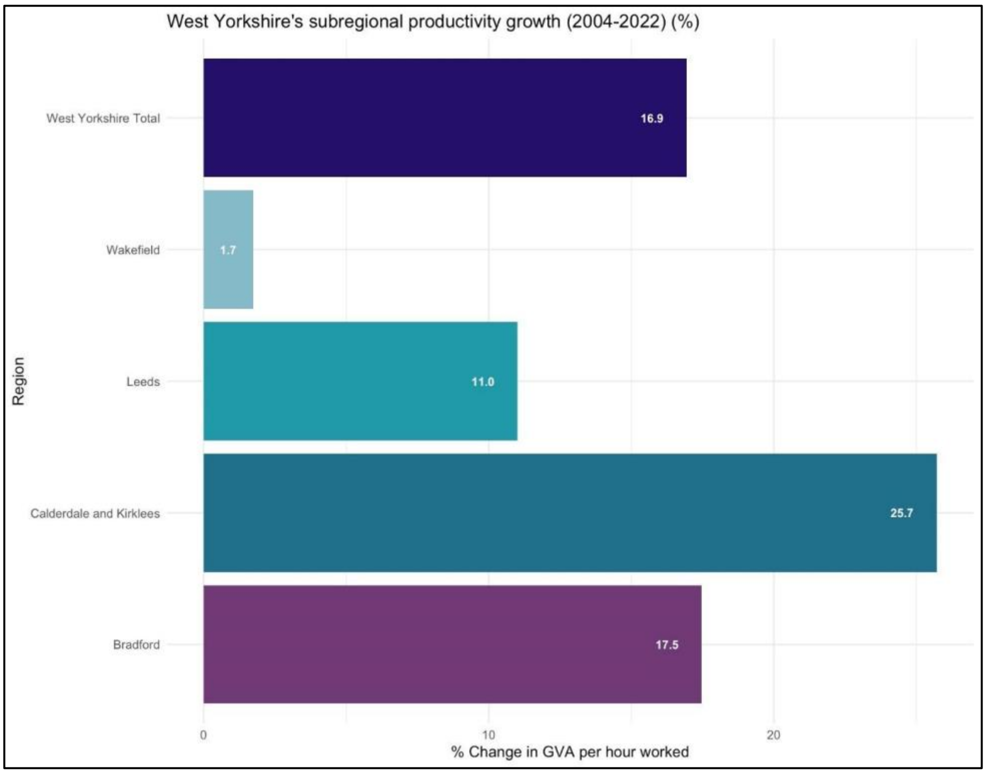

Figure 7 Growth between 2004-2022 in West Yorkshire's ITL3 subregions

The most notable trend in West Yorkshire is that two subregions, Bradford and the two neighbouring authorities of Kirklees and Calderdale, have outperformed the wider West Yorkshire average – the latter dramatically so. In fact, this subregion neighbours significant parts of the Greater Manchester conurbation and its performance exceeds all but Manchester City in that city region.

As argued by NPP's Chief Executive in this month's Journal of Urban Regeneration & Renewal one key statistic which underpinned the Northern Powerhouse Rail business case throughout its development is that currently there are only 10,000 people in the North who can reach four major Northern cities and Manchester Airport in under an hour. They live in and around Huddersfield town centre, the largest town in Kirklees. Recorded patronage at North TransPennine rail stations, enabling access to the Kirklees local authority area's largest concentrated population centres, increased by 140 per cent between 2002–03 and 2010–11, and in the decade running up to 2013, Huddersfield saw the largest growth in usage of all the major railway stations in the North.

This evidence suggests further support for the thesis that the proximity with access by public transport to a number of major cities including Manchester, Leeds and Bradford, rather than only one, is one factor that may be responsible for this productivity growth improvement. And of course, many areas of the South East would appear to be strong beneficiaries of this, given their geographic and transport links to London.

/07. Conclusion

This paper has examined regional productivity growth trends in the UK between 2004-2022, using the Office for National Statistics' Subregional Productivity dataset's chained volume measure of GVA per hour to ensure accurate, inflation-adjusted analysis. Overall, our research showed that whilst London remains the most productive regions, its growth rate has slowed, suggesting a deceleration in our capital's economic growth that must be addressed. There have been some signs of improvements within the North, with the North East and North West outperforming English average productivity growth. Within larger urban areas, Greater Manchester leads the North's growth, however growth in West Yorkshire and East Yorkshire and North Lincolnshire also showed promise. Similarly, in West Yorkshire, Bradford and Kirklees and Calderdale outperformed their regional average growth working towards convergence within this city region with Leeds and Wakefield (which had previously been further ahead in absolute terms).

Despite these hopeful signs, many Northern regions lag behind the national average, 52% of the North's ITL3 subregions underperformed when compared to England's average productivity growth, the lowest of which was North Yorkshire. Hopefully this report gives some objective data and evidence about overall trends in the North, highlighting the better improving areas, and discussing some of the likely reasons for their improvement. If lessons can be learned by both those locally as well as decision makers in Whitehall, more subregions of the North - and indeed elsewhere can benefit from their local assets thereby helping to secure long-term economic growth for regions that have been left behind, and therefore boosting the economic growth performance of the UK.

Avenue for further research

This paper has predominantly analysed long term growth in the chained volume measure of GVA per hour the reasons for which were set out in the methodology section of the paper. The data is indexed to 2019 so we can assess and compare productivity growth amongst regions. However, it doesn't inform us on where a subregions productivity ranks alongside other regions in constant prices £.

Due to the effect of price changes and inflation, absolute levels of productivity aren't a robust form of data to compare across regions over time. Therefore, an avenue for further research that would be useful to this discussion is to adjust for inflation through tools such as the relative regional consumer price index. However, the data as it currently stands is not up to date enough to do so.

The value of having this data at a time series level which is methodologically sound is worth exploration. It would allow us to better compare regions and obtain a benchmark of how they should be performing, it would enhance evaluations of the impact of different economic models and place-based policies between and within regions, along with a clear identification of outperformers and underperformers. Given this papers discussion around the productivity of subregions such as Greater Manchester, East Yorkshire and North Lincolnshire, and North Yorkshire we have produced three figures which demonstrate the value of this and the potential insights that could be discerned.

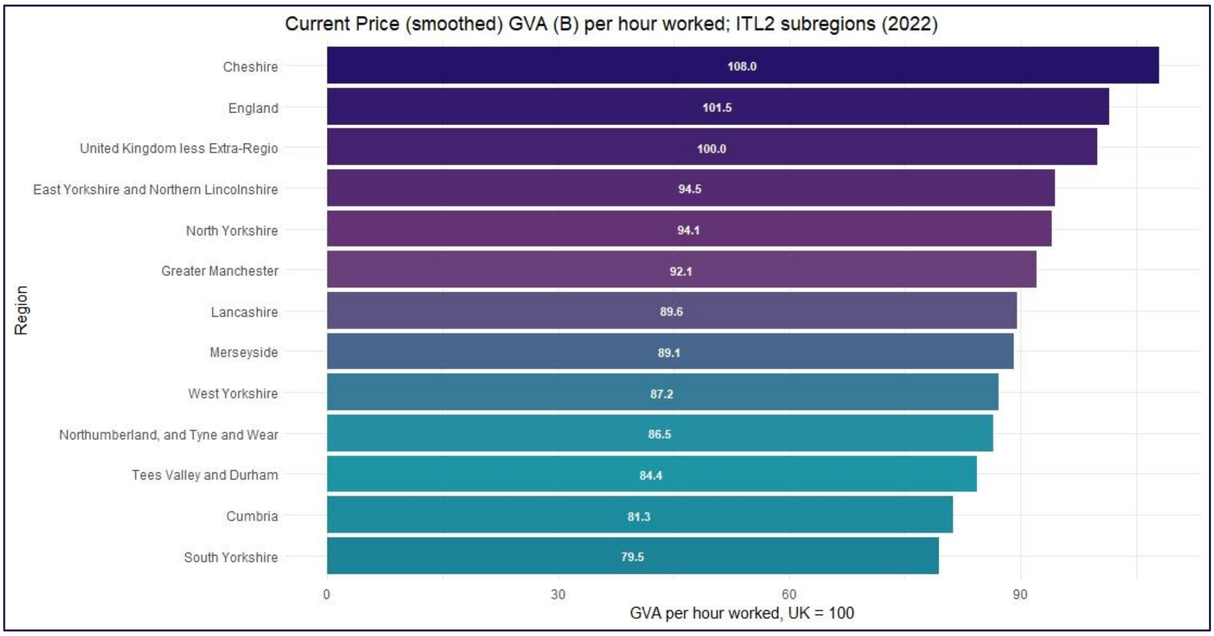

Figure 7 Current Price GVA per hour relative to the UK average

Figure 7 shows GVA per hour relative to the UK average. A value above 100 signifies productivity above the UK average, while a value below 100 indicates productivity is below the UK average. Notably, only one area of the North which has productivity above the UK average – Cheshire. Interestingly, the next highest are East Yorkshire and North Lincolnshire, North Yorkshire and then Greater Manchester in terms of absolute of GVA per hour. Figure 4 in this paper showed that North Yorkshire CC experienced a decline in productivity by -2.3% between 2004-2022. One might infer from this that productivity is poor relative to the rest of the North. However, the current price data in Figure 7 provides context, illustrating that despite a poor growth rate its absolute productivity is relatively high. This suggests that while a declining growth rate is concerning, North Yorkshire still ranks high in terms of overall Northern productivity levels.

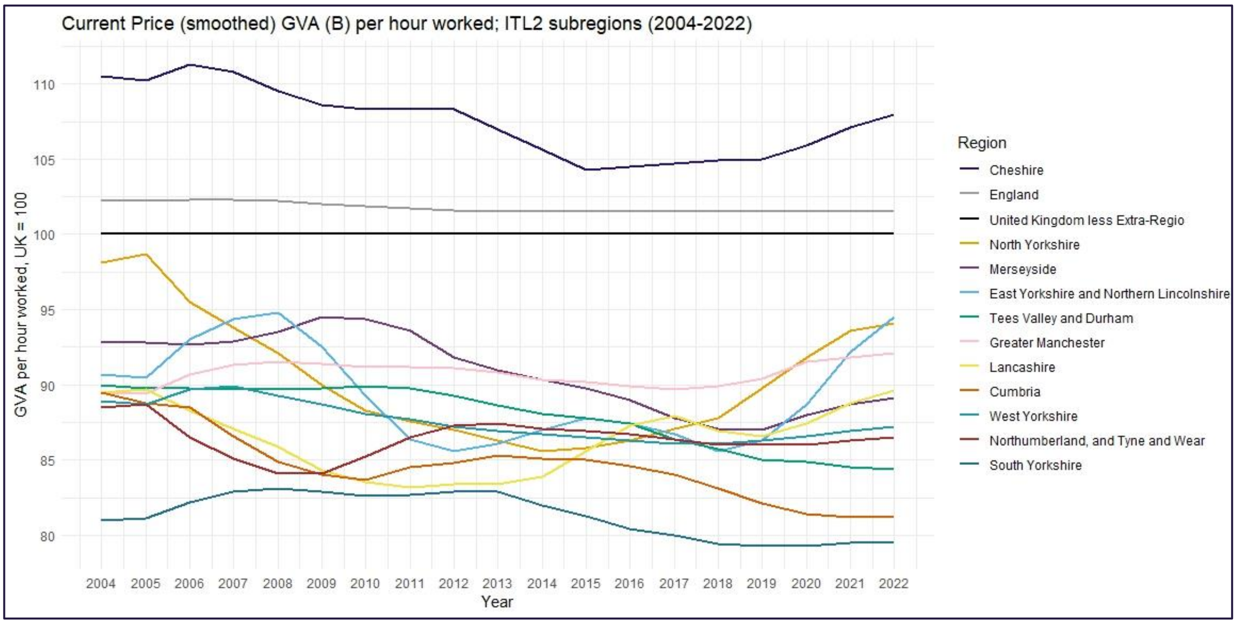

Figure 8 Current Price GVA per hour relative to the UK average over time 2004-2022

Figure 8 maps this relative performance over time. This should be treated with caution due to the aforementioned methodological issues. However, this graph illustrates that Greater Manchester has narrowed the gap between itself and the UK average. However, there are two areas which surprisingly surpass Greater Manchester and they are North Yorkshire including York and East Yorkshire along with North Lincolnshire.

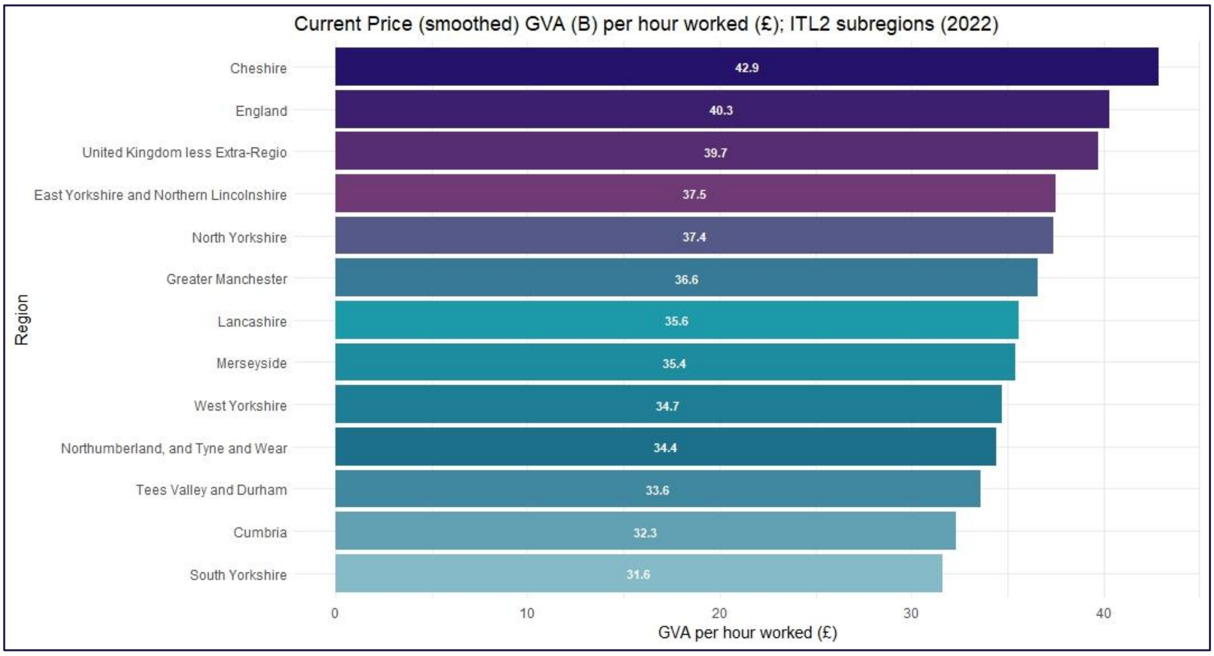

Figure 9 Current Price GVA per hour relative to the UK average in £ (rather than indexed to the UK average)

Figure 9 is a recreation of Figure 7 but shows the £ value of GVA per hour rather than as an indexed value to the UK average.

Overall, this experimental analysis has illustrated the value of having productivity data in constant price terms. The performance of regions such as East Yorkshire and North Lincolnshire, Greater Manchester, and North Yorkshire including York is one which merits further research.