



### Productivity Commission - Sizing the Productivity Problem

The Midlands Engine is a pan-regional body that brings together information and partners for the economic and social good of the region. We add value and drive prosperity. The Midlands Engine Observatory is the UK's only pan-regional economic observatory which provides substantive data to support evidenced led policy making for our region.

The Midlands Engine is a vital component of the UK economy - the biggest regional economy outside of London and the South East providing £246bn in GVA or 14% England total and 20% of all exports. Developing a detailed comprehension of contemporary evidence of the challenges across our economy underpins the work we deliver through the Midlands Engine Observatory.

Is productivity measured correctly in the UK, and is it measured differently across countries?

There are significant limitations with GVA as a sole productivity measure – both in terms of intrinsic reliability and validity sub nationally. Traditional GVA-based measures need to be augmented by quantitative and qualitative 'inclusive', 'green' and 'good' growth understandings. However, it is acknowledged that currently GVA is the easiest way to measure a local economy and its productivity – and it does serve a purpose. Future, more holistic productivity metrics should be developed and standardised by relevant agencies (such as ONS) in order to bring in wider determinants of wealth. This broader measure of GVA considers the complexities of society that act as a barrier to growth. It also ensures that growth is equitably spread across the region and the UK, ensuring Levelling Up is successful and tangible, as well as tackling the climate crisis.

Economic and community culture should also be considered. Economic culture comprises the traits relating to factors such as entrepreneurship, innovation, and risk-taking. Community culture comprises the broader societal traits and relations that underpin the 'way of life' within places, which adds to the attractiveness of place and emphasises community assets, cultural assets and access to green spaces.<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Report of the West Midlands Productivity & Skills Commission, 2017, <u>ps-commission-final-report.pdf</u> (<u>wmca.org.uk</u>)





How does the UK's productivity compare on a regional basis? Why do some regions have better productivity growth than others?

The Midlands consistently underperforms against the UK average on productivity and GVA. Productivity varies within the region. There is no one reason as to the regional and inter-regional disparity.

Productivity is the key factor explaining the GVA per capita gap in the Midlands. Productivity performance compared to the national average improved slightly post-recession but has remained relatively static since 2013. By 2019, GVA per employee in the Midlands was £51,119, a shortfall of £9,582 with the England figure (£64,701). If we compare the Midlands with the rest of England (including London), GVA per capita is only 79% of the benchmark. This gives a GVA gap of £82.3bn.



These figures mask variable productivity within the Midlands though. Three LEP areas (Coventry and Warwickshire, Greater Birmingham and Solihull, and Leicester and Leicestershire) have higher productivity than the Midlands average and have done so for the last two decades. The gap between high and low productivity areas in the Midlands has progressively widened in some areas over the last twenty years.

However, the Midlands has seen growth across the economy, in terms of output and productivity. Between 2009 and the pre-Covid period, Midlands Engine GVA grew faster than the rest of England and substantially faster than England when London is excluded. Based on 2019 prices, output per hour worked in the West Midlands region was £31.80 – an increase of 2.0% (+£0.61) since 2018, and £31.02 in the East Midlands, an increase of 1.6% (+£0.50) since 2018.

In order to fully close the productivity gap the Midlands' productivity performance would need to increase at a rate of 2.4% p.a. to reach the UK average by 2020.

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This shows that even though an area may be experiencing economic growth, it can still be lagging against UK and international comparisons. While it is important to recognise the inter-regional differences in productivity and prosperity. Specific interventions are required from central government in multiple policy areas to bring all regions and each area within those regions to the UK average, truly driving levelling-up.<sup>2</sup>

### Why productivity differs

The Midlands suffers from issue that are prevalent across the nation: skills levels and range of skills; business environment; infrastructure (digital, energy & transport); innovation; inward investment; inclusivity; rural sparsity; inequality and wellbeing; as well as governance and institutions also affect productivity levels; a large tail of poor quality firms; a lack of investment in R&D and pockets of low investment; a large number of zero-hour contract firms and start-ups; a large number of home based SMEs where measurement is difficult; large services and creative services sectors with complex measurement difficulties; the large public sector; and that up to 30% of international differences in productivity stem from management differences.<sup>3</sup>

However, there are factors that are specific to the Midlands, such as structural inequalities. If earnings are taken as a proxy for productivity, there are interregional differences, with the highest and lowest earning areas in Nottinghamshire being less than 20 miles apart. Uneven travel to work areas due to long-term structural differences such as poor public transport connectivity entrench earning differences.<sup>4</sup> Low levels of public transport connectivity damages access to jobs and retards productivity growth.<sup>5</sup>

Investment is another concern, with investment by existing firms in fixed capital expenditure per capita (which is key to commercial efficiencies) between the Midlands and the England minus London average widened and remained persistent between 2006 and 2012, with a slight narrowing of the gap since then.

Poor road and rail transport is a well-documented issue across the region, especially in terms of eastwest travel. The Midlands has suffered from low levels of transport investment over a prolonged period; with the East Midlands the lowest of all regions at £268 per head in 2018-19.<sup>6</sup> This is acting as a drag on business performance. International airports are an important asset for the Midlands, but there are concerns regarding road/rail connectivity to airports and insufficient flights to key growth markets. There is little to no opportunity to increase real freight because the transport system is at capacity, limiting exporting growth.<sup>7</sup>

### National Trends

Government decisions and nation-wide trends impact productivity. Brexit has reduced the historic supply of low-cost labour which means productivity seems to have increased as only high paying and

<sup>&</sup>lt;sup>2</sup> Midlands Engine Independent Economic Review, 2020, <u>Midlands-Engine-IER-Full-Report.pdf</u>

<sup>&</sup>lt;sup>3</sup> Midlands Engine Independent Economic Review, <u>Midlands-Engine-IER-Full-Report.pdf</u>; City REDI Blog, University of Birmingham, 2020, <u>UK Regional Productivity Variations and What Might be Driving These – City</u> <u>REDI Blog (bham.ac.uk)</u>; Nigel Driffield, Productivity Drivers and Differences Across the Midlands

<sup>&</sup>lt;sup>4</sup> Nigel Driffield, Productivity Drivers and Differences Across the Midlands

<sup>&</sup>lt;sup>5</sup> Network Effects, <u>network effects.pdf (ukonward.com)</u>

<sup>&</sup>lt;sup>6</sup> https://www.bbc.co.uk/news/uk-england-50592261

<sup>&</sup>lt;sup>7</sup> Midlands Engine Independent Economic Review, <u>Midlands-Engine-IER-Full-Report.pdf</u>

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high productivity jobs remain. However, it reduces productivity due to frictional trade losses and gaps in supply from care to HGV drivers. The region is likely to see a dip in productivity as supply chain disturbances, hidden by the slow demand of the pandemic, are coupled with rising prices and wider disruption affecting the Midlands' larger than average manufacturing base. – representing 20% of the industry's UK workforce. The number of unemployed is likely to increase due to the end of furlough and firms struggling with costs, reducing productivity further. However, low-productivity and lower skilled work in some areas enables high-productivity work in others.<sup>8</sup> This means that some amount of low-skilled, low-productivity is necessary.

Government spending in the form of Structural National borrowing and spending, monetary policy, and property asset booms built on leverage and cheap money pull future gains forward into the present. But this reverses eventually over time as debt is repaid. The cost of bringing these gains forward early will rise if interest rates increase. This contrasts with high state spending reduces productivity growth. Calculations show that the productivity growth in Government spending had been -0.5% p.a. for 3 years in a row. Since Government spending was 45% of the UK economy, this has held back the total UK productivity growth. The Government must consider the effects of its own economic decisions of productivity and use its own spending to increase national and regional productivity.

*How does the UK's productivity compare on a sectoral basis? Why do some sectors or firms have better productivity growth than others?* 



Crucially, it is the nature of activities and productivity within sectors that accounts for the majority of the change in productivity, rather than sectoral composition of the Midlands economy<sup>9</sup>. 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). Indeed, some LEP-level evidence recognises that the productivity gap is unlikely to be closed by efforts to (re)shape

<sup>&</sup>lt;sup>8</sup> Nigel Driffield, Productivity Drivers and Differences Across the Midlands

<sup>&</sup>lt;sup>9</sup> Midlands Engine Independent Economic Review, Midlands-Engine-IER-Full-Report.pdf



industrial structures, and suggests that the focus should be on under-performing firms within certain sectors.

An analysis for the Midlands shows that almost all of the productivity gap is due to productivity within sectors rather than sectoral structure. The key messages are as follows:

- If the Midlands economy matched the England minus London sectoral structure (i.e. if the proportion of jobs in each sub-sector in the Midlands mirrored the benchmark, but Midlands productivity within sectors remained constant) the productivity gap would actually widen. This is because the Midlands employment share in comparatively high productivity manufacturing sectors would decrease. Under this scenario, the Midlands productivity gap in 2017 would increase from 94% to 93% with England minus London.
- If productivity performance of each sector in the Midlands matched the England minus London productivity for each sector (but the Midlands sectoral composition remained the same) the productivity gap would almost completely close (to 99% in 2017).

Attracting investment from productive firms and boosting the innovation, export and performance of existing firms is therefore critical to the Midlands closing the productivity gap; rather than aiming to completely re-shape our industrial make-up. Local powers through the Midlands Engine, LEPs and Combined Authorities / Local Authorities must be given the power to target any investment and policy.

Are the higher-performing companies a "tightly-knit bunch" geographically and sectorally, and how have they bucked the UK trend?

There is a degree of geographical concentration for high productivity firms, but there is significant variation between firms, even in high productivity sectors.

In the Midlands, urban centres with universities and high productivity sectors are more productive. Three LEP areas (Greater Birmingham & Solihull, Coventry & Warwickshire and Leicester & Leicestershire) have consistently outperformed the Midlands average productivity levels. These areas have manufacturing capacity, particularly in automotive, aerospace and space technologies, energy and low carbon, medical technologies, and as well-regarded universities. This shows that currently, only a small number of the region's sectors have high levels of productivity, and these are not equally distributed.

High performing areas have an over-representation of highly skilled people (and NVQ4+ skills are increasing faster than the Midlands average), a higher share (and growth) of employment in knowledge-intensive businesses and relatively high productivity sectors, high growth firms, and strong performance on innovation measures.

However, the region's success stories are concentrated in a small number of sectors and firms. This has led to productivity growth in areas such as Coventry but leaves the area vulnerable to even small changes in global demand. COVID has disproportionately affected internationally facing areas. Three of the top 10 districts nationally affected by loss of output due to COVID are within the Coventry and Warwickshire LEP area.<sup>10</sup> This is partly due to the reliance on specific supply chains, where changes in those supply chains most affected SMEs who had no other outlet for their products.

<sup>&</sup>lt;sup>10</sup> Nigel Driffield, Productivity Drivers and Differences Across the Midlands

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Through increased finance, skills training and digital deployment, other sectors should increase productivity, with learnings from productive sectors being shared. Firms, especially SMEs, should be supported to diversify their markets and respond to market changes.<sup>11</sup>

What, if anything, is preventing lower-performing companies from learning how to be more productive from the higher-performing companies?<sup>12</sup>

Innovation is unequally distributed due to the concentration of funding. Innovation is poorly distributed across and within sectors, and lower-performing companies struggle to find the skills to capitalise on new learning.

Where innovation and productivity gains come from large companies receiving inward investment, there are knowledge spillovers. There are absorptive capacity issues across the business base and within SMEs. This is due to skills shortages, personality and cultural traits, the variable national business support offers and a lack of effective leadership to encourage technology diffusion.<sup>13</sup> A good planning process, a positive culture, effective leadership and management, as well as moving up the value chain and embracing digitisation have all been shown to increase productivity. The productivity of professional and financial services links to under-performance in skills and innovation in the sector, particularly in relation to digitisation.<sup>14</sup> The example of professional and financial services reflects the needs of many other sectors around digitisation and innovation.

FDI is overly concentrated in a small number of firms, limiting opportunities for lower-performing companies to gain investment. The Midlands is home to nationally significant clusters and major world class assets and "innovation anchors". Large amounts of FDI have been invested in some of the region's high productivity priority sectors, with the region securing 15% of all FDI projects in the UK 2019/20.<sup>15</sup> Midlands Engine businesses invest 16.5% of business R&D in the UK, whereas government investment in R&D to the Midlands Engine is just 8% of the UK total: £989m.<sup>16</sup> The Midlands should receive a fair proportion of R&D investment, and this should be more equally distributed between firms in the Midlands. Where needed, smaller firms may benefit from working with more experienced firms or universities to take on R&D projects.

The results of R&D and innovation are rarely widely distributed to other businesses. Businesses struggle to engage with universities and each other. R&D activity tends to be very concentrated in a small number of highly innovative firms and leading research institutions in the Midlands. Some of these high-quality innovation assets are not effectively "joined up", performance in securing public sector innovation funding is variable, and businesses cited difficulties engaging with the research base quickly and efficiently. Diffusion of knowledge/innovation across the wider business base appears to be slow. The lack of a clear gateway into universities was seen as a major obstacle for engagement for many businesses interviewed. A small number of businesses also noted the difficulties in exploring opportunities for cross-sector synergies and innovation, and the lack of support/facilitation in this respect across the Midlands.

<sup>&</sup>lt;sup>11</sup> Midlands Engine Independent Economic Review, <u>Midlands-Engine-IER-Full-Report.pdf</u>

<sup>&</sup>lt;sup>12</sup> Midlands Engine Independent Economic Review, <u>Midlands-Engine-IER-Full-Report.pdf</u>

<sup>&</sup>lt;sup>13</sup> Spillovers from inward investment in the West Midlands – a comparison with the rest of the UK, Nigel Driffield and Katiuscia Lavoratori, Warwick Business School, University of Warwick

<sup>&</sup>lt;sup>14</sup> Midlands Engine Independent Economic Review, <u>Midlands-Engine-IER-Full-Report.pdf</u>

<sup>&</sup>lt;sup>15</sup> Spillovers, Driffield and Lavoratori

<sup>&</sup>lt;sup>16</sup> <u>Gross domestic expenditure on research and development, by region, UK - Office for National Statistics</u> (ons.gov.uk), <u>Business enterprise research and development - Office for National Statistics (ons.gov.uk)</u>





There is a need for further funding, support, and coherent support to allow businesses to innovate. The Midlands should receive a reflective proportion of the funding for the innovation in the region.<sup>17</sup>

#### Skills<sup>18</sup>

SMEs and large companies cannot find staff with the skills they require. This suggests a discrepancy between skills provision, career advice and the job market.

Skills most commonly relating to STEM skills and digital, such as data analytics, computation, software engineering, 3D printing, CAD, graphic design, are in short supply. The West Midlands Combined Authority area is one of the largest centres for digital and tech enterprises outside of London, but almost three-quarters of large employers and half of SMEs in the area report digital skills shortages, and the pace of technological change is making it difficult for skills providers to keep up. There are concerns of skills mismatch, where the skills being taught are not those most needed by industries.

Limited awareness of career opportunities amongst young adults coupled with low work readiness could reflect a gap in the quality of careers advice and guidance. Work readiness of college/university graduates is a prominent issue.

Skills poaching and pay competition is an issue. SMEs are being priced out of the market by large global firms in the area who can pay more for skilled staff. This is hindering the growth of some firms.

Skills is a significant concern for the region. The Midlands requires an extra 378,755 people to achieve an NVQ 4+ to reach the UK average, and 7.6% of the working age population has no qualifications, compared to 6.6% nationally. There is a significant need to upskill those at risk of redundancy due to automation or the end of the furlough scheme. Higher graduate retention in the region would enable SMEs to draw staff from a wider pool, easing the effect of skills poaching, and enable the transition to a productive green economy.

How does the productivity of large companies compare with SMEs?

SMEs have lower productivity than large firms due to a lack of funding, skills, and lower exports, limiting their growth. Low investment by employers in skills and training is a challenge. EU funding given to help solve this issue has not been sufficient, and uncertainty about the future of upskilling projects is unhelpful given other challenges around supply chains, COVID-19, the EU Exit, and climate change.

SMEs have found it difficult to secure business loans to finance growth. Access to finance for innovation is a known issue: businesses described the "valley of death" in the early stages of R&D, as well as a "second valley of death" where a significant amount of capital is required to take a new product to market.

Large companies have benefits of scale and economy that smaller firms do not. Large companies tend to export more, whereas smaller firms tend to have lower levels of export trade. Even smaller businesses who do export could increase their exports and engage in new markets. Inward investment tends to focus on larger companies. Inward investment tends to increase the number of jobs available OR productivity levels, taking more opportunities away from SMEs, showing the importance of SME access to investment and finance.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Midlands Engine Independent Economic Review, <u>Midlands-Engine-IER-Full-Report.pdf</u>

<sup>&</sup>lt;sup>18</sup> Midlands Engine Independent Economic Review, 2020, <u>Midlands-Engine-IER-Full-Report.pdf</u>

<sup>&</sup>lt;sup>19</sup> Midlands Engine Independent Economic Review, 2020, Midlands-Engine-IER-Full-Report.pdf



How has the Covid-19 pandemic affected the UK's productivity performance? 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?

Digital connectivity is essential to enable modern business practices, like the growth of home working, but connectivity is poor across the region. Digital connectivity is variable across the Midlands in both rural and urban areas which impacts home-working and business activities.<sup>20</sup>

Home working will have a significant effect on the Midlands region. The West Midlands is expected to have 54.8% of workers on site, leading to a small net gain of £19m in earnings for the region, and a 0.03m gain in employees. The East Midlands is expected to 57.1% of jobs that require being onsite, leading to a net gain of £50m for the region in earnings and a gain of 0.07m people through home working.<sup>21</sup>

This shows the need for investment in digital connectivity across the regions urban and rural areas to allow financial growth for Midlands companies. Poor digital connections dramatically reduce innovation and productivity.

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<sup>&</sup>lt;sup>20</sup> Midlands Engine Independent Economic Review, 2020, <u>Midlands-Engine-IER-Full-Report.pdf</u>

<sup>&</sup>lt;sup>21</sup> Zoomshock Dashboard — Metro Dynamics