



The Midlands' Productivity Challenge: Exploring the issues

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1. Introduction - Purpose of the paper

The purpose of this paper is to review the regional productivity performance of the Midlands, to present key metrics and discuss the drivers and drags on productivity. The paper aligns with the emerging research agenda of The Productivity Institute and to allows for comparisons with other key regions in England as well as the three devolved nations of the UK.

There are two alternative explanations for why a region underperforms on productivity relative to others. Firstly, the region has or attracts a preponderance of firms in low productivity activities. Secondly, comparing like with like, a typical firm in the region may have lower productivity relative to the same type of firm in comparable regions.

While there is certainly some evidence of the former, at least when comparing broad sectors, there is less evidence of the latter. However, a key phenomenon within the East and West Midlands regions is that one can say the same *within* these regions, i.e. comparing sub-regions or districts, and also within broad industrial sectors, and that may be a focus of subsequent work by The Productivity Institute, particularly as part of its Measurement & Methods theme.

It appears that productivity of the West Midlands has been subject to more study and certainly greater comment than that of the East Midlands. Since the inception of the West Midlands Combined Authority (WMCA) and the creation of the mayoral role, the West Midlands has instigated a Productivity and Skills Commission (PSC), a Leadership Commission, and a Land Commission¹. These are in addition to the development of a local industrial strategy and its associated evidence base, all of which have, at their heart, questions around productivity and, more recently, considerations about what has come to be known as 'inclusive growth'. In 2019, labour productivity, measured as output per hours, in the West Midlands was 11.1% below the UK average.

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¹ The West Midlands Local Industrial Strategy Document (https://www.gov.uk/government/publications/west-midlands-local-industrial-strategy) provides an excellent summary of the challenges in terms of converting innovation to productivity. The Science & Innovation Audit identified the WMCA as an innovative economy with a sophisticated and thriving innovation ecosystem. The region has high performing universities and Catapult centres, with a cluster of accelerators in GBSLEP. The region performs above average for Innovate UK funding awards, although there is a spatial imbalance within the region. Levels of collaboration for innovation, new to the market innovation, and R&D investment are moderate by UK standards and low compared to international competitors.

Although the West Midlands hosts well-known advanced manufacturing brands such as JLR, Aston Martin, and JCB, and has seen significant growth in the financial and professional services, the perception is that the region's productivity is some way below where it 'ought to be'. Indeed, if one considers the essential drivers of productivity, e.g., agglomeration, innovation, connectivity, firm start-ups, and experience effects, it becomes evident that the region's productivity could and should perform better than it does.

For the East Midlands, productivity was 13.3% behind the average UK productivity level in 2019. Perhaps due its more fragmented nature, the East Midlands has received less attention in terms of its existence as an economic entity compared to the West Midlands. This may be because East Midlands is less of an identifiable economic region with dedicated institutions, and rather covering a number of different LEP areas.

Current studies on productivity suggest that several issues affecting productivity across the UK are also apparent in the Midlands, though by varying degrees (see Appendix 1 for sources):

- a large tail of poor quality firms, in particular a large number of zero-hour contract firms and home based SMEs, for which measurement is difficult, and productivity can be low, because of limited economies of scale affecting their productivity.
- large services and creative services sectors, as well as a public sector with complex measurement issues.
- a lack of investment in R&D and pockets of low investment in capital equipment, and
- a weakness in management competencies accounting for 30% of international differences in productivity.

At the same our analysis also shows that some of the fundamentals for productivity, such as innovation, connectivity, business dynamism, inward investment, and exporting are relatively strong in the Midlands. Still, the Midland's overall productivity performance is below that of the UK and, across the region, performance is patchy.

The essential question therefore is why, given the relative strength of the fundamentals, and the fact that the region is home to a number of world leading companies, productivity performs relatively poorly? Our working hypothesis is that too many opportunities have been missed in past decades. These may be opportunities for capturing externalities in productivity, linking local firms to inward investors, and learning from exporting or through collaboration on supply chains. With the exception of Birmingham, the region's cities are small by global standards,

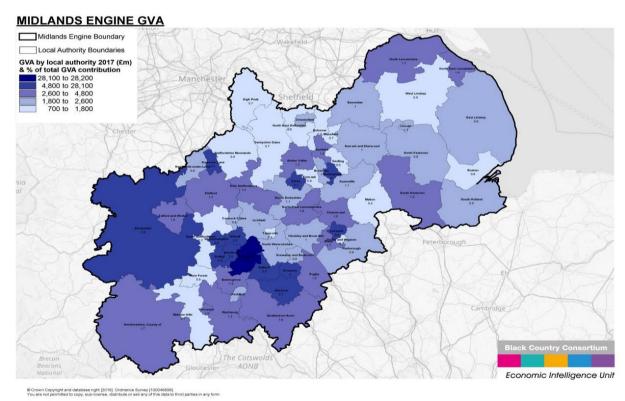
and not well connected with each other. Indeed, national and international connectivity is better than intra-region connectivity, which is too reliant on roads. In turn, underlying these issues are questions about management and leadership and skills. We also note the complex and convoluted set of institutions in the region, which certainly does not help. The focus of The Productivity Institute's Regional Productivity Forum for the Midlands should be on these issues.

2. Description of the region

There is a large amount of evidence concerning productivity, innovation, and skills in the Midlands in the public domain already. We have used this material to generate this paper, most notably from the sources listed in appendix 1.

The area covered by the Midlands Engine Region is depicted in Figure 1.

Figure 1 Midlands Engine Region and Differences in GVA 2017.



 $Source: \underline{https://www.midlandsengine.org/wp-content/uploads/2021/12/Midlands-Engine-QEC-March-120319-.pdf}$

As mentioned above, there are significant differences in institutional arrangements between the East and West Midlands. Some potential anomalies arise. For example, the West Midlands Combined Authority (WMCA) covers an area that is significantly smaller than the NUTS2 area more typically referred to as the West Midlands. While the WMCA covers the three main conurbations of Birmingham, Coventry, and Wolverhampton, accounting for a large proportion of the West Midlands' GDP, it is clear that a good deal of activity lies outside it. This also means that the area covered by the WMCA is much smaller and more focused on the three large conurbations than the area covered by the Regional Development Agency, Advantage West Midlands, which was subsequently replaced by LEPs.

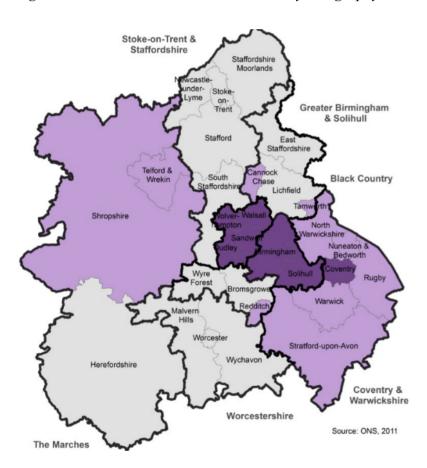


Figure 2 West Midlands Combined Authority Geography

In contrast, the East Midlands region is essentially a convenient label for what is statistical nomenclature rather than a coherent economic geography. The East Midlands includes the urban centres of: Nottingham, Leicester, Derby, Northampton, Lincoln and the counties of Nottinghamshire, Leicestershire, Lincolnshire, Derbyshire. Northamptonshire and Rutland.

DERBYSHIRE

NOTTINGHAMSHIRE

NOTTINGHAM

LINCOLNSHIRE

NOTTINGHAM

RUTLAND

NORTHAMPTONSHIRE

Northampton

EAST

MIDLANDS

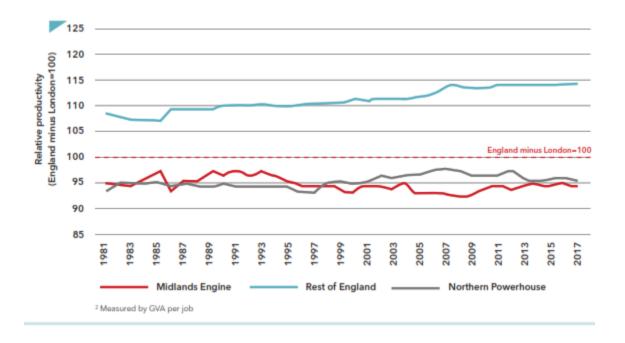
Figure 3 East Midlands Geography by County

3. Productivity, Earnings and Labour Markets in the Midlands²

There are four factors accounting for the gap in GDP per capita between the Midlands and England-minus-London as the benchmark. Two of these drivers – jobs per worker and working age population – are broadly in line with the benchmark and therefore have no explanatory power here. The employment rate, calculated as the ratio of the employed to the working age population, is another driver which contributes to the gap, in that the Midlands' employment rate was 97% of the England-minus-London average. However, productivity, the final driver, in the Midlands was 94% of the England-minus-London average (or 82% if we compare it to the rest of England including London). In some parts of the Midlands, productivity is lower still, and in some areas the gap has progressively widened over the last twenty years.³

² A detailed analysis of the differences between the East and West Midlands is available from the Midlands Engine Independent Economic Review (https://www.midlandsengine.org/wp-content/uploads/Midlands-Engine-IER-Full-Report.pdf) and its accompanying appendices.

³ More details are available at https://www.midlandsengine.org/wp-content/uploads/GVA-2021-ME.pdf



Source: Midlands Engine Independent Economic Review, 2020

The scale of the problem - an illustration from the WMCA region

- The West Midlands Combined Authority generates £100bn GVA (5% of UK economic output), achieving over 20% growth in the last 5 years. The Combined Authority provides 2 million jobs across a diverse range of sectors, including major multinationals and large numbers of SMEs, some of which fall within essential global supply chains.
- Prior to the pandemic GVA per hour was increasing by more than twice the UK's rate.
- Higher level qualifications are increasing faster amongst the workforce than the national rate.
- The youngest population outside London in diverse and stable communities.
- The West Midlands is the fastest growing UK region for goods exports.
- FDI projects have almost tripled since 2011/12.
- Good progress has been made on clean growth, with a 24% increase in economic productivity and 18% decrease in carbon emissions over 5 years.
- However, productivity is still more than 10% below the UK average. Solihull is by some distance the highest performing area, with Warwickshire well above the UK average. Otherwise, only Coventry is also slightly above the UK average.

Figures 5a and 5b show the stark differences in earnings across the region. Average hourly earnings for the UK was £15.18 per hour in 2020. In addition to the generally low levels of average earnings across the region, a notable aspect of the earnings distribution is the large differences in earnings across relatively small distances. Several districts in the East Midlands have earnings above the UK average. These include South Derbyshire, Broxtowe and Rushcliffe in Nottinghamshire, and Harborough and Blaby in Leicestershire. However, only two areas of the West Midlands, Solihull and Warwickshire, have earnings above the UK average.

At the same time, however, it is noticeable that several districts have average earnings of more than 10% below the UK average. Indeed, Herefordshire, as well as areas of North Nottinghamshire, North Derbyshire, and Lincolnshire have average earnings that are even below 80% of the UK average.

As is illustrated by the earnings data in Figures 5a and 5b, the differences across relatively small distances is also stark, with the distance between the highest and lowest earning areas of Nottinghamshire being less than 20 miles.

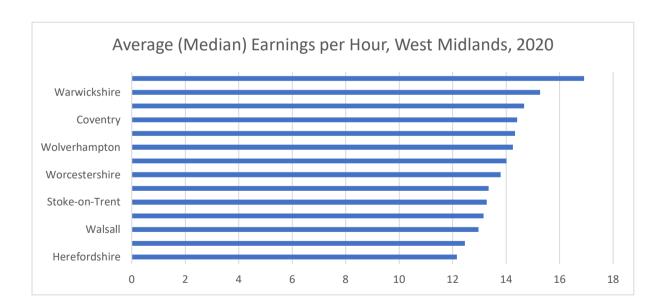
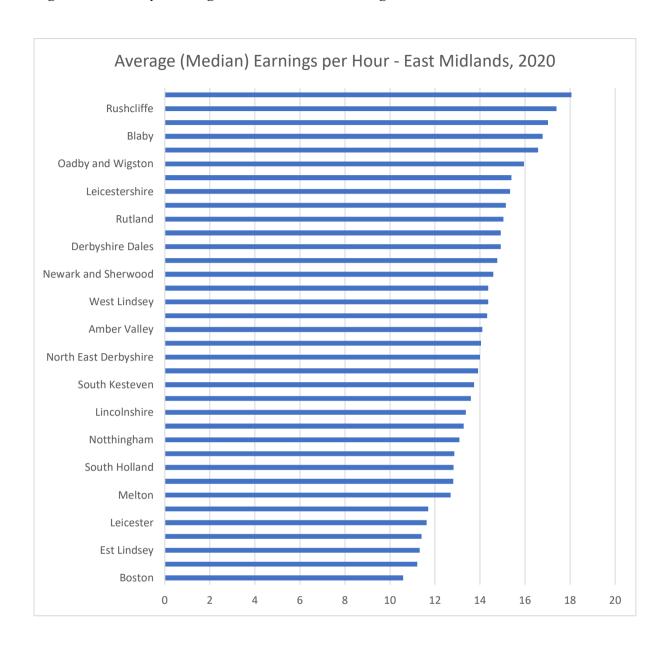


Figure 5a – Hourly Earnings in the West Midlands Region

Note: Hourly pay – excluding overtime – for full-time workers Source: ONS, Annual Survey of Hours and Earnings, NOMIS

Figure 5b – Hourly Earnings in the East Midlands Region



Note: Hourly pay – excluding overtime – for full-time workers

Source: ONS, Annual Survey of Hours and Earnings, NOMIS

55,000 Rest of England Coventry and Warwickshire 50,000 Productivity (GVA per job) 2017 Greater Birmingham and Solihull Leicester and England minus London Leicestershire 45,000 West Midlands Northern Powerhouse Midlands Engine East Midlands Black Stoke-on-Trent and Country Staffordshire 40,000 The Marches Greater Lincolnshire 35,000 15.000 20,000 25,000 30,000 GVA per capita, 2017

Figure 6 GVA/head and GVA/job across the Midlands

Source: Midlands Engine Independent Economic Review, 2020

One LEP area – D2N2, which refers to Derby, Derbyshire, Nottingham and Nottinghamshire – accounts for a substantial share of the Midlands' economy (about one-fifth of GDP in 2017) but its productivity has persistently remained below the Midlands' average. Three of the more rural LEP areas together account for another one-fifth of the Midlands economy, and they display a mixed picture. In the Marches and Greater Lincolnshire, productivity is low and the gap with the Midlands average has widened, whereas in Worcestershire productivity performance is closer to (but still below) the Midlands average (and actually exceeded the Midlands average for a short period between 2011 and 2015).

There is consistently strong performance in three coterminous LEP areas in the middle/south of the region - Coventry and Warwickshire, Greater Birmingham and Solihull, and Leicester and Leicestershire - where productivity exceeds the Midlands average and has done so for the last two decades. Together, these areas account for almost two-fifths (almost £100bn) of the

Midlands GVA in 2019. These areas have a number of characteristics that are associated with high performing places, including an over-representation of highly skilled people, a higher share (and growth) of employment in knowledge-intensive businesses and relatively high productivity sectors and high growth firms.

Finally, Stoke and Staffordshire, and the Black Country account for just under one-fifth of the economy. Productivity is low and has remained below the Midlands average over the last two decades, although the Black Country has shown signs of improvement (relative to the Midlands average) since 2015.

Figure 7a Productivity Changes Over Time – West Midlands LEPs

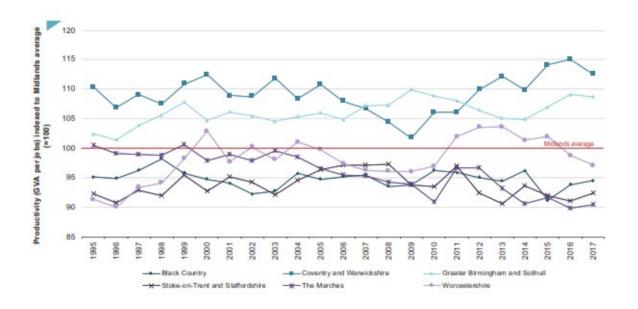
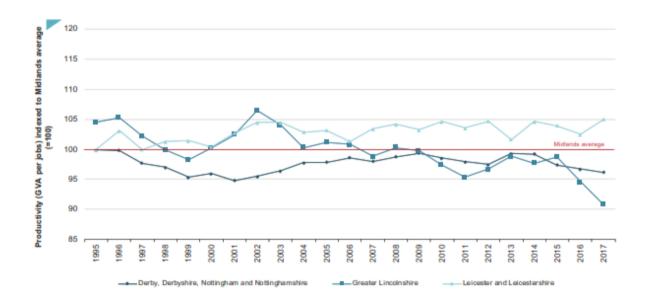


Figure 7b Productivity Changes Over Time – East Midlands LEPs



4. The Midlands Output Gap

Because of the gap in the employment rate and productivity relative to the UK as a whole, described in the previous section, there is a large unmet economic potential gap in the Midlands. The output gap, defined as the Midland's shortfall in GVA per head compared to the UK multiplied by its population amounts to nearly £15.1bn and has increased over time.

The West Midlands Local Industrial Strategy (LIS) highlights three reasons for this gap, which are echoed in the Midlands Engine Independent Economic Review:

1. Insufficient Skill Levels

This is calculated by (i) comparing the number of people at each qualification level to the national average, and (ii) identifying the earnings differential as a result of any skills deficits.

2. Too Few in Employment

The West Midlands region has the lowest employment rate of any mayoral combined authority (70%) and an above average unemployment rate of 5.7%. There are particularly weak spots such as Sandwell, Birmingham and Wolverhampton. Similarly, areas in the north and east of the East Midlands region such as Ashfield and Mansfield have high levels of unemployment, as, notably, do the three main cities Derby, Leicester and Nottingham.

3. Too many poor-quality jobs

One in four jobs pay below the 'real living wage' and salary levels which vary within different parts of the Midlands. The median full time weekly wage for Black Country residents is £479 (the lowest of any LEP), compared to £533 in Greater Birmingham and Solihull, and £556 in Coventry and Warwickshire. Similarly, Boston, Bolsover and Chesterfield, and perhaps most notably Leicester, have earnings well below the UK average. For example, Boston's average earnings are only 64% of the average earnings of the highest earning region, Rushcliffe, in Nottinghamshire.

These large differences in earnings and productivity across regions are a reflection of the UK's flexible labour market. While firms are attracted to the UK because adjusting employment is relatively easy compared to the rest of Europe, it also deters training and encourages low value-added activity. It also means that the UK's system of in-work benefits effectively subsidises

employment in low productivity activities. The flexible labour market is likely to disproportionately affect productivity in lagging regions by attracting further investment in such activities. Although these investments may reduce unemployment, they may also exacerbate regional productivity gaps. This is likely to be an issue at the sub-regional level as well.

In addition, in 2016/17 there were 90 schools in the WMCA region (41.5%) rated above the national average, while 127 were deemed below average (58.5%). More generally, West Midlands schools have below national average outcomes although there are within-region variations. Schools in Birmingham and Solihull performed the strongest while those located in Walsall and Sandwell were the weakest.

There are also increased concerns about the lack of awareness of job and career opportunities amongst young people, graduates, and adults looking to upskill, as has been reported in key sectors such as metals/materials, aerospace, and business and professional services.

5. Investment – capital, skills and innovation

R&D and Innovation

Compared to the UK-wide average of 4.4%, spending on R&D increased at 5.1% in East Midlands and at 10.4% in the West Midlands since 2007 (West Midlands is the 2nd highest growth rate out of all regions, the 1st being London at 11.2%). In 2017 the East and West Midlands combined accounted for 18% of the UK total in R&D spending.

Since 2017, the East Midlands has increased expenditure by 16.3% (+£0.2bn) reaching £1.8bn, the largest proportional increase in expenditure in all UK regions, accounting for 7.1% of UK R&D spending. The West Midlands has increased expenditure in 2018 by 11.1% (+£0.3bn) reaching £2.7bn, accounting for 11.0% of UK R&D spending.

However, given the strong representation of manufacturing in the region, those levels of investment in R&D are still moderate by UK standards and low compared to international competitors. So that firms of all sizes can capitalise on the region's distinctive strengths (e.g., its clean & connected mobility), the Local Industrial Strategy (LIS) provides broad and sector-specific actions to raise innovation activity.

The largest proportion of manufacturing R&D spending in the East and West Midlands is in transport, accounting for 23.1% of total manufacturing spend in the East Midlands and 68% of total manufacturing spend in the West Midlands.

Between 2010 and 2015, over 400 organisations in the 3-LEP WMCA participated in projects aimed at securing Innovate UK funding, obtaining grants equating to £247.5m. This amounts to 8% of the UK total which is a higher share of Innovate UK funding than the West Midland's population of firms would suggest (6%).

However, there is a spatial imbalance to the success of funding applications. The LEPs are very uneven when it comes to BERD and grants offered by Innovate UK. Coventry & Warwickshire lead the way on innovation, performing at four times the national average on BERD, whereas the Greater Birmingham and Solihull LEP and the Black Country LEP need improvement in their grant award performance. Indeed, the Black Country is below average across all Innovate UK categories for grants offered. As regards sectors, the transport, sustainability, and high value manufacturing themes have been particularly successful at garnering Innovate UK grant awards.

Business Dynamism and Innovation

Figures 8a-h compare the performance of the main LEPs in the West Midlands with the UK frontier across a series of innovation metrics. The charts relate to a series of ten metrics that provide an indication of the proportion of firms in each area engaged in each type of innovation.

What is clear is that the three LEPs within the WMCA area are some way from the frontier, and indeed in many cases are closer to the worst performers than the best. Exceptions are work organisation in the Black Country, and design in Coventry & Warwickshire.

A stark result is how far the region is from best practice on cooperation, reinforcing concerns over the 'missing' contribution this could make to productivity growth. But perhaps most concerning of all is how far from the frontier the region is on process innovation and radical innovation, with all three LEPs being close to the bottom in these measures.

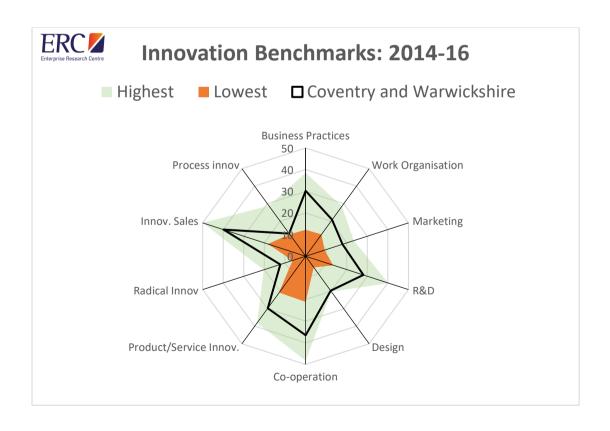
The picture is broadly similar for the other Midlands LEPs. It is noteworthy that innovation is low in the region overall, though innovation to sales in the Coventry & Warwickshire and Derby, Derbyshire, Nottingham and Nottinghamshire (D2N2) LEPs are higher than in the rest of the

region's LEPs, thanks to two particularly strong advanced manufacturing clusters around Coventry and Derby.

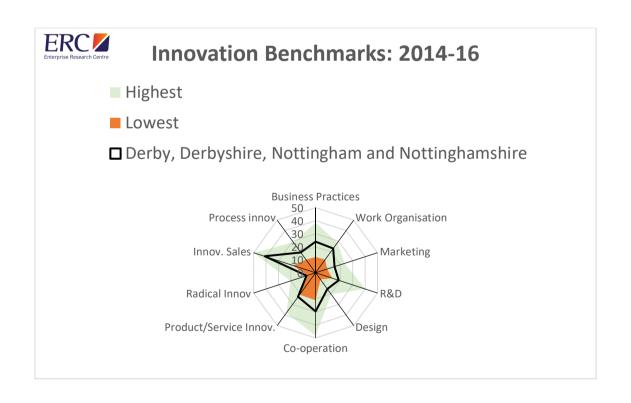
Similarly, data from the Enterprise Research Centre reveal some interesting information about firm birth rate, scale-ups, and high growth incidence. Figure 9 presents the percentage difference between the 3 West Midlands LEPs and the England average for the incidence of firm births, survival, growth, and high growth. It is clear that on virtually all measures, the region underperforms against the UK average.

Figures 8a-8h Innovation benchmarks across the regions LEPs

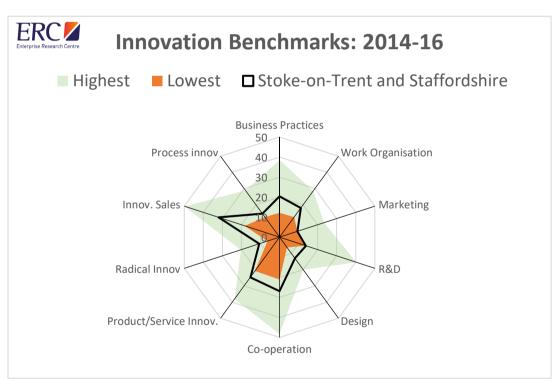




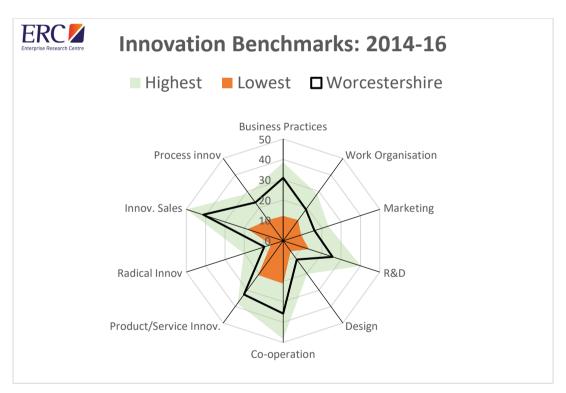












Note: Charts cover the period 2010-16 and are derived from the UK Innovation Survey. Further details about the derivation of data can be found in the ERC Innovation Benchmarks Report.

Source: reproduced from the Enterprise Research Centre (https://www.enterpriseresearch.ac.uk/).

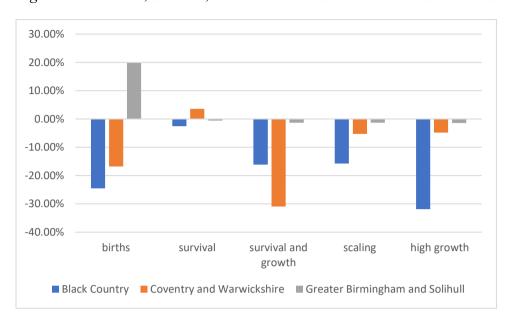


Figure 9 Firm Birth, Survival, and Growth Rates across the West Midlands

Note:

Births Number of UK-owned firm births per 10,000 population in 2018

Survival 3-year survival rate of UK-owned firms born in 2015 (and surviving to 2018)

Survival and growth UK-owned firms born in 2015 and surviving to 2018 that grow to £1m+

turnover in 2018 and had turnover <£500k in 2015

Scaling Survivor firms (born <2015) with £1-2m turnover in 2015 scaling to £3m+ in 2018 High growth High Growth Firm Incidence Rate (OECD definition 20% annual avg growth)

Source: Enterprise Research Centre

The West Midlands, and Birmingham in particular, is something of a success story in terms of start-ups. 8,394 new enterprises started life in the city throughout 2020, marking the highest volume of start-ups outside London. This was an increase of 26.8% from 2019.⁴

The latest findings also ranked Sandwell and Coventry highly on the list, while Wolverhampton's registrations increased by over 30% from the previous year. Although nationwide lockdown restrictions impacted the rate of business formation across the UK, the West Midlands – alongside London – had the strongest recovery of any region, recording 62% growth in June.

Overall the West Midlands saw 28,522 start-ups, and the East Midlands 18,578 in 2020. This equates to just under 5 per 1000 of the population for the West Midlands, and just under 4 per 1000 of population in the East Midlands. In more stark terms, this represents a 20% difference in start-up rates between the two regions.

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⁴ The figures are the latest in an annual study from think-tank Centre for Entrepreneurs.

Exporting and Inward Investment

The West Midlands has performed very well on export growth in recent years, with the East Midlands also generating significant export growth in the period 2015-17. However, this success is driven by a few sectors, notably advanced manufacturing and professional services, with life sciences contributing to a lesser extent.



Figure 10: Export Growth by Region, 2015-2017

Source: Economist Intelligence Unit, West Midlands Local Industrial Strategy, Foundations of Productivity Evidence Base, 2019

Figure 11 looks at the main FDI sectors, depicting each sector's growth in employment against its share in Gross Value Added (GVA). It indicates the importance of the sector to the West Midlands economy, as well as offering an indication of relative performance.⁵ Clearly this figure highlights the importance of the transport equipment sector, but it also illustrates that inward investment in, for example, food and drink contributes less to productivity – though these sectors do of course provide employment for less skilled workers. Indeed, the chart neatly illustrates a finding from the academic literature, which is that, save for a few exceptions, inward investment contributes to productivity or it generates significant employment

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⁵ A more detailed analysis of inward investment and its contribution to regional productivity for the West Midlands can be found here: https://www.wmca.org.uk/media/2232/inward-investment-productivity-across-sectors.pdf

opportunities. While the transport equipment sector does both, as do the financial services to an extent, most other sectors fall into one category or the other – see Table 1 for specific details.

Wholesale and retail trade; repair of motor vehicles 12.0% 2,245 10.0% 8.0% share of GVA Financial and insurance activities 1.898 6.0% Construction 733 Transport equipment 22,506 Information and communication **2,872**Transportation and storage 4.0% 989 989

Basic metals and

Commetal gas, steam and

metal products 1,227

air-conditioning supply Accommodation 1,179 Arts, entertainment and Food products, beverages recreation 1,569 and tobac 3,732 Computer, electronic and optical products 3,636

15.0%

AV Growth rate

20.0%

25.0%

30.0%

Figure 11 Inward Investment across the Largest Sectors

-5.0%

0.0%

5.0%

Source: Nigel Driffield and Jae-Yeon Kim, <u>Inward investment and productivity across sectors</u> <u>within the WMCA</u>, Warwick Business School.

Table 1 Inward Investment and Contributions to Local Economic Development

10.0%

Sectors that generate employment	Sectors that generate productivity growth	Sectors that generate both
Transportation and storage	Information and communication	Financial and insurance activities
Construction	Computer, electronic and optical products	Transport equipment
Arts, entertainment and recreation	Electricity, gas, steam and air-conditioning supply	
Food products, beverages and tobacco		

Source: Nigel Driffield and Jae-Yeon Kim, <u>Inward investment and productivity across sectors</u> within the WMCA, Warwick Business School.

The region's main sectors have differing importance to the various LEPs. For example, the motor trade is more important in the Black Country, as are accommodation and food services. Overall, Figure 11 shows that the sectors in which the Black Country attracts FDI are those that tend to be more unskilled and labour intensive, compared with the sectors that attract inward investment in Coventry and Warwickshire. Not surprisingly, given its relative size, the Greater Birmingham and Solihull region reflects the overall pattern, with again a greater emphasis on the sectors that support the automotive industry.

Transport and connectivity

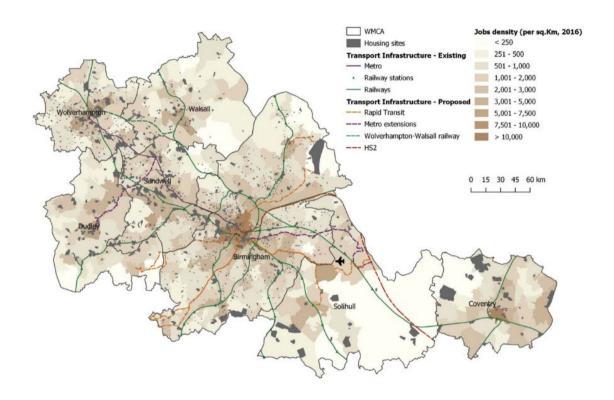
The West Midlands is a well-connected region. Ninety of the UK's population live no more than a four-hour drive away from the West Midlands and the region is served by one of the UK's fastest growing airports: Birmingham airport has 13 million passengers a year travelling to 143 destinations).

However, there is an overreliance in the region on the road network, and the reductions in tram and bus use have resulted in poor air quality and costly congestion. Together these externalities reduce both productivity and the health of the region's population, reducing the chances of delivering inclusive growth. Only 41% of residents are able to access three or more urban centres by public transport within 45 minutes during the peak morning hours, which is some 34 percentage points lower than the WMCA ambition of 75%.

These constraints will become more challenging in the context of increasing demand. By 2035, 1.2 million additional journeys will need to be accommodated every day on top of the 8 million today. Improving access to high quality employment areas and to local services and facilities for all residents is imperative to increasing productivity and standards of living. In general, infrastructure contributes to the WMCA's weaker than average productivity, but some areas within the region are worse affected than others in terms of connectivity.

Figure 12 illustrates the lack of transport connectivity outside the main conurbations.

Figure 12 Transport Connectivity in the West Midlands



Source: West Midlands Local Industrial Strategy, 16 May 2019.

The WMCA has approved a 2026 Delivery Plan for Transport and the West Midlands Local Industrial Strategy (LIS) re-iterates the key transport requirements regionally. This particularly relates to building a fully integrated and seamless multi-modal transport system across the whole region, investing £3.4bn over the next decade in trams, roads, and rail. Equally HS2 is an enormous opportunity for the region. It will open access to key international markets and drive new areas of regeneration, housing, and business growth across the West Midlands.

6. Institutions and Governance

One of the main issues across the Midlands Engine space is that while the WMCA is a combined authority region, it is made up of three LEPs (the only combined authority to comprise more than one LEP) while there is not a Mayoral Combined Authority in the East Midlands. Coordination of certain functions is therefore arguably easier across the Coventry and Warwickshire LEP, the Greater Birmingham and Solihul LEP, and the Black Country LEP, compared with the Nottinghamshire/Derbyshire/Leicestershire area. Nevertheless, within the

West Midlands, it is fair to say that the governance of the region could be described as complex.⁶ It comprises a number of different local authorities and the WMCA is the only mayoral combined authority to comprise more than one LEP.

Despite some encouraging signs of progress, there is an urgent need for the Midlands to develop a more cohesive strategic agenda, a coherent and compelling narrative, and a collective identity if the region is to achieve its full potential over the coming years. The Midland Engine's Independent Economic Review discusses this in more detail.

To quote directly from the WMCA website:

"Leadership of the WMCA comes from the Mayor and the leaders of the seven constituent local authorities, which have full voting rights. The leadership also includes the chairs of the Local Enterprise Partnerships (LEPs) which are business-led organisations that help build relationships between businesses and local authorities. Non-constituent authorities, which include the LEPs and ten local councils from across the wider West Midlands region, have reduced voting rights but play a crucial role at board level, helping to inform policy and drive forward the WMCA agenda.

Elected members and officers lead on key policy portfolio areas, working in partnership with LEP colleagues. There are also observer organisations who include other councils, LEPs and bodies awaiting non-constituent membership, as well as non-voting observers."

In other words, there is an overlapping structure of LEPS with local authorities of various types, plus the complicating factor that Warwickshire is part of the Coventry and Warwickshire LEP but not part of the Combined Authority. In addition, there is the Midlands Engine, which is itself jointly sponsored by the Ministry of Housing, Communities & Local Government (MHCLG) and the Department for Business, Energy & Industrial Strategy (BEIS) which have some overlapping responsibilities.

The nomenclature of the Midlands Engine region is presented in Appendix 2. As is evident from the table, this is an extremely complex set of arrangements, with business in particular

⁶ The complex nature of the institutional arrangements of the west midlands are discussed in detail here https://lipsit.ac.uk/2020/09/15/the-complexity-of-local-government-in-england-the-west-midlands-rubiks-cube/. The complete structure is available here: https://www.wmca.org.uk/who-we-are/structure.

expressing frustration over knowing which body they should talk to about what. For example, there are functions at many institutional levels concerned with skills, inward investment and business support more generally. This potentially presents a challenge for the region in terms of attracting strategic assets such as a Gigafactory, as communication of the value proposition both by and for the region spans a number of these bodies.

7. Brexit and Covid Recovery

A recent Midlands Engine Survey on the state of the region's businesses reported the following:⁷

- 43.7% of trading businesses in the West Midlands and 39.8% of East Midlands businesses reported their turnover amid the pandemic had decreased by at least 20%.
- Almost one quarter of firms in the Midlands only have cash reserves that would last up
 to three months, with 2.8% of West Midlands businesses and 4.2% of East Midlands
 businesses having no cash reserves.
- Midlands Engine estimates are that more than 70,000 Midlands businesses temporarily closed due to lockdown restrictions. An estimated 33,600 businesses in the East Midlands were mandated to close, with almost 40,000 in the West Midlands.
- Findings from the Enterprise Research Centre (ERC) suggest that in almost all regions, including both the West Midlands and East Midlands, the self-employed were more affected by loss of work during the crisis than employees. More than 40% of those who were self-employed in January/February 2020 experienced a 100% drop in demand of their services and products in the first month of the lockdown.
- Millions of early-stage or part-time entrepreneurs, freelancers and limited company directors continue to be excluded from government support packages such as the Self Employment Income Support Scheme (SEISS).
- According to the Small Business Federation (FSB), 34% of all small business owners have increased their levels of debt during the pandemic.
- The Midlands may be particularly vulnerable given its economic reliance on many sectors that are expected to decline in the near future due to COVID-19 and Brexit. The

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⁷ Midland Engine, Economic Impact of COVIC-19 on Business, January 2021

- competitiveness and stability of some of the Midlands largest businesses, some of which are EU-owned, is central to this uncertainty.
- When compared with the previous year, Quarter 3 (July to Sept) 2020 business investment fell by 19.2% in the UK

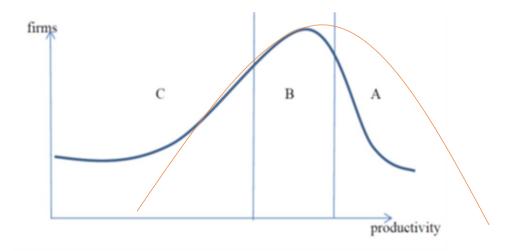
This presents a stark picture for the region, and highlights the nature of the challenge.

8. Developing a Research Agenda for the Midlands - Barriers to Productivity Growth

The research agenda for the Midland Regional Productivity Forum focuses on three main areas, reflecting both the challenges and opportunities for the region. These research themes are motivated by the challenges faced in terms of three distinct groups of firms, as a countenance against a "one size fits all" solution to the problem.

Rather than representing the population of firms, ranked by productivity levels, as a standard bell curve, it can probably be better represented in terms of skewed distribution, with a few high performing firms (segment A in the figure), a set of 'typical' firms in the middle (segment B), and a long tail (segment C), which is the apparent drag on productivity.

Figure 13 The Distribution of Productivity



The precise nature of the population of firms within the region needs therefore to be understood, with policies designed for the different elements of the distribution:

- Segment A the focus here should be to attract more such firms, say by offering tax incentives for innovation or capital investment.
- Segment B for this segment, the need is to stimulate such firms to move to segment
 A by encouraging innovation and involvement in high-tech activity. Another focus for
 this group could be on improving managerial capacity by, for example, offering training
 for managers in the commercialization of intellectual property, or in the management
 of innovation.
- Segment C the focus here may be on skills and training, but also on labour market policies to encourage workers to invest in their human capital, by emphasizing the returns., Alternatively the focus may also be on knowledge transfer from segments A and B to segment C. However, from the firm's perspective, this only makes sense if they can use the skills acquired. Having more educated workers is important but not sufficient.

Taken together, we suggest three priority areas for the Midlands:

Innovation & green economy

Innovation and green economy should be a major area of strength for the region going forward. A focus here is on industrial decarbonisation and models for low carbon energy. The way in which the principles of a more circular economy are being adopted may impact the productivity and growth of the region. The region needs to identify and support start-ups in these areas, as well as support innovation, through collaborations between the private sector and public bodies, and understand what world class business support looks like for start-ups, innovators and exporters.

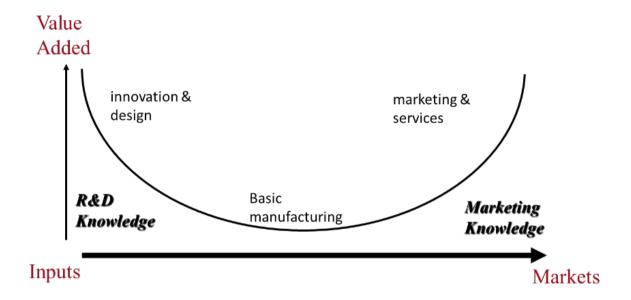
Competition for investment and maximising the benefits of inward investment

Brexit is making the UKs ability to attract inward investment more challenging, and the midlands region is no exception to that. We need to better understand what our value proposition is, and where the gaps in our supply chains are that can be remedied through inward investment and stimulation of new activities. It also requires an understanding of the importance of promotion activities focusing on certain sectors, and cooperating across LEP areas, for example. Equally many of the region's leading firms are themselves inward investors, whose local leadership need to make a case for investment when competing with other parts of the global business.

Developing this argument further, it is important to understand how the region's firms fit into global supply chains. When a firm's activities sit within such production networks, it clearly influences its productivity. The data explored above has established that many sectors of the region have a productivity performance below that of comparable sectors elsewhere. This suggests a combination of two factors. The first is that barriers to productivity, such as skills and innovation, are the key to unlocking the region's potential. The second is that there is work to do on harnessing the power of local supply chains to move certain activities up the value chains, and encourage re-allocation of resources towards more productive activity. Secondly, it is important to recognise that activities that are technically 'low productive' in terms of the output per worker or per hours may provide vital support for 'high productive' activities elsewhere. The agenda of the Midlands Productivity Forum must therefore be focused on understanding the relative importance of these effects and the nature of the interactions between them for understanding the apparent productivity gap.

It is clear that productivity is vital for levelling up. It is only with productivity growth that we can see sustained growth in earnings. The more we understand about how to stimulate growth in new firms, to encourage innovation and collaboration in existing firms, and to harness the benefits of inward investment in a post-Brexit world, the better the prospects for the region will be.

Figure 14 "Who Does What Where" – Value Added Across Activities



One challenge for 'lagging regions' is that as they seek to address their unemployment problems, which in the UK are likely to be exacerbated by both Covid and Brexit, they will be forced to seek out more activities at the bottom of the value curve, which will further increase the productivity gap (Figure 14).

Building resilience and connectivity

How can we reduce dependency on a limited number of dominant sectors in a region? Can we strengthen local supply chains, value capture and resilience?

The Midlands region has a number of success stories, but these are often concentrated in a few sectors. This has generated productivity growth (Coventry being a prime example) but makes the region vulnerable to changes in global demand. For example, Covid has hit such regions very hard. Three of the top ten districts nationally in terms of the loss of output due to Covid are in the Coventry & Warwickshire LEP area: Rugby, Stratford on Avon and Nuneaton. Equally, too many firms rely on a focal firm, which coordinates the supply chain, and generates external scale economies. As firms, such as JLR, furloughed during the pandemic, many of their suppliers had no other customers. This again increases the fragility of the region, and emphasises the importance of cooperation, particularly in supply chains.

In the productivity setting, policy interventions typically focus on one or more of three areas: skills, innovation, or a sector-based approach to regional development and firm location. There is need for more evidence on the nature of the relationships between interventions targeting innovation and subsequent productivity growth, including evidence concerning what has worked in other places.

The key indicators for the region highlight the productivity challenge, but also the skills challenge. The West Midlands is in many ways a leader in skills interventions, with a government funded Skills Deal and a degree of devolution in this area. Indeed, the skills situation has been improving. At the time of the final Regional Economic Strategy Review for Advantage West Midlands (AWM, covering essentially the current WMCA geography, plus Shropshire, Herefordshire and Staffordshire) in 2006, 50% of the work age population in the AWM region had no qualifications. This percentage has been falling, typically as older workers leave the job market. There remains evidence however of significant skills shortages in the region and, extrapolating from UK data, there is likely to be significant under-use of skills within workplaces.

9. Unlocking productivity growth in the Midlands – what works?

Throughout the life of the Midlands Productivity Forum, and working with other elements of The Productivity Institute the final aim will be to inform policy, and to help businesses understand how policy can address the weaknesses in productivity that have been identified in this study, and which will be further explored as the research develops. We argue that the region is failing to capture externalities from productivity growth, whether this is through knowledge transfer, spillovers, or value chain collaboration. Policy interventions should therefore focus on how we can improve the extent to which:

- We can attract more FDI that is linked to frontier technology, and how local firms can learn from this.
- Start-ups and scale-ups can connect with, and establish, best practice
- Innovation becomes better dispersed and embedded across the wider cohort of firms
- Supply chain collaboration leads to fewer holdups, smoother throughput, and better productivity.

⁸ West Midlands Local Industrial Strategy Foundations of Productivity Evidence Base.

- Better management practices facilitate better practices, along with greater investment in skills and their use. For example, around a third of employers report not using the skills of their workers.
- Local institutions can best facilitate these pro-productivity actions.

Appendix 1 – List of Resources

Midlands Engine latest Economic Data. https://www.midlandsengine.org/our-programmes/observatory/latest-data-and-research/latest-economic-data/

West Midlands Local Industrial Strategy Foundations of Productivity Evidence Base - Black Country Consortium

WMCA Productivity & Skills Commission - Supporting Evidence Pack WMCA

WMCA Productivity & Skills Commission- Summary of Responses to the Call for Evidence

West Midlands State of the Region 2019 Summary Report

Inward investment and productivity across sectors within the WMCA – Driffield and Kim

These documents are also underpinned by a large number of supporting documents or more detailed evidence base, and can be found at:

https://www.wmca.org.uk/what-we-do/productivity-skills-commission/

https://www.wmca.org.uk/what-we-do/industrial-strategy/

https://www.the-blackcountry.com/economic-intelligence-unit/black-country-intelligence-reports/wmca-state-of-the-region

https://www.wmca.org.uk/media/1682/west-midlands-sia-final-for-publication-21617.pdf

https://www.wmca.org.uk/what-we-do/leadership-commission/

https://www.wmca.org.uk/media/2232/inward-investment-productivity-across-sectors.pdf

Innovation Benchmarks Report and LEP charts

https://www.enterpriseresearch.ac.uk/publications/benchmarking-local-innovation-the-innovation-geography-of-england-2019/

Further Reading

Unlocking regional Growth. Understanding the drivers of productivity across the UK's regions and nations. https://www.cbi.org.uk/articles/unlocking-regional-growth-1/

Great job: solving the productivity puzzle through the power of people https://www.cbi.org.uk/articles/great-job-solving-the-productivity-puzzle-through-the-power-of-people/

Visualisations of UK differences: What are the regional differences in income and productivity? https://www.ons.gov.uk/visualisations/dvc1370/index.html

Appendix 2 Midlands Engine Institutional Nomenclature

24 Upper Tier Authorities	West Midlands Combined Authority	Local Enterprise Partnerships	Towns Fund	City Deals	
Birmingham	Birmingham	Greater Birmingham and Solihull		Birmingham	
Solihull	Solihull	LEP			
Dudley	Dudley	Black Country LEP			
Sandwell	Sandwell		Rowley Regis & West Bromwich (Sandwell)	Black Country	
Walsall	Walsall			DIACK COUNTRY	
Wolverhampton	Wolverhampton		Wolverhampton		
Coventry	Coventry	Country and Many inhabity LER		Coventry and	
Warwickshire		Coventry and Warwickshire LEP	Nuneaton (Warwickshire)	Warwickshire	
Worcestershire		Worcestershire LEP			
Herefordshire, County of					
Shropshire		The Marches LEP			
Telford and Wrekin					
Stoke-on-Trent		Stoke-on-Trent and		Stoke-on-Trent and	
Staffordshire		Staffordshire LEP	Burton-upon-Trent & Kidsgrove (Staffordshire)	Staffordshire	
Derby					
Derbyshire		Derby, Derbyshire, Nottingham	Clay Cross & Staveley (Derbyshire)		
Nottingham		and Nottinghamshire LEP	Mansfield & Newark (Nottinghamshire)	Nottingham	
Nottinghamshire					
Leicester		Later day and Later day like LED		Leicester and	
Leicestershire		Leicester and Leicestershire LEP		Leicestershire	
Rutland					
Lincolnshire			Boston, Lincoln, Mablethorpe & Skegness (Lincolnshire)		
North East Lincolnshire		Greater Lincolnshire LEP			
North Lincolnshire			Scunthorpe & Grimsby (North East Lincolnshire)		
Midlands Engine - 65 LAs or 9 LEPs					