West Midlands
Weekly Economic Impact Monitor

WM REDI CITY REDI

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This monitor aims to pull together information across regional partners to understand the impacts of Covid-19 on the economy. Where possible it will utilise all forms of quantitative and qualitative intelligence. However, we urge caution in the use of the contents as this is an emerging situation.

The latest Purchasing Managers Index has left confidence falling to a 19-month low, but some firms remained upbeat due to new product launches, marketing efforts and expansion plans to support output over the course of the coming year. Business optimism was generally restricted due to acute inflationary pressures, issues with transportation, a challenging economic climate, and the Russian invasion of Ukraine all reportedly dampened optimism in May 2022. This is a change for the region, which had until now remained positive in the face of the pandemic and EU Exit.

Covid-19

- Case numbers across Europe have risen since the previous monitor, with numbers doubling in some countries. In the UK the new confirmed case numbers have risen from 93 per million people to 208 per million people. However, the reason for these increases is likely because of economies reopening and big events returning. However, deaths remain low.

Economy

- There has been a widespread decline in GDP over the first quarter of this year, alongside rapidly rising inflation. The largest rises in inflation have been within the UK and US and forecasters are now anticipating that inflation could climb to double figures this year in both the UK and US. Reasons are: rapidly rising energy prices; supply chain bottlenecks; and wheat and fertilizer prices.
- ONS announced that Consumer Price Inflation (CPI) had risen even further to 9.1% in the 12 months to May, up slightly from April's rate of 9%. This is the highest rate of inflation in 40 years since March 1982, and the Bank of England is now forecasting that inflation could reach 11%.
- 17 out of the 20 most deprived areas in the UK are within the Midlands and the North. With inflation hitting 9% many households may be pushed further into poverty and deprivation within the Midlands.
- The Bank of England (BoE) has raised interest rates from 1% to 1.25%, their highest level for 13 years. Some analysts are predicting that the BoE may go so far as to raise interest rates to 3%.
- ONS stated that inflation in May was fuelled by rising prices for food and non-alcoholic beverages. The inflation in this sector is largely due to Russia's invasion of Ukraine severely restricting wheat and maize supplies; the two countries make up almost a quarter of worldwide production.
- The Centre for Economics and Business Research (Cebr) has found that the rail strikes will likely cost the economy at least £91m, warning that these figures could be much higher, especially for hospitality and retail. Rail strikes will limit or prevent freight from moving round the UK, at expected rates which will impact on the West Midlands (WM). Significantly limiting business's ability to get output to customers and reducing economy activity
- WM Business Activity Index decreased from 54.5 in April 2022 to 49.7 in May 2022: the first contraction in 16 months. A score below 50 means that the regional economy is shrinking. Business activity was restricted due to inflationary pressures, subdued demand, challenging economic conditions and input shortages. Out of the 12 UK regions, the WM was the third lowest for Business Activity in May 2022.
- WM Future Business Activity Index decreased from 71.8 in April 2022 to 66.1 in May 2022.
- WM New Business Index increased 50.2 in April 2022 to 50.5 in May 2022, a marginal rise in new business intakes due to better demand conditions and greater international travel.
- WM Export Climate Index decreased from 53.4 in April 2022 to 52.8 in May 2022, indicating the slowest rate of growth in four months.
- WM online job adverts decreased by 4.4% and on the 10th June 2022, it was at 130.9% of the average level in February 2020. All 12 regions were still above their February 2020 levels.

Energy and low carbon

- Energy prices hit their peak in March, when gas prices hit a high of £314.52 per therm due to a number of factors including the invasion of Ukraine; gas shortages; increased demand; Halting of Nord Stream 2.
- UK households have been hit with higher energy bills after the energy price cap on standard variable rate tariffs (SVTs) increased by 54% as of April. However, the price cap does not extend to business energy, meaning that suppliers can increase their out of contract rates by as much as they see necessary to cover their increased costs and remain profitable. This has seen out of contract rates (also known as deemed rates) rise by an average of 100% since August 2021.

The WM Weekly monitor is funded by the West Midlands Combined Authority, Research England/UKRI

West Midlands Combined Authority UKRI Research England

- Very small business consumers – consuming under 20 MWh per year- were likely to pay the highest electricity price in Q4 of 2021 at 18.84 pence per kWh. Whereas extra-large consumers- consuming over 150,000 MWh annually- paid on average 17.07 pence per kWh.
- Between 2020 and 2021, the average price of electricity per kWh increased by 11.8% and gas increased by 24.4%. The year-on-year increase has been higher for larger consumers however, smaller consumers are still paying a much higher rate.
- A third of business saw their energy bills increase. 1 in 5 owners saw an increase of over 15%, and 1 in 10 reported a hike of 20%. Almost a third of SMEs say they will have to reduce their energy usage to save on running costs. 1 in 5 (17%) said that doing so would negatively impact their business. 1 in 4 (26%) small business owners have increased their prices due to rising inflation and business costs.
- WMCA is home to around 90,000 micro and small businesses, making up 97% of the region's total business count. Energy prices potentially rising by 250% in the first quarter of this year will drastically impact their ability to continue to operate at current capacities.
- The average business within WM is spending £3,686 on their annual energy bills. Excluding Greater London, this means that the WM has the 4th highest average annual energy bill amongst the UK regions.
- The industrial make-up of the WM was highly impacted by the pandemic, vastly reducing growth, compared to other UK regions. Some of the large sector employers in the region, such as the automotive industry, are also still grappling with inflation caused by other factors such as shortage of raw materials, supply chain bottlenecks and Brexit increasing transactional costs. Rising energy prices will likely force many businesses in these sectors to increase prices and this will reverberate across all supply chains.
- Research performed by the West Midlands Growth Company has shown that despite the impact of Covid, that low-carbon manufacturing is now the fastest-growing sector; the sector grew by more than 7% in 2020 despite a 9% decline in the wider West Midlands economy as a result of the Covid pandemic.
- Heating accounts for 40% of the energy consumption and about one-third of the carbon emissions. In contrast to electricity, very little progress has been made in the decarbonization of how homes are heated and how heat is generated in industrial applications, due to the difficulties of behaviour change, infrastructure and more costly alternatives, and investment in new forms of heating.
- The Midlands proposes a National Centre for Decarbonisation of Heat (NCDH), working between local government, academic institutions, innovation Catapults, and industry to coordinate the delivery. The NCDH would work on a whole series of activities including driving down the cost of delivering heat.
- Jaguar Land Rover said that it will develop 6 new electric vehicles in the next 5 years and that all vehicles will be available as all-electric variants by 2030, setting the pace for the region and there is an opportunity for the Midlands to continue to take a leading role in the introduction of electric vehicles in the UK.
- The System Average Price (SAP) of gas decreased by 28% in the latest week to 12th June 2022 (from the previous week), 44% higher than the equivalent period from the previous year and 300% higher when compared to the pre-Coronavirus baseline.
- 50.2% of responding WM businesses reported "exporting stayed the same" in May 2022 when compared to May 2021. 18% of businesses reported "exported less" and 16.4% reported "exported more".
- 23.6% of WM businesses reported experiencing global supply chain disruption in May 2022.
- 35% of WM businesses reported the main concern for business was "inflation of goods and services prices".
- 34.1% of WM businesses are using, or intending to use, increased homeworking as a permanent business model going forward.
- 38.6% of West Midlands businesses reported to currently experiencing a shortage in workers, leading to 63.7% stating workers were working longer hours.
- The most common actions reported by adults who reported their cost of living had increased continued to be spending less on non-essentials (60% - up 4% from the previous period), using less fuel such as gas or electricity at home (52% - up 2% from previous period), spending less on food shopping and essentials (41% - up 5% from previous period) and cutting back on non-essential journeys in vehicles (40% - up 1% from the previous period).

Innovation

- Manchester (GM) and Birmingham city-regions both underperform on innovation relative to their international peer group based on population size. Oxford and Cambridge are national and global outliers in terms of Science and Technology (S&T) intensity. Beyond these outliers, there is relatively little variation in innovation performance across regions, compared to other countries.
- Specific measures of science and technology output and discounting the outliers shows the WM to be performing well nationally, relative to its size, while GM lags the rest of the pack, especially on patent applications.
- The UK has an apparent weakness relative to other highly innovative countries when it comes to mid-sized cities. Between the stellar S&T performance of Oxford and Cambridge and the global significance of London, there is little in between in terms of places, that could be classed as world-leading.
- Across almost all regions – the UK is performing relatively well in terms of innovation inputs. But it is behind in terms of applying these commercially, which can drive long-term growth in employment, productivity and prosperity. This is also the area where the South East, as well as the East of England, are performing much better than the other regions.

- Regions like the West Midlands for innovation inputs and outputs are very diverse and include Tuscany and Andalusia, the Budapest, and Northern Jutland.
- The Levelling Up White Paper announced increasing spending by 40% by the end of the decade, adding a further £0.7bn by 2030. The target for a 40% increase in public R&D spending by 2030 only applies to the non-GSE regions
- This funding aim includes BEIS spending through UKRI, other BEIS R&D funding competitions, industry R&D programmes and R&D infrastructure. It is difficult to track regional spending of all public R&D funding and the Government acknowledges this.
- A 35% increase in R&D spending performed by the public sector in the West Midlands (using 2019 as a base) would be worth about £191m a year by 2024/25.

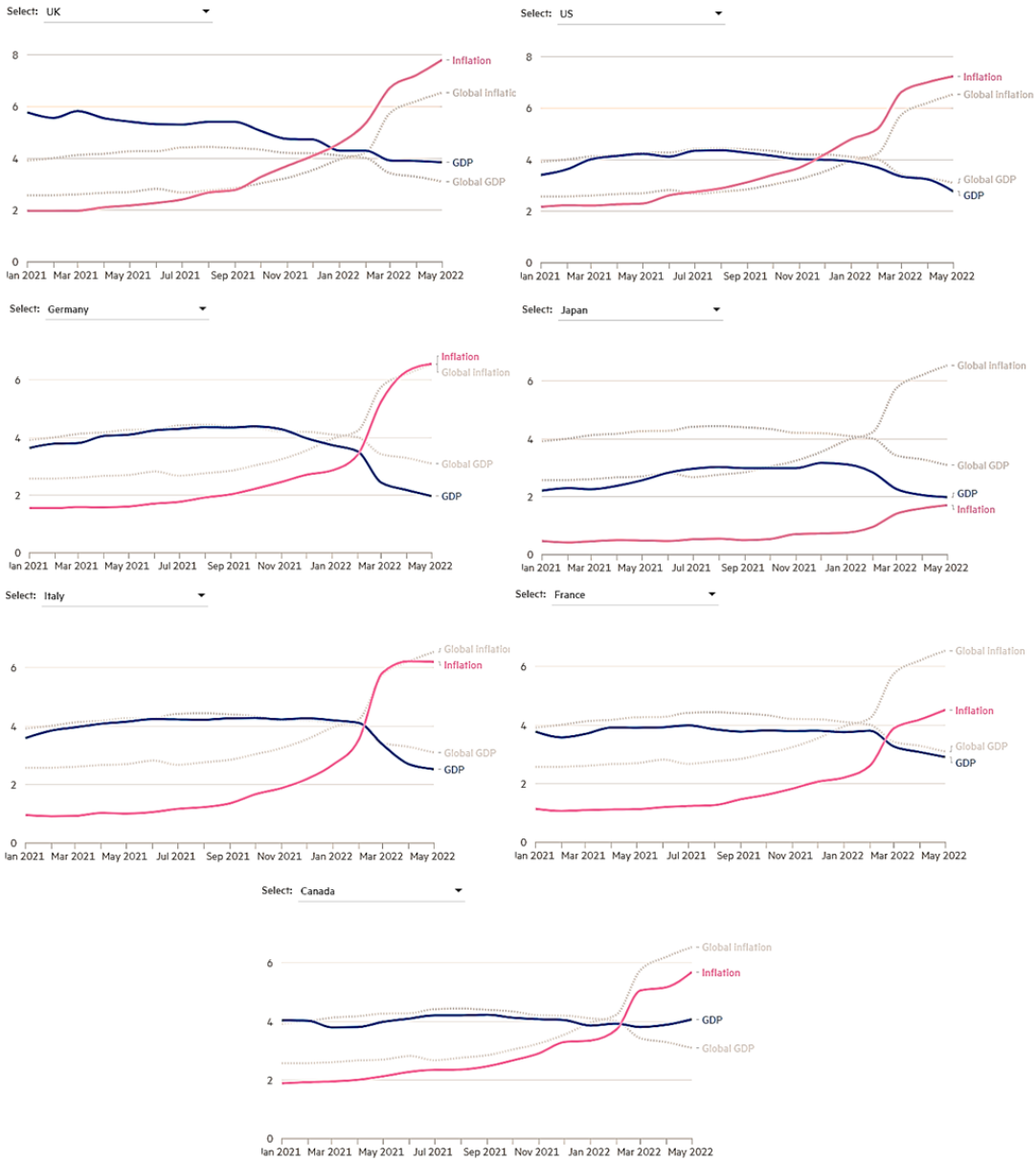
Global, National and Regional Outlook

Alice Pugh, WMREDI

Global

It was anticipated that following the Covid-19 pandemic, as happened after the last global pandemic, we may experience a 'Roaring 20s'. However, instead it would appear we will be entering a period akin to the 1970s: stagflation looks like it is set to grip many countries. Stagflation is when there is persistent high inflation and stagnant demand, as happened in the 1970s. The figure below shows current inflation and GDP by G7 country, comparative to global levels.

Figure 1: Economic growth and inflation forecast for 2022, by date of forecast. GDP and consumer price index, annual % change



Source: Financial Times, 2022

As can be seen from the graphs, each country has seen a decline in GDP over the first quarter of this year, alongside rapidly rising rapidly rising inflation. The largest rises in inflation has been within the UK and US and forecasters are now anticipating that inflation could climb to double figures this year in both the UK and US.

The main reasons for the rapidly rising global inflation are:

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1. **Rapidly rising energy prices**

Energy prices are rapidly rising due to the Russian invasion of the Ukraine. The G7 and EU countries have announced the phasing out or banning of imports of Russian oil, with similar measures taken for coal and natural gas. Several large oil companies have also ceased operations in Russia and many traders are boycotting Russian oil. Therefore, energy prices are expected to increase by 52% globally in 2022, according to the World Bank.

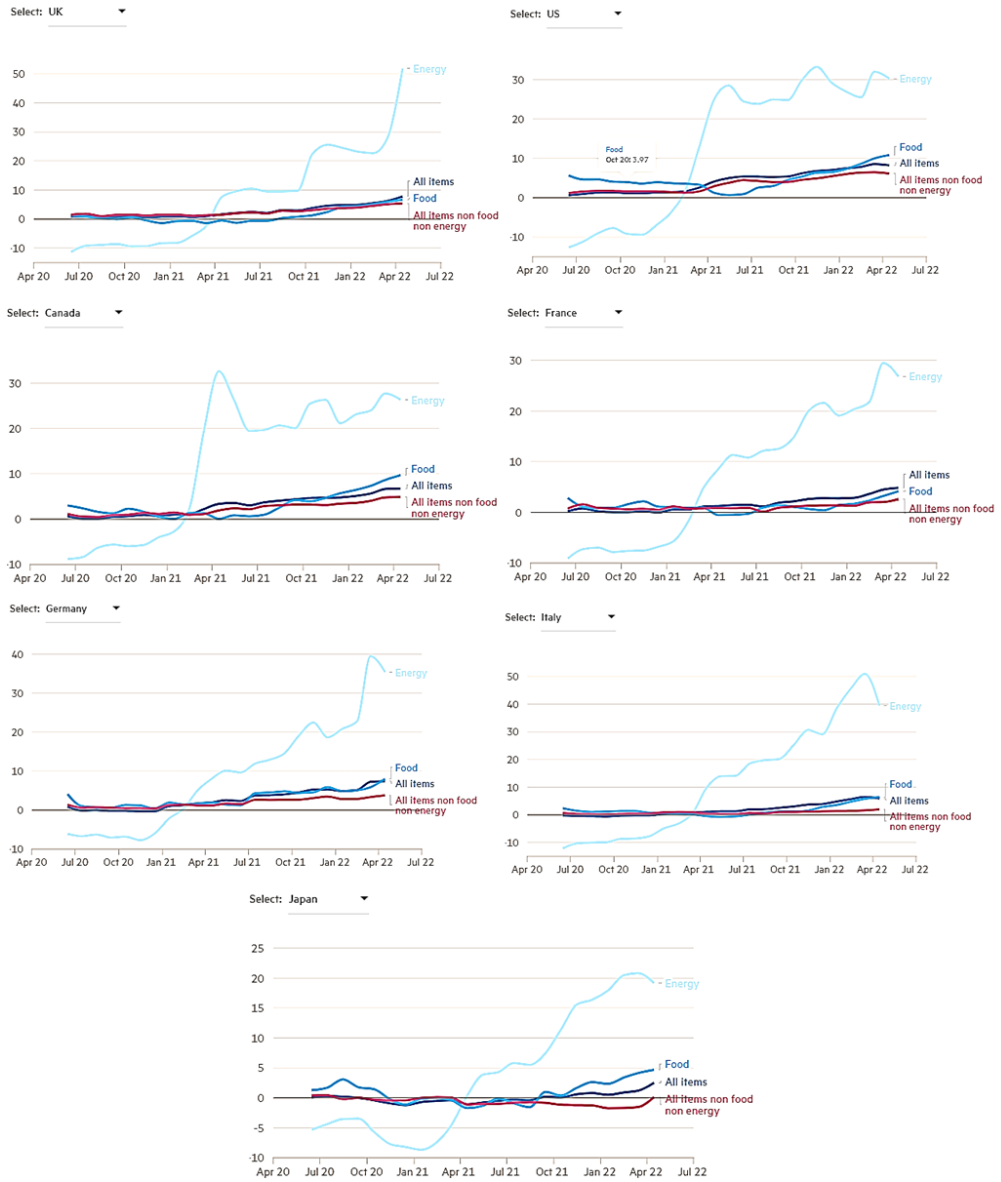
2. **Supply Chain Bottlenecks**

Supply chains are still being impacted by the lingering impacts of the pandemic, including disruptions in major Asian ports and lockdowns in major cities within China. Furthermore, Russia's invasion of Ukraine and its repercussions have led to severe physical and logistical dislocations that have magnified pre-existing bottlenecks.

3. **Wheat and Fertilizer price rises**

Agricultural prices are forecast to increase 18% this year, above previous projections, reflecting weaker production in Ukraine and Russia, alongside much higher input costs, including for fuel, chemicals, and fertilizers. Russia and Ukraine are key exporters of wheat, together accounting for about one-quarter of global wheat exports. Russia is also the world's largest exporter of fertilizers and has instituted new quotas and restrictions on exports. Fertilizer prices are expected to increase by around 70% in 2022, due to soaring input costs, reduced production, and trade disruptions. As the price of these two commodities continue to rise it will drive the up the price of most foods and drinks goods, as these commodities are key ingredients in the majority of food and drink production.

Figure 2: Sector detail consumer price inflation by main component. Annual % change in consumer price index and sub-indices, G7 countries



Source: Financial Times, 2022

Figure 2 above shows the annual percentage change in consumer price index and sub-indices by G7 economy. As can be seen in the graphs, energy has seen the largest annual percentage change in recent months. Across the majority of the G7, the annual percentage change in energy has peaked at 30% and is now on a downward trajectory. However, the UK and Italy have seen energy rises hitting 50%, with the UK still currently at this level and climbing. Germany also saw energy rises hit 40%, unsurprising given its reliance on energy fuels from Russia.
Rising energy prices will impact almost every business globally, rising production costs for firms. Such significant price rises are significantly increasing production costs for firms, which will likely be passed onto consumers as firms will likely be unable to absorb these costs and will have to pass the majority of costs onto the consumer through price rises.

National

The UK appears to be reverting to conditions similar to the late 1970s/ early 1980s. Abba, Dianna Ross, The Rolling Stones and Elton John are all on tours, Kate Bush is top of the charts, there are significant social movements occurring, trade unions are making a comeback, there is rapidly rising inflation and a growing cost of living crisis.

And whilst rising inflation and the growing cost of living crisis are happening globally, the situation is somewhat worse in the UK when compared with other similar economies. The UK appears to be suffering the worst inflationary pressures as can be seen by the high rates of inflation in Figures 1 and 2 above. Additionally, this week the ONS announced that Consumer Price Inflation (CPI) had risen even further to 9.1% in the 12 months to May, up slightly from April's rate of 9%. This is the highest rate of inflation in 40 years since March 1982, and the Bank of England is now forecasting that inflation could reach 11%.

ONS stated that inflation in May was fuelled by rising prices for food and non-alcoholic beverages. The inflation in this sector is largely as a result of Russia's invasion of Ukraine severely restricting wheat and maize supplies, from two countries which make up almost a quarter of worldwide production. Kantar is now forecasting that the average annual grocery bill in the UK is now set to rise by £380 this year. Asda told the BBC that many of their shoppers are now setting limits at checkouts and petrol pumps, with consumers placing less in their basket and switching to cheaper budget ranges.

The rising food and drink costs are being compounded by rapidly rising energy prices. Food and drink production is highly energy intensive and the rapidly increasing energy prices will further push up costs for food and drink manufacturing and production. This will all then be pushed onto consumers, as many firms in the UK are struggling to absorb rapidly rising costs. For a greater explanation of the current impact of energy prices on the UK and West Midlands Businesses see the brief in the next section.

In order to combat inflation, the Bank of England (BoE) has raised interest rates from 1% to 1.25%, their highest level for 13 years. The rise this month had been expected and it is anticipated that there will be further increases this year. Some analysts are predicting that the BoE may go so far as to raise interest rates to 3% to quash inflation, however others are predicting it will peak around 1.75%.

Last year, OBR investigated the impact of long-lasting high inflation on the UK economy. This can happen when people think price rises will continue - businesses raise prices to keep making a profit and workers demand wage increases to keep up, developing into a wage-price spiral. If this were to happen the interest rates may reach 3.5%.

Rail workers are on strike for three days this week protesting the pay freeze and redundancies facing the sector. Last-ditch talks failed to resolve the dispute over jobs, pay and conditions, meaning some 40,000 RMT members at Network Rail and 13 train operators have walked out. On the effected days only around 60% of trains will still be running. The Centre for Economics and Business Research (Cebr) has found that the rail strikes will likely cost the economy at least £91m, warning that this figures could be much higher, especially for hospitality and retail.

Other sectors are now considering striking as well as they also face redundancies and pay freezes; however, many sectors may be waiting for the outcome of this strike before taking further action. If other sectors, such as education and health ,were to see strikes as well we could see the development of a wage-price spiral, as workers demand pay rises in line with inflation, increasing costs leading to increasing prices, thus rising inflation.

Regional

Commuters across Birmingham and the West Midlands are facing major disruption this week with rail strikes. Among those disrupted are services operated by West Midlands Railway (WMR) which runs the busy Cross City commuter route from north Worcestershire to Lichfield via Longbridge, Birmingham New Street and Sutton Coldfield. WMR planned to have a "very limited" number of services on strike three days, with passengers urged to travel only if essential. Services which do run do so between 7.30am and 6.30pm, to allow freight transportation to continue.

The following routes are affected:

- Cross City Line - Two trains per hour
- Wolverhampton to Birmingham - One train per hour
- New Street - Birmingham International - One train per hour

No trains will run on any other WMR route, including all via Birmingham Snow Hill, Birmingham to Shrewsbury, Birmingham to Worcester/Hereford and Nuneaton to Leamington Spa. Other operators have also been impacted and these impacts can be seen here.

Strikes could also impact other large sectors within the West Midlands. The West Midlands is a distribution and logistics hub, due to its location enabling 90% of the UK population being reachable within 4 hours. With many businesses producing and storing goods in the region, to enable quicker distribution of goods across the UK. However, rail strikes will limit or prevent freight from moving round the UK. This significantly limits businesses' ability to get output to customers and reducing economy activity.

The strikes will also deter employees from travelling into work, as well as deterring tourists from travelling around the UK. This will have a significant impact for businesses relying on commuters and tourists within the region. Hospitality and retail are the sectors expected to be most significantly impacted by the strikes. These are sectors which are still struggling to recover from the pandemic.

17 out of the 20 most deprived areas in the UK are within the Midlands and the North. With inflation hitting 9% this month many households may be pushed further into poverty and deprivation within the Midlands. This will further increase both inter- and intra-regional inequalities, especially as poorer households already spend a higher proportion of their incomes on both energy and food bills.

NatWest Purchasing Manager Index (PMI) Survey: West Midlands Region Released June 2022[1]

Black Country Consortium Economic Intelligence Unit

In Summary:

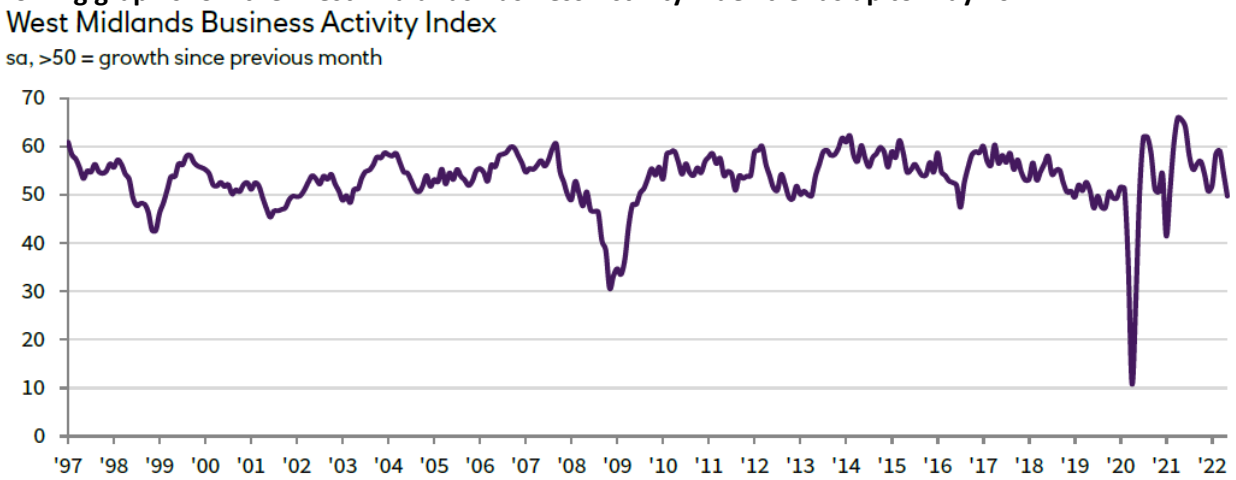
- The West Midlands Business Activity Index decreased from 54.5 in April 2022 to 49.7 in May 2022, the first contraction in 16 months. Business activity was restricted due to inflationary pressures, subdued demand, challenging economic conditions and input shortages.
- Out of the 12 UK regions, the West Midlands was the third lowest for Business Activity in May 2022.
- The UK Business Activity Index decreased from 53.1 in May 2022.
- The West Midlands Future Business Activity Index decreased from 71.8 in April 2022 to 66.1 in May 2022. Despite the overall level of positive sentiment falling to a 19- month low, some firms remained upbeat due to new product launches, marketing efforts and expansion plans to support output over the course of the coming year. Optimism was restricted due to acute inflationary pressures, issues with transportation, a challenging economic climate and the Russian invasion all reportedly dampened optimism in May 2022.
- Out of the 12 UK regions, the West Midlands was sixth highest for Future Business Activity in May 2022.

In Detail:

Business Activity Index

The West Midlands Business Activity Index decreased from 54.5 in April 2022 to 49.7 in May 2022, the first contraction in 16 months. Business activity was restricted due to inflationary pressures, subdued demand, challenging economic conditions and input shortages.

The following graph show the West Midlands Business Activity Index trends up to May 2022:



Source: NatWest, June 2022

Out of the 12 UK regions, the West Midlands was the third lowest for Business Activity in May 2022. London was the highest with 56.5 and the North East was the lowest at 48.4.

The following chart shows the Business Activity Index across all UK regions in May 2022:

[1] Source: NatWest - West Midlands PMI, June 2022. The seasonally adjusted indices vary between 0 and 100, with a reading above 50 indicating an overall increase compared to the previous month, and below 50 an overall decrease.

Source: NatWest, June 2022

Demand

The West Midlands New Business Index increased from 50.2 in April 2022 to 50.5 in May 2022, a marginal rise in new business intakes due to better demand conditions and greater international travel. New business was restricted due to subdued market confidence, inflationary pressures, the cancellation of projects and input shortages.

Exports

The West Midlands Export Climate Index decreased from 53.4 in April 2022 to 52.8 in May 2022, indicating the slowest rate of growth in four months. Economic growth was sustained in four of the top five export markets for the West Midlands; as there was a contraction to China (42.2).

The following tables shows the top export markets for the West Midlands in May 2022:

Top export markets, West Midlands

Rank	Market	Weight	Output Index, May '22
1	USA	21.2%	53.6
2	Germany	11.1%	53.7
3	China	8.7%	42.2
4	France	6.1%	57.0
5	Ireland	6.2%	57.5

Source: NatWest, June 2022

Business Capacity

The West Midlands Employment Index increased from 55.1 in April 2022 to 55.3 in May 2022, taking the current sequence of job creatin to 15 months and the pace of growth was the fastest since February 2022. The increase in employment was linked to rebuilding of workforces, sustained improvements in new business, expansion plans and the replacement of voluntary leavers.

The West Midlands Outstanding Business Index increased from 50.2 in April 2022 to 51.3 in May 2022, the fastest rate of growth since February 2022. New contract wins, greater bookings, labour shortages, supply-chain issues and a lack of raw material availability all reportedly caused the increase in unfinished business volumes.

Prices

The West Midlands Input Prices Index increased from 85.0 in April 2022 to 85.6 in May 2022. The latest rate of inflation accelerated to the second highest since data collection started in January 1997. Firms indicated that electronic component, energy, food, fuel, transportation and wage costs were the main drivers of price pressures.

The West Midlands Prices Charged Index decreased from 71.2 in April 2022 to 70.7 in May 2022. The overall rate of charge inflation was among the highest since the series started in November 1999 (the highest index reading was recorded in the previous month). Approximately 47% of monitored firms signalled higher fees, citing the pass-through of rising cost burdens to clients.

Outlook

The West Midlands Future Business Activity Index decreased from 71.8 in April 2022 to 66.1 in May 2022. Despite the overall level of positive sentiment falling to a 19- month low, some firms remained upbeat due to new product launches, marketing efforts and expansion plans to support output over the course of the coming year. Optimism was restricted due to acute inflationary pressures, issues with transportation, a challenging economic climate and the Russian invasion all reportedly dampened optimism in May 2022.

Out of the 12 UK regions, the West Midlands was sixth highest for Future Business Activity in May 2022. Yorkshire and The Humber was the highest with 78.9 and the Northern Ireland was the lowest at 47.8.

The following chart shows the Future Activity Index across all UK regions in May 2022:

Source: NatWest, June 2022

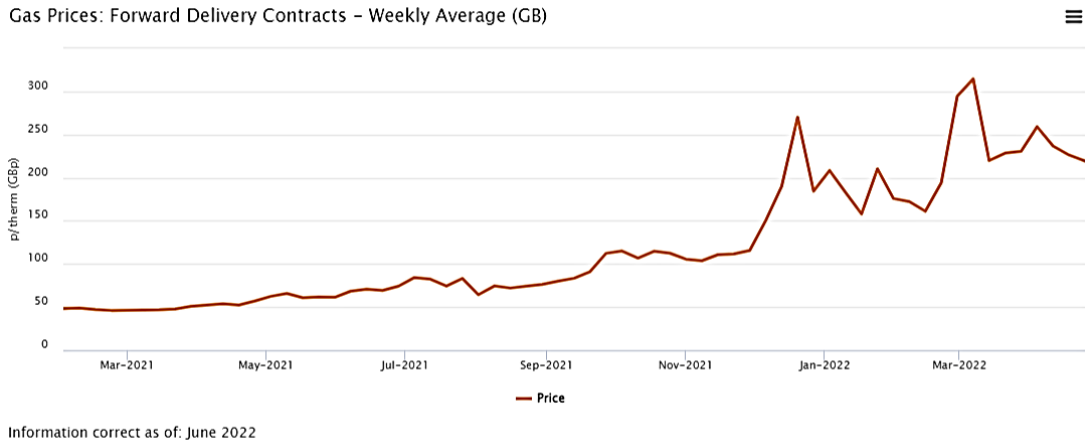
Impact of Energy Price Rises on Businesses

Alice Pugh, WMREDI

Gas price rises

As can be seen in graph below from OFGEM, gas prices have been increasing rapidly in the last few months. Energy prices hit their peak in March, when gas prices hit a high of £314.52 per therm (a therm is around 29kwh). As of the latest update by OFGEM on the 25th April, gas energy prices were £219.46.

Figure 1: Gas prices per therm

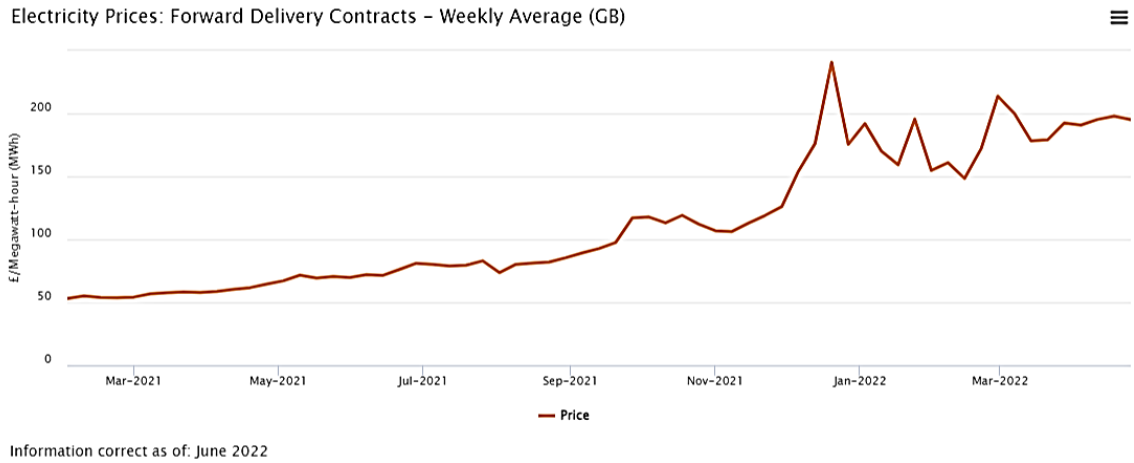


Source: OFGEM, 2022

Electricity Price Rises

Much like gas prices, electricity prices have also been rapidly rising, as seen in the graph from OFGEM below. Electricity prices hit their highest in December 2021, when they reached £240. 58. As of the latest update from OFGEM, current electricity prices are at £195.12 MWh.

Figure 2: Electricity Prices per MWh



Source: OFGEM, 2022

Why are Global wholesale energy prices increasing?

Although we are all experiencing the effects of rising energy prices at home and at work, this is a global phenomenon, caused by far-reaching and some unanticipated reasons:

1. **Invasion of Ukraine -** The invasion of Ukraine has caused massive disruption to energy gas supplies. This is especially the case as G7 and EU countries are reducing or banning the use of Russian energy supplies.
2. **Gas shortages** - There was a prolonged cold winter between 2020 and 2021, this drained the EU's natural gas storage.
3. **Increased demand**- As countries move away from less environmentally fossil fuels, there has been a rise in the demand for natural gas to ease the transition. Therefore, there has been higher demand for liquified natural gas (LNG) from Asia, which has led to lower LNG shipments to the EU.

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4. **Nord Stream 2** - The Nord Stream 2 pipeline is a $11bn link across the Baltic Sea with the capacity to send 55 billion cubic metres of gas a year, directly from Russia to Europe, bypassing the Ukraine. However, the project has been halted due to the geopolitics surrounding the Russian invasion of the Ukraine. Currently, it is viewed by Europe that allowing this pipeline to open would give Moscow too much geopolitical power.

Why are UK energy prices so high?

Whilst we are in the midst of a global energy crisis, the UK is also suffering from additional issues:

1. **Low winds**- Over the past year, low winds have meant lower renewable energy generation. This, coupled with outages at some nuclear power stations, has led to a higher percentage of electricity production through using gas.
2. **National Grid** - A fire at a National Grid sight in Kent, knocked out a power cable that runs between the UK and France, used to import electricity from the continent. This is not expected to be fully functionating again until 2023.
3. **Gas reserves**- The UK has the lowest gas reserves within Europe; this means there is little opportunity to stockpile gas to use it when most needed. Stockpile capacity is equivalent to roughly 2% of the UK's annual demand, compared with 25% for other European countries and as much as 37% in Europe's four largest storage holders.

Does the energy price cap apply to businesses?

UK households have been hit with higher energy bills after the energy price cap on standard variable rate tariffs (SVTs) increased by 54% as of April. With the average cost of an SVT having risen by £693 to £1,971 a year. Households on prepayment meters have seen average annual bills rise by £708 to £2,017 a year. This is set to worsen in October when there will be another £800 expected increase in the price cap by OFGEM. However, the price cap does not extend to business energy, meaning that suppliers can increase their out of contract rates by as much as they see necessary to cover their increased costs and remain profitable. This has seen out of contract rates (also known as deemed rates) rise by an average of 100% since August 2021. This means any business which lets a fixed rate deal expire without arranging a new one could see huge price hikes even though they are using no more energy than before.

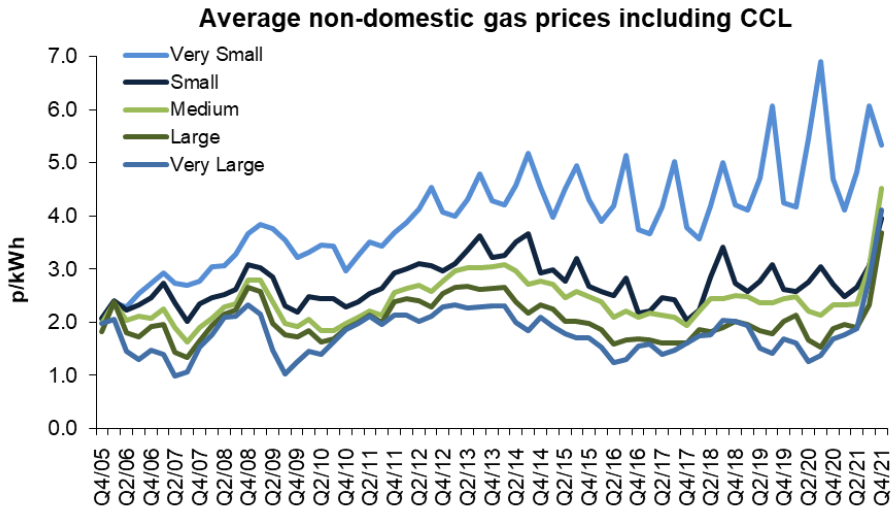
What are the latest business energy rates?

The rates a business will be charged for energy will depend on the size and type of business, as well as the amount of energy used, as well as how and when it is used. Location may also have an impact of the rates that a business may pay.

Energy rates by volume of consumption

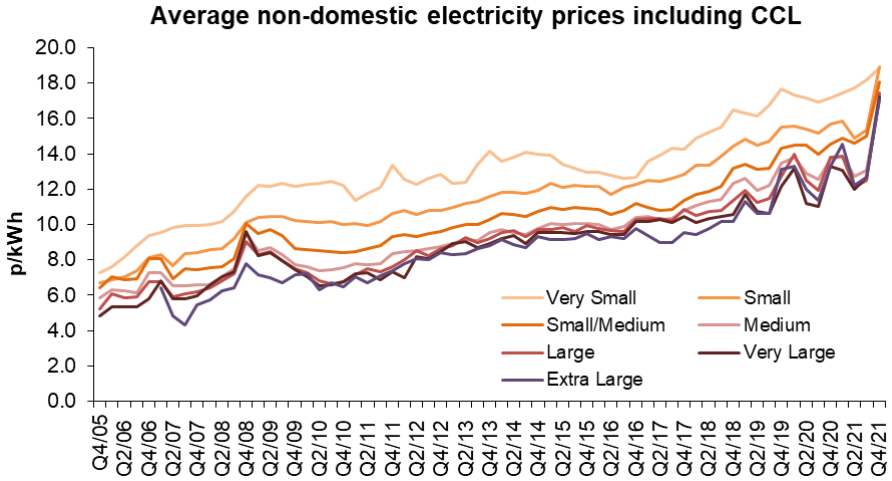
Figure 3 below shows the average non-domestic gas prices, across all businesses the average gas price was 4.18 pence per kWh in Q4 of 2021. However, the price does vary dependent annual consumption of gas. Businesses consuming under 278 MWh or very small consumers, on average pay 5.34 pence per kWh, comparative to very large consumers which consume over 277,778 MWh per year which were paying an average of 4.11 pence per kWh.

Figure 3: Average non-domestic gas prices, including the Climate Change Levy (CCL)



Source: ONS, 2022

Figure 4: Average non-domestic electricity prices, including Climate Change Levy (CCL)



Source: ONS, 2022

Figure 4 above shows average non-domestic electricity prices by consumption size. Much like gas prices, electricity prices rapidly grew during the final quarter of 2021. Additionally, the price that businesses would pay varied by annual volume of consumption. Very small consumers – consuming under 20 MWh per year- were likely to pay the highest electricity price in Q4 of 2021 at 18.84 pence per kWh. Whereas extra-large consumers- consuming over 150,000 MWh annually- paid on average 17.07 pence per kWh.

Between 2020 and 2021, the average price of electricity per kWh increased by 11.8% and gas increased by 24.4%. The year-on-year increase has been higher for larger consumers however, smaller consumers are still paying a much higher rate. Additionally, ONS has not yet released the figures for the first quarter of this year, and these figures have rapidly increased during this period, especially given the Russian invasion of the Ukraine and following sanctions and embargos of Russian energy supplies. However, Cornwall Insight in forecasting that SMEs could be facing a gas bill rise of around 250% in Q1 of this year comparative with Q1 of last year.

A recent survey by Iwoca, found that over 1/3 (36%) of small business owners saw their energy bills increase in 2021. During the year, one in five owners saw an increase of over 15%, and one in ten reported a hike of 20%. Almost a third (30%) of small business owners say they will have to reduce their energy usage to save on running costs. Yet nearly one in five (17%) said that doing so would negatively impact their business. One in four (26%) small business owners have increased their prices due to rising inflation and business costs. This comes following a record rise in energy bills at the beginning of April and ahead of another potential spike in October.

Energy Use by Sector

The type of industry and the way businesses use energy will determine the amount of energy used each year. When it comes to heating business premises, the energy efficiency of the building will also play a part. The table below shows a breakdown of the UK's top 10 biggest business energy consumers:

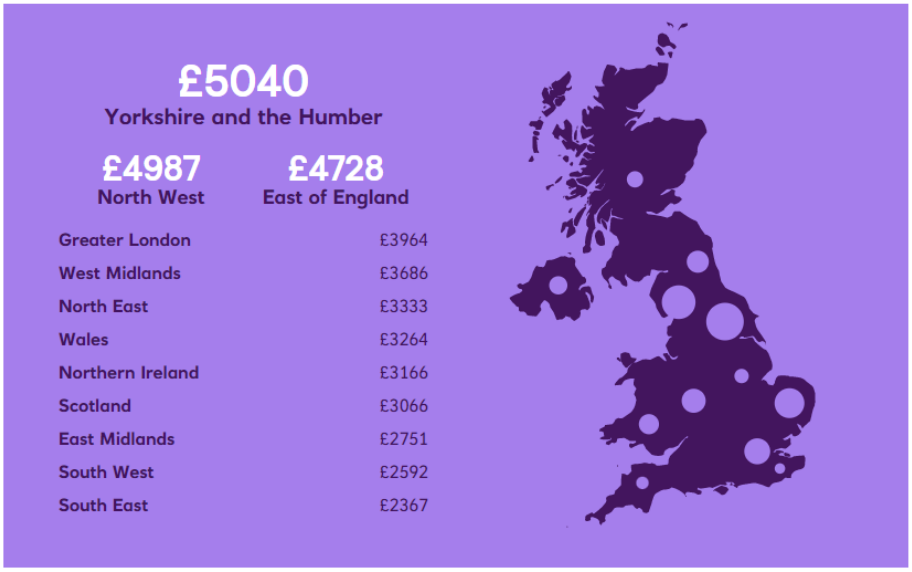
Industry	Combined annual usage
Commercial and miscellaneous services	169,972,450 MWh
Public administration	64,883,770 MWh
Manufacturing and industrial services	42,042,450 MWh
Chemical manufacturing	40,728,260 MWh
Food, drink and tobacco manufacturing	34,506,210 MWh
Mineral products manufacturing	30,028,660 MWh
Printing and publishing	21,294,530 MWh
Agriculture	17,503,150 MWh
Mechanical engineering	17,596,190 MWh
Iron, steel and metal manufacturing	17,410,110 MWh

Impact on the West Midlands

The West Midland Combined Authority (WMCA) has the second largest number of SMEs amongst combined authorities, in England with the WMCA being home to around 90,000 micro and small businesses, with these businesses making up 97% of the regions total business count. Energy prices potentially rising by 250% in the first quarter of this year will drastically impact their ability to continue to operate at current capacities. If energy prices continue to rise at such a rate many businesses in the region may be forced to reduce operations or raise prices.

Currently, according to analysis from Tyl, as can been seen in the figure below, the average Business within the West Midlands (WM) is spending £3,686 on their annual energy bills. Excluding Greater London, this means that the WM has the 4th highest average annual energy bill amongst the UK regions.

Figure 5: Annual business energy bills by region



Source: Tyl, 2022

Rising energy prices could see these figures climb even further, especially following the energy price increases expected later this year in October. Unlike on domestic energy prices, there is no energy price cap on business energy rates. According to 70% of business owners surveyed, rising energy prices will also continue to stifle their growth. This stifling of growth alongside protracted high inflation could lead to stagflation in the region.

This could be particularly acute in the WM as the industrial make-up of the WM was highly impacted by the pandemic, vastly reducing growth, compared to other UK regions. Some of these large sector employers in the region, such as the automotive industry, are also still grappling with inflation caused by other factors such as shortage of raw materials, supply chain bottlenecks and Brexit increasing transactional costs. Rising energy prices will likely force many businesses in these sectors to increase prices and this will reverberate across all supply chains.

Rising energy prices are increasing at a faster rate in UK comparative to other countries, as seen in Figure 2 within the Global, National and Regional section. Inflation rising at a higher rate in the UK than in other countries, will lead to real term increases in prices comparative to other countries. The WM is one of the UK's highest exporters of goods and inflation rises will reduce the comparative advantage of firms in the region compared to firms internationally. As a result, exports may fall.

New Opportunities for Low Carbon Growth

Martin Freer, University of Birmingham

Professor Martin Freer discusses what areas of the low-carbon sector the West Midlands is optimally placed to develop in the region.

This blog post was produced for inclusion in the Birmingham Economic Review for 2021.

The annual Birmingham Economic Review is produced by the University of Birmingham's City-REDI and the Greater Birmingham Chambers of Commerce. It is an in-depth exploration of the economy of England's second city and a high-quality resource for informing research, policy and investment decisions.

This post is featured in Chapter 5 of the Birmingham Economic Review for 2021, on sustainability and a green, clean and just transition.

You can read the Review here.

Low Carbon Manufacturing

Research performed by the West Midlands Growth Company has shown that despite the impact of Covid, low-carbon manufacturing is now the West Midlands' fastest-growing sector; the sector grew by more than 7% in 2020 despite a 9% decline in the wider West Midlands economy as a result of the Covid pandemic.

This positive news signposts a direction and signals a nationally leading position, which creates a platform to build new sectors which could be pivotal for the growth of the regional economy. Low carbon is a big sector, but there are two obvious markets where the West Midlands is optimally placed; low-carbon heating and low-carbon transport.

Heating homes

In the present mix of energy utilisation in the UK, heating accounts for 40% of the energy consumption and about one-third of the carbon emissions. To date, in contrast to electricity, very little progress has been made in the decarbonization of how homes are heated and how heat is generated in industrial applications. The UK generates most of its heat utilising natural gas and sits at the high end of the spectrum in terms of carbon intensity. The reason so little progress has been made in the UK is that it is extremely challenging to make progress. Unlike the greening of the electricity grid, where the appliances in the home are immune to changes in the source of generation and the switch from coal to wind can be done without any need for the customer to change behaviour, heat will need a change in 25+ million homes.

Delivering low-carbon heating in the UK and the Midlands

There are three accepted ways of delivering low-carbon heating. The approach that the UK government has most enthusiastically supported is heat pumps which use electricity to extract heat from the external environment, air, or ground and pump it into the building. The UK government's 10-point action plan for the delivery of net zero sets out an ambition to install 600,000 heat pumps a year by 2028. The challenge with a heat pump solution is that it is expensive compared to a gas boiler, by a factor of 10 to 20, and is not a direct one-for-one replacement. The intensity of heat a heat pump can generate is less than that of a gas boiler and hence there is a need for hand-in-hand improvements to the thermal efficiency of the home. The cost and level of disruption are therefore high. Alternatives to this approach are either the use of hydrogen or district heating.

The Midlands proposes a National Centre for Decarbonisation of Heat (NCDH), working between local government, academic institutions, innovation Catapults, and industry to coordinate the delivery. The NCDH would work on a whole series of activities including driving down the cost of delivering heat. This would be the analogue of what has been achieved in offshore wind. As a benchmark of heating installation, the cost of heat pump installation for heat pump and thermal retrofit is £20k per house and 25million homes, so of the order of £500b. An innovation program that took just 10% off the installation costs would save £50b, which is staggering and could be redeployed elsewhere

in the energy system, or even in healthcare. The Midlands has the assets to lead the decarbonization of heat being home to several major companies such as Worcester-Bosch, Baxi, E.on, Engie, and Cadent, state-of-the-art manufacturing expertise through the Manufacturing Technology Centre, the Energy Systems Catapult, and a powerful network of Midlands universities.

The region has all of the ingredients to establish itself as the location for the delivery of low-carbon heating manufacturing and services to the UK and beyond. The second opportunity is in transport.

Electric Vehicles

Following recent government announcements on the end of the sale of new petrol and diesel cars and vans from 2030, there is an opportunity for the Midlands to continue to take a leading role in the introduction of electric vehicles in the UK and internationally by continuing to innovate, supporting the industry with transitioning to manufacturing for electric vehicles and implementing infrastructure to allow both pilot activity and full-scale deployment of technologies. The announcement by Jaguar Land Rover that it will develop 6 new electric vehicles in the next 5 years and that all vehicles will be available as all-electric variants by 2030, sets the pace for the region.

Growth in HGVs

Since the mid-1990s, the most significant growth in types of heavy goods vehicles, HGVs, has been in articulated HGVs over 41 tonnes gross vehicle weight, which was initially allowed on British roads in the early 1990s but only when moving containers to/from rail terminals but were then permitted for all freight traffic from the early 2000s. By 2018 around 115,000 HGVs over 41 tonnes were registered in Great Britain. The Midlands has 30% of the lorry freight in the UK. HGV emissions make up 21% of road-based transport emissions in the Midlands compared with the national average of 17%.

These HGVs have been the supply chain backbone, supporting just about every element of how we live our lives. They transport goods across and into the country, from food to construction materials. It is hard to appreciate the scale of the haulage sector until moments when it grinds to a halt and supplies run scarce and trucks back up at ports for tens of kilometres. They are the lifeline for the UK's economy. Yet, on the other hand, they are heavy, diesel consuming, transport whose impact on CO2 emissions is significant and to achieve net-zero need to be transformed.

Decarbonising HGVs

There is a clear need to decarbonise this extreme end of the HGV spectrum. Here fuel cell and hydrogen (FCH) technology is a very promising zero-emission powertrain solution for the heavy-duty trucking industry. It is widely accepted that electric vehicle solutions cannot work at this end of the spectrum as the weight of the battery packs required to power the vehicle's electric engine becomes so heavy that the economics cease to stack up. Although there are no 41-tonne hydrogen trucks presently on the UK roads, we are on the verge of seeing this happen. There are a number of international truck manufacturers who have prototype vehicles and there are companies such as Hyundai who have established a small-scale trial of hydrogen-powered trucks in Switzerland. There is a need for the UK to get on board.

The UK government has recently run a competition for catalysing regional development of schemes to transition the HGV from diesel. The Midlands has the ambition to establish a hydrogen freight and logistics route which extends from the West Midlands past the East Midlands Airport and through to the South Humber. In the first instance, this could see hundreds of hydrogen trucks on the roads and a national demonstrator. The aim is also to create the right economic environment for hydrogen truck manufacturers to locate in the region. A hydrogen vehicle manufacturing sector would take advantage of the rich automotive heritage of the West Midlands.

Of course, ingredients are one thing, delivery is another. The opportunities for growth in low-carbon technologies are well recognized across the UK, with the Northeast already making hay with offshore wind and now the development of a centre of excellence for hydrogen. The stakes are high and there is a need for urgent and strong regional leadership to ensure that the fledgling signs of economic growth are not extinguished by failure to grasp the opportunity.

How Does the Innovation Performance of the West Midlands Rank on the National and International Stage?

Kelvin Humphreys, WMREDI

Summary

This analysis compares the innovation performance of the Birmingham city-region with counterparts in the UK and abroad. Although it is reliant on a limited set of science and technology (S&T) output indicators as proxies for innovation, it reveals some novel differences.

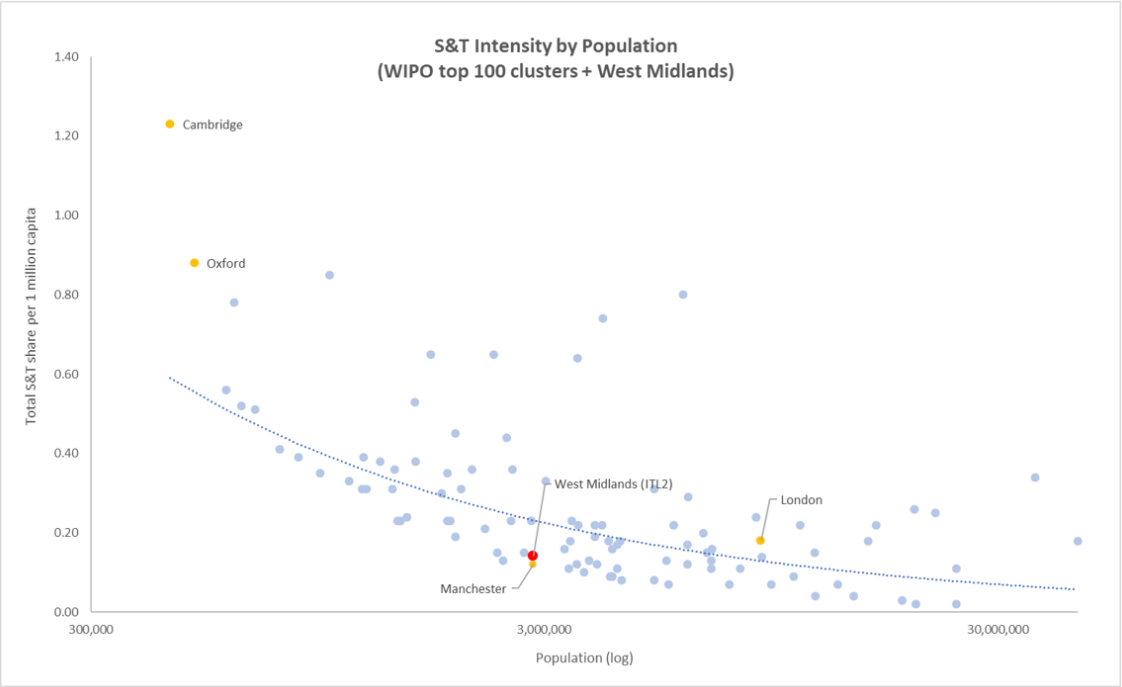
- Manchester and Birmingham city-regions both underperform relative to their international peer group based on population size.
- Oxford and Cambridge are national and global outliers in terms of S&T intensity. Disregarding these outliers, there is relatively little variation in innovation performance across regions, compared to other countries.
- Breaking down the analysis to focus on specific measures of S&T output and discounting the outliers shows the West Midlands to be performing well nationally, relative to its size, while Greater Manchester lags the rest of the pack, especially on patent applications.

Benchmarking the innovation performance of the West Midlands region

Our aim is to benchmark the innovation performance of the West Midlands region (aligning with the International Territorial Level 2 (ITL2) definition of the metropolitan county) within both the national and international context. The West Midlands is the largest urban agglomeration outside of London and has been noted for its relatively high level of private sector investment in R&D, but low level of public sector investment in R&D. This analysis attempts to benchmark regional performance using patenting and scientific publication data by drawing on methodology and metrics published in the World Intellectual Property Organisation's (WIPO) annual Global Innovation Index.

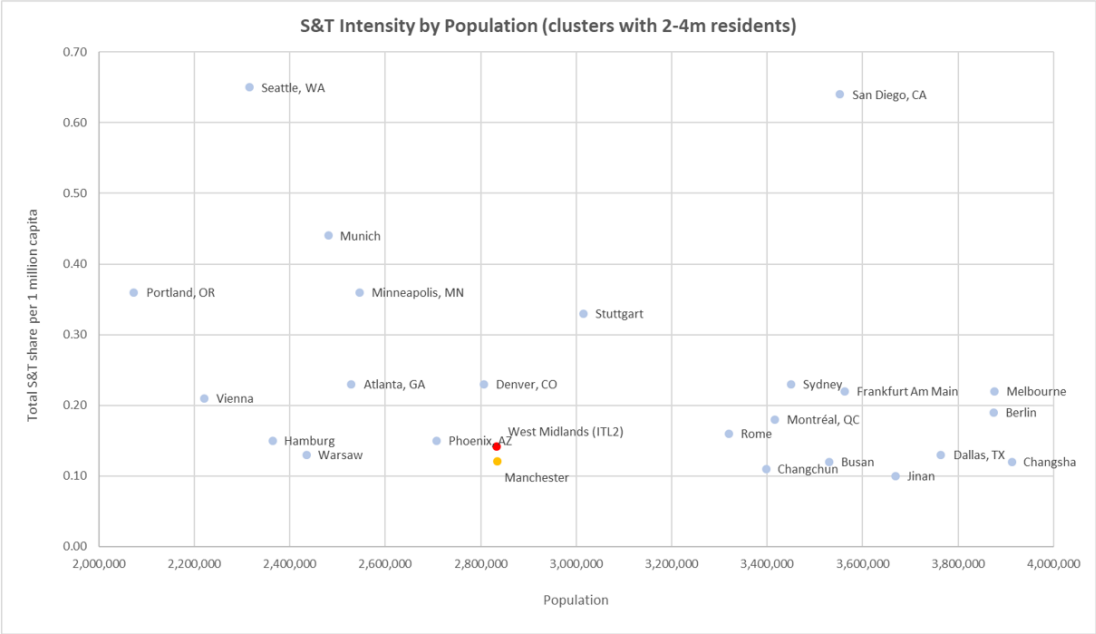
WIPO provides an annual ranking of the ***Top 100 Science and Technology Clusters*** worldwide based on a bottom-up analysis that uses geolocated patent and scientific publications data as a proxy for science and technology (S&T) intensity. Clusters are identified according to the density and proximity of geolocated data and do not necessarily align with established municipal boundaries. S&T intensity is defined as a cluster's combined global patent and publication output per 1 million people. WIPO's method maps identified clusters onto population data from the Global Human Settlement Layer Population Grid thereby creating a high-resolution view of clusters and their S&T intensity.

WIPO's Top 100 rankings for 2020 (S&T cluster rankings are taken from WIPO's Global Innovation Index 2020. The analysis uses patent and publications data between 2014-2018 and population data from 2015; the 2021 Index was not used as it contains a more limited set of data.) show an inverse relationship between cluster size and S&T intensity with small but highly intensive clusters, including Oxford and Cambridge, at one end and large but relatively lower intensity clusters, including London, at the other end. Manchester is the only other UK city that appears in the 2020 rankings.



We have attempted to benchmark the West Midlands against WIPO's rankings using a simplified methodology. To do this we took the patent, scientific publication and population data falling within the West Midlands metropolitan county (ITL2) administrative boundaries and used it to calculate S&T intensity per capita. Whilst the methodology is less granular the results yield an interesting insight as the region is placed in an almost identical position to Manchester. In this case, Manchester refers to the innovation cluster identified in WIPO's bottom-up analysis rather than a particular administrative geography. The identified population of 2.84 million people aligns very closely with that of the metropolitan county.

The West Midlands region has a population of c. 2.8m people. Focusing in on the S&T intensity of clusters with a population between two and four million highlights that both UK cities underperform compared to their peer group based on size.

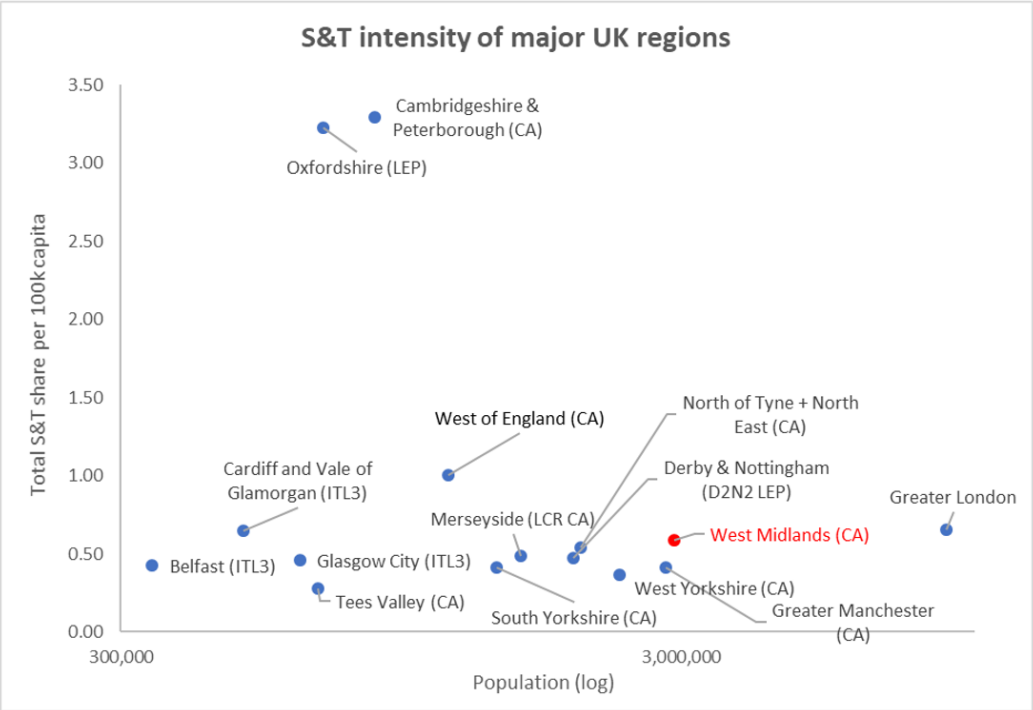


Benchmarking analysis for the major economic regions in the UK

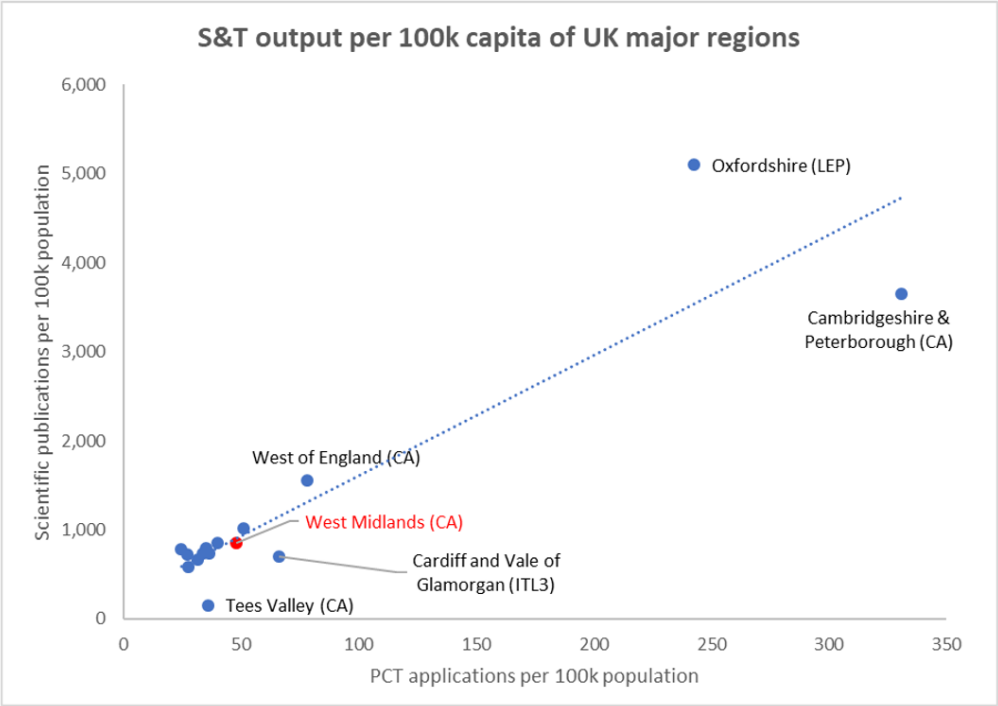
Our next step was to perform a similar benchmarking analysis for the major economic regions in the UK, including all combined authorities and core cities. We achieved this using available patents, scientific publications and population data for the most recent five-year period (Patent data is taken from the OECD REGPAT database and suffers from a

time lag meaning the most recent data covers 2013-2017. Scientific publications data is available for 2017-2021 using the Web of Science, Science Citation Index Expanded (SCIE) excluding Arts & Humanities and Social Sciences research areas.) Population estimates are averaged over 2016-2020. We defined geographies outside of Greater London using combined authority boundaries, Local Enterprise Partnership boundaries (England only) or corresponding ITL3 boundaries as applicable.

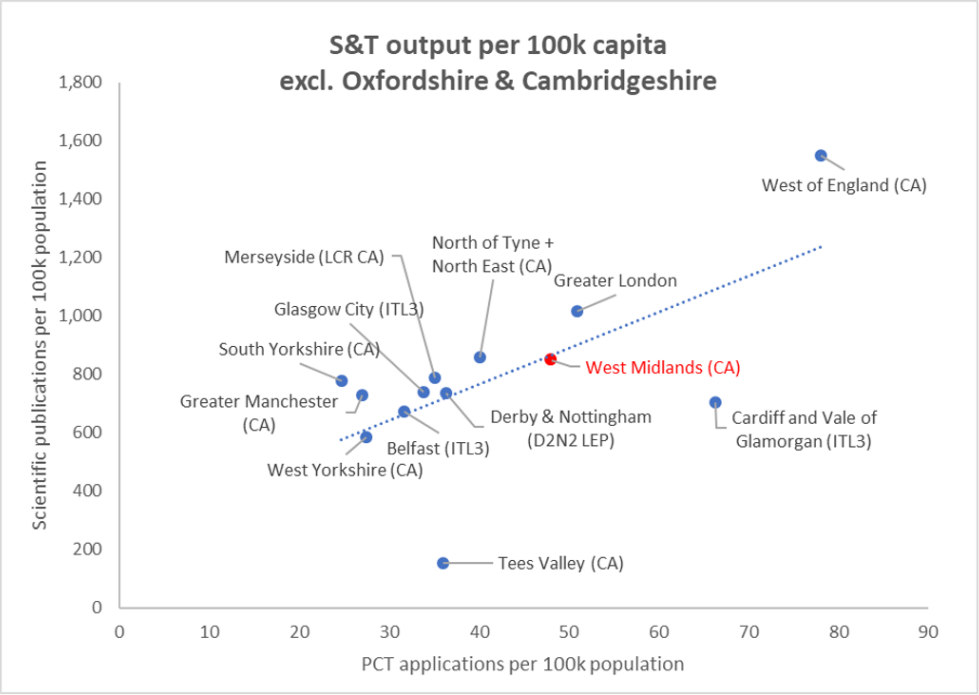
Charting S&T intensity against population demonstrates a less clear relationship between intensity and size within the UK. Oxfordshire (LEP) and Cambridgeshire and Peterborough (Combined Authority) appear to be complete outliers.



Switching the axis to plot patent applications and scientific publications per (100k) capita demonstrates just how intensive Oxfordshire and Cambridgeshire are for both proxy measures relative to all other UK major economic regions. There is also a more discernible relationship between patents and publications with performance across both measures appearing to closely correlate.



Excluding the outliers and focusing on the remaining regions shows the West Midlands to be performing relatively well amongst major UK regions and not too dissimilar to Greater London.



The West Midlands is therefore performing well within the national context relative to its size when using these two proxy measures for S&T output. Interestingly, Greater Manchester lags the rest of the pack when using our simplified methodology, especially on patent applications. Both city-regions underperform their international peer group of similarly sized S&T clusters based on the WIPO rankings.

Innovation weakness of the UK

It could be said that the UK as a whole has an apparent weakness relative to other highly innovative nations (the UK ranked 4th in WIPO's Global Innovation Index 2021 in comparison to 131 other nations) when it comes to mid-sized cities. Between the stellar S&T performance of Oxford and Cambridge and the global significance of London, there is little in between that could be classed as world-leading. Compared to other countries, including the US, there is remarkably little variation in innovation performance across regions, not considering the two outliers.

Raising the innovation potential of regional cities outside the London-Oxford-Cambridge 'Golden Triangle' could accelerate economic growth outside of the Greater South East and help to address inter-regional inequality. The Levelling Up White Paper aims to achieve this through a spatial rebalancing of R&D investment although current spending commitments do not go far enough.

Whilst the results of this exercise paint an unsurprising picture it should be noted that the use of patents and scientific publications as proxies for innovation performance is overly simplistic. A more comprehensive attempt could be made to link innovation inputs (which include scientific outputs) with innovation outputs, including commercialisation and adoption of new technologies for economic exploitation.

Regional Systems of Innovation – How Does the West Midlands Compare With its European Counterparts?

Carolin Ioramashvili, WMREDI

Dr Carolin Ioramashvili and Professor Simon Collinson compare levels of innovation in regions around Europe with the West Midlands to show policymakers where they can focus investment and interventions.

This is part of a series of blogs looking at Innovation in the West Midlands.

Find out more about our work on regional innovation systems.

Innovation is intended to be one of the key drivers of the Government's Levelling Up agenda, with increasing innovation funding outside London and the South East one of the 12 missions. But how do UK regions actually perform in terms of innovativeness against their European peers? And where should policymakers focus investment and interventions to improve our regional systems of innovation?

In this blog, we develop indices of innovation "inputs" – such as basic research and development of new technologies, and innovation "outputs" – the commercialisation of these inputs in the form of new or improved processes, products or services. We show that – across almost all regions – the UK is performing relatively well in terms of innovation inputs. But it is lagging behind in terms of applying these commercially – and arguably, it is commercialisation that can drive long-term growth in employment, productivity and prosperity. This is also the area where the South East, as well as the East of England, are performing much better than the other regions.

However, the UK is not alone with this problem. In our analysis of 237 European regions, we find that many regions in Germany and the North of Italy face a similar dilemma, despite being successful engineering and manufacturing hotspots. Other countries, including Norway and France, have the opposite problem, of being good at commercialising new technologies, but having a weak basic research sector underpinning these industries. In fact, there are very few countries that perform well both in terms of innovation inputs and outputs. The exceptions are Belgium and the Netherlands. These countries appear to have a better balance between the supply-side of innovation inputs, and the demand-side of outputs and adoption. If UK policymakers want to learn from other countries how to successfully translate basic science into economic growth, this is where to look.

Measuring innovation inputs and outputs

To develop our indices, we combine several variables into an innovation input and output index. All data is provided by the OECD at the NUTS2 or 3 levels, to be on a similar scale to the West Midlands region. We include the EU, Switzerland, Norway, and the UK. The different variables are combined into indices using Principle Components Analysis (PCA). The baseline indices are based on values for 2015, with gaps filled in with available data from 2012 to 2018.

The input index includes variables that represent basic research and inputs in the innovation process, such as skills, participation in training, public R&D expenditure and patenting in different technologies, which represents the development of these technologies, but says nothing about their commercialisation. The share of PCT patents that are filed jointly with regional partners represents the density of the innovation system.

In contrast, the output index includes variables that represent the translation of basic research into new products, processes and services. This includes the start-up rate, or "births" of businesses, young businesses, defined as three years old, and the ratio of the two, to capture start-up survival. Here, we also include R&D expenditure by the private sector, which is likely to be more applied and translational than publicly financed research. Further, we include employment in high-technology manufacturing and knowledge-intensive services, as well as the overall diversification of the economy, defined by the Hirschman-Herfindahl index of regional GVA (the HH-index is defined by the sum of squared industry shares in total regional GVA).

The figures below show maps of the indices. Broadly speaking, regions with a value above zero score above average on the score and are shaded from yellow to red, while regions scoring at or below average are shaded in blue.

Most of the regions of the UK perform very well in terms of innovation inputs, but less well in terms of outputs. This is similar to Germany and the North of Italy. The opposite is true of Norway, and to a lesser extent France, which score low on innovation inputs but high on outputs. Belgium and the Netherlands, and perhaps surprisingly, Bulgaria, score high on both measures.

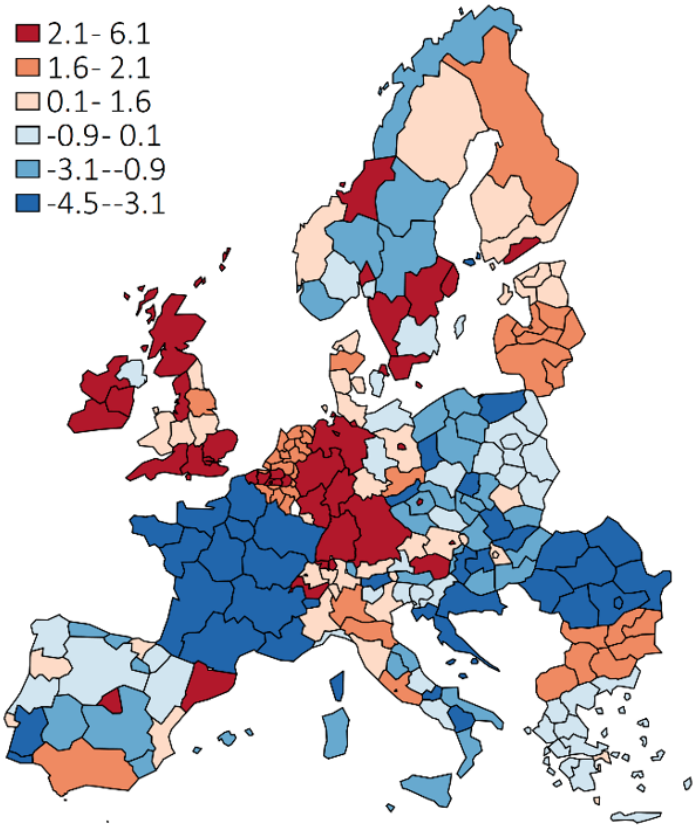


Figure 1: Map of the innovation input index

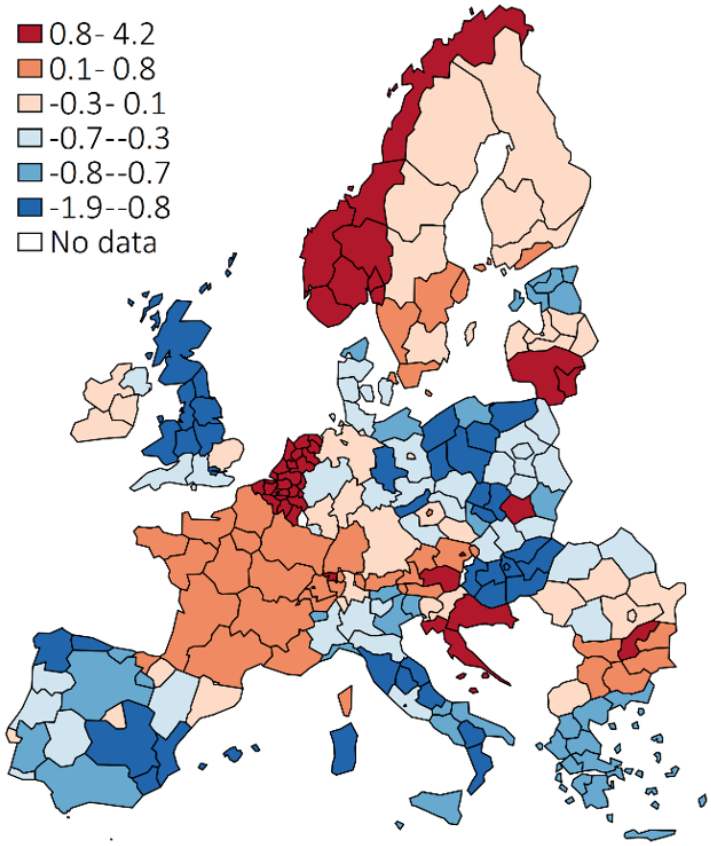


Figure 2: Map of the innovation output index

How does the West Midlands compare?

Figure 3 below focuses on a few selected regions that score similar to the West Midlands on both measures. This includes all regions with a positive innovation input index, but a negative innovation output index. The West Midlands, in the bottom left corner of the figure, is highlighted in red. In its immediate vicinity are several other UK regions, including Wales, the East Midlands, and the North East. All other UK regions can be found in this graph as well, with London, the South East and East of England showing some of the highest input scores. The other regions similar to the West Midlands are very diverse and include two Southern European regions with Tuscany and Andalusia, the Budapest, and Northern Jutland, a rural region in Denmark. The other regions on the graph are from Finland, Germany, Ireland, Portugal, Sweden and Switzerland, as well as further regions from Denmark, Hungary, Italy and Spain.

While it may not be immediately attainable for the West Midlands and other UK regions to achieve the same high levels of innovation inputs and outputs as Dutch and Belgian regions, the figure provides some regions that UK policymakers could try to emulate. This includes the Republic of Ireland, where both NUTS2 regions score a little bit higher both in terms of inputs and outputs than the West Midlands, or Lisbon, the East of Switzerland and Southern Finland, which score even a little bit lower on innovation inputs, but much higher in terms of outputs, suggesting a much better rate of translation of inventions into commercial outputs.

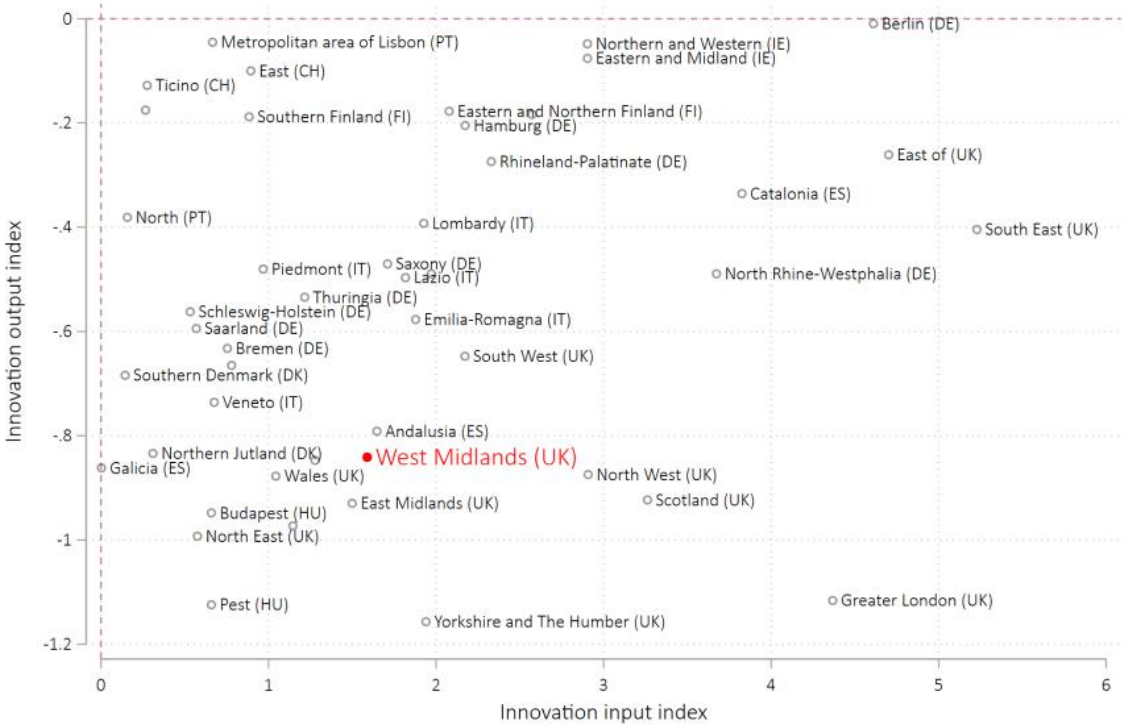


Figure 3: Zoom in on the West Midlands peer group

Less is More? Will the Levelling Up White Paper Rebalance the Regional Distribution of R&D Spending?

Carolin Ioramashvili, WM REDI

In this blog, taken from REDI-Updates focusing on the government's flagship policy - Levelling Up - Carolin Ioramashvili, Kelvin Humphreys and Simon Collinson examine the promise to boost Government R&D spending outside the greater South-East region.

View REDI-Updates.

In the 2020 edition of our REDI Updates, we examined the government's promise to increase R&D spending to 2.4 percent of GDP (the OECD average) linked to the need to rebalance growth across UK regions. Since then we have seen the launch of the Government's Innovation Strategy and the Place-based R&D Strategy and now the Levelling Up White Paper, with R&D as the second mission listed out of 12.

The Government states:

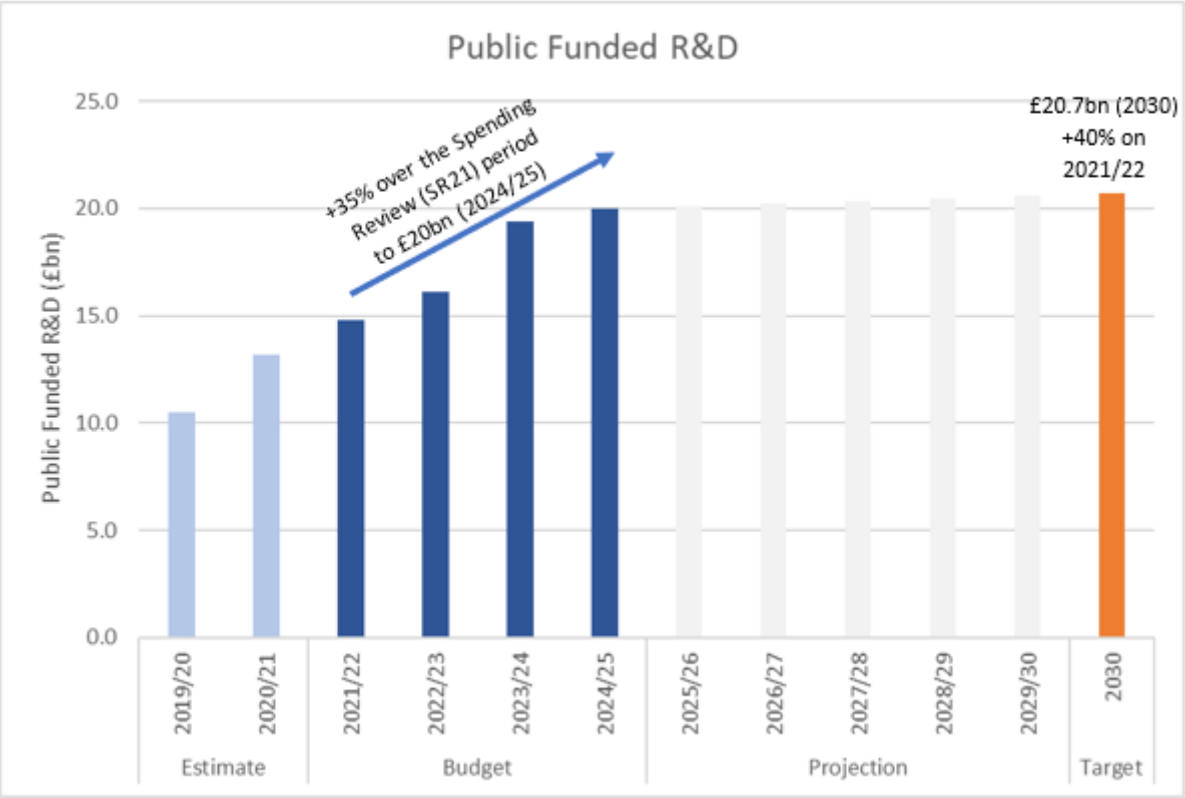
> *"By 2030, domestic public investment in R&D outside the Greater South East will increase by at least 40%, and over the Spending Review period by at least one third. This additional government funding will seek to leverage at least twice as much private sector investment over the long term to stimulate innovation and productivity growth."*

As part of the adoption of levelling up as a core goal for BEIS and UKRI the government has made the initial commitment to spend 55% of its budget outside the 'golden triangle' by 2024-25. This was at least partly triggered by a well-publicised NESTA report by Forth and Jones (2020), which noted that London and the two subregions containing Oxford and Cambridge account for 46% of all public and charitable spending on R&D, but just 31% of business R&D and 21% of the population.

Analysing UK Government R&D spending, past, present, and promised, we find some hope but also disappointment for those in city-regions outside of London, the South-East and East of England (GSE). A reality check provides the following conclusions.

Many see mission 2/12 as promising new funding, but it does not look like a lot

A major reason that the R&D spending numbers are underwhelming is that a significant boost to R&D investment was already announced in the latest Spending Review (SR21). SR21 shows public spending on R&D rising from £14.8bn in 2021 to £20bn in 2024. A 35% (nominal) increase by 2024 was excellent news. Increasing spending by 40% by the end of the decade only adds a further £0.7bn by 2030 (assuming this is a percentage increase over 2021 budgeted levels and in nominal terms, on which the White Paper is not clear), and that's assuming both the Greater South East (GSE) and non-GSE see a 40% increase. If the GSE sees a lower increase as part of rebalancing efforts, then the overall increase will be less than £0.7bn.



Projected public-funded R&D investment to 2030

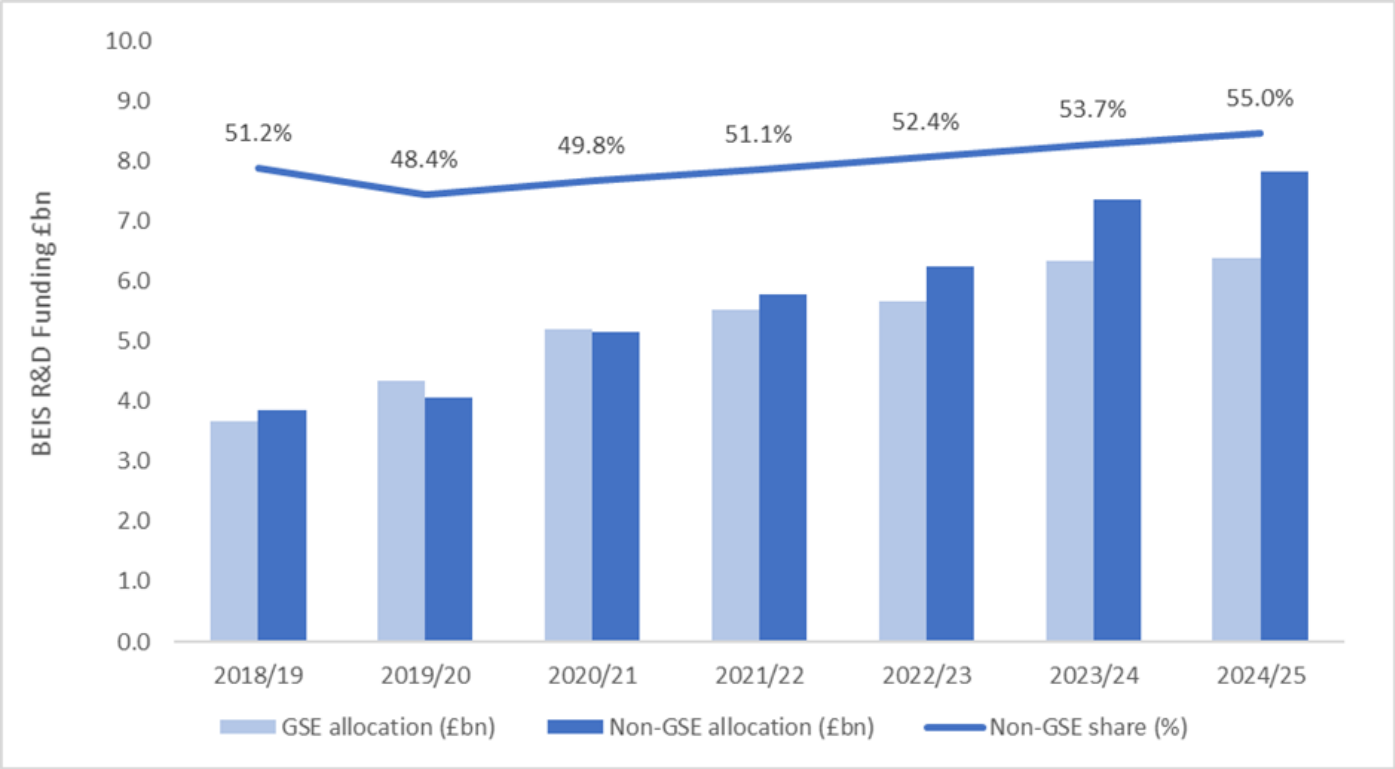
The 40% overall increase and 55% outside the GSE are not enough to achieve levelling up.
The target for a 40% increase in public R&D spending by 2030 only applies to the non-GSE regions (see above). The aim for BEIS to invest at least 55% of its R&D funding outside the GSE East by 2024-25 is a step in the right direction but does not appear to go far enough to rebalance the current spending distribution.

The funding aim includes BEIS spending through UKRI, other BEIS R&D funding competitions, industry R&D programmes and R&D infrastructure. It is difficult to track regional spending of all public R&D funding and the Government acknowledges this. It makes a clear statement in the White Paper (p.172) of its intention to develop better data in the future and close these evidence gaps.

Using currently available UKRI data for Innovate UK, Research Councils and Research England we have traced 67% of BEIS' R&D spending in 2018 and 51% of spending in 2019 to the main regions of the UK at the International Territorial Level 1 (ITL1) level. The data shows an almost 50:50 split in spending in the GSE and non-GSE when averaged over the two years (In this exercise the GSE is defined as ITL1 regions: London, South East and East of England. The non-GSE includes all remaining regions in England plus Scotland, Wales and Northern Ireland).

An indicative estimate of BEIS regional R&D spend in 2024/25
A shift to a 55:45 split in favour of the non-GSE by 2024/25 is then indicatively a welcome step towards rebalancing. Assuming all BEIS R&D funding follows the same distribution as that identified in the available data, then the targeted distribution would represent a £0.7bn reallocation of budgeted funding in 2024/25 from the GSE to the non-GSE.

However, the GSE as defined in this analysis covers only 37% of the national population and would still be over-weighted on a per capita basis. The GSE would also see substantial growth in R&D funding despite the rebalancing given the large increases in BEIS budgeted spending in the SR21.



The indicative trajectory of BEIS regional R&D spend between 2018/19 – 2024/25

Which regions will benefit very much depends on how the uplift is delivered.

If we take the West Midlands, it was highlighted by Jones and Forth (2020) as a region which attracts about £400 per capita in private R&D spend, compared with only £83 in public R&D spend. But the West Midlands has done better in attracting Innovate UK funding, particularly in 2018-19 when it was awarded 14% of the national total, compared to a much lower annual average in other years. Given that there is an anticipated '36% ***real-terms*** increase for Innovate UK annual core funding between 2021-22 and 2024-25' (compared to the 35% ***nominal*** increase for overall R&D funding), this could be a significant opportunity for this region at least.

The government wants to focus a high proportion of any new funding on translational or 'applied' R&D. In fact, one observation is that only £5.9bn of the £20 billion promised across the government by 2024-25, will be spent on the "core research budget."

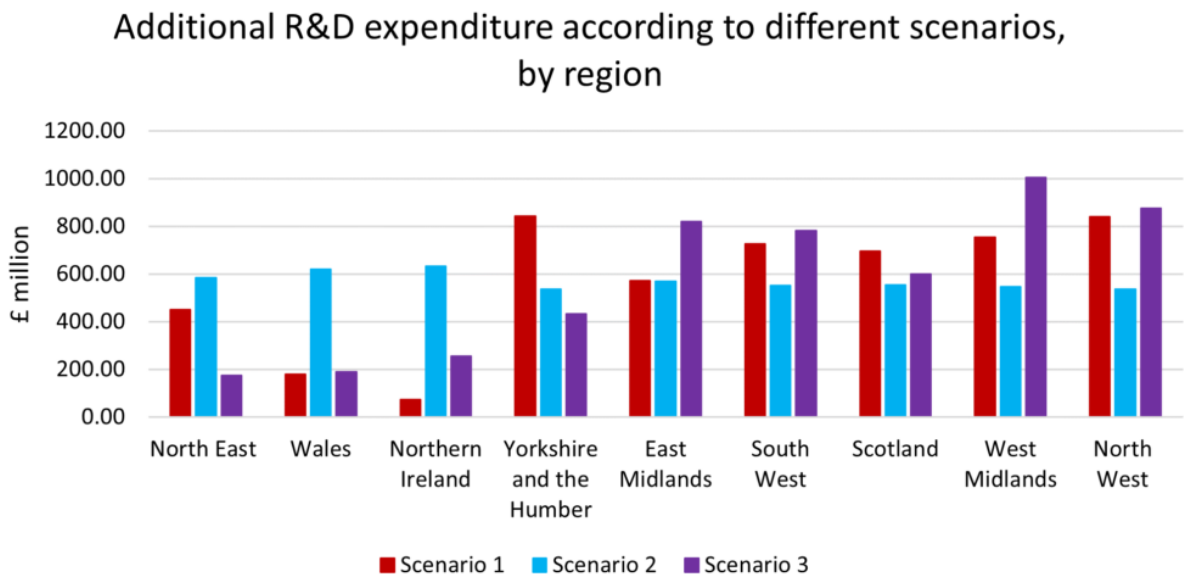
Research councils and Formula based, Quality-Related (QR) funding is unlikely to increase as much as other BEIS and government spending on R&D. But this raises another opportunity for the West Midlands, alongside Greater Manchester and Glasgow, who have been earmarked for £100 million for Innovation Accelerators in the Levelling Up White Paper. These are likely to be intermediary technology transfer facilities, linking universities and other R&D sources to local firm-level demand. As in the case of the Warwick Manufacturing Group (WMG), Tyseley Energy Park (TEP), or the Manufacturing Technology Centre (MTC), these might also be funded to combine technology development, upskilling, entrepreneurship, scaling-up and support for small firms and local supply chains. These centres are all in the West Midlands and subject to a WMREDI study of 'STEM assets' to evaluate their local impacts.

Based on the latest available data on UKRI and further BEIS expenditure on R&D, as well as ONS data on university and private sector expenditure, we have developed several scenarios on what the 40% promised increase in spending outside the GSE could mean for different regions. The modelling also takes into account the target to double match additional public funding with private sector sources. The modelling assumes that this target will be met, although this may be more challenging in regions with a weaker private innovation sector.

The figure below shows the pound increase in overall R&D expenditure over the policy period, according to three plausible scenarios. Scenario 1 assumes that there will be an overall 40% in government funding, which will be distributed in the regions outside the GSE following the previous distribution of government funds. In this scenario, the North West and Yorkshire and the Humber would be big winners, as well as the West Midlands.

Scenario 2 assumes a larger effort to rebalance expenditure across all regions. In this scenario, more of the additional funding is allocated to regions that previously received less public funding. The distribution of funds is relatively even, with most additional funds received in the North East, Wales, and Northern Ireland, although it is as yet unclear how the policy would apply in the devolved administrations.

Lastly, scenario 3 assumes that the government follows market signals in allocating funds and assumes that additional funding is distributed proportionally to private sector R&D expenditure. This scenario would be plausible, also with the double-matched private sector leverage target in mind. Here, the West Midlands would be the big winner, gaining more than £1 billion in additional funding by 2030, followed by the North West and East Midlands.



Will all of this be enough to outweigh the losses from EU funding?

This is an important but complex calculation. By some estimates, UK regions (except Cornwall) are anticipating a 54% drop in funding as ERDF and other EU structural funds end and new programmes, such as the Shared Prosperity Fund, start. This is over the current spending review period and after adjusting for inflation the real terms impact may be higher. One estimate suggests that this amounts to a decrease of £69 million a year for the West Midlands.

In counter, a 35% increase in R&D spending performed by the public sector in the West Midlands (using 2019 as a base) would be worth about £191m a year by 2024/25. This would be more than sufficient to cover the gap left by EU funding (net of SPF) by the middle of the decade.

But we need to remember that EU structural funds in the past, and the new Shared Prosperity Funds, are for a wider range of applications than simply R&D-focused investment. A fuller analysis is needed to estimate the net losses or gains for different regions that would be triggered if the policies in the Levelling Up White Paper were delivered.

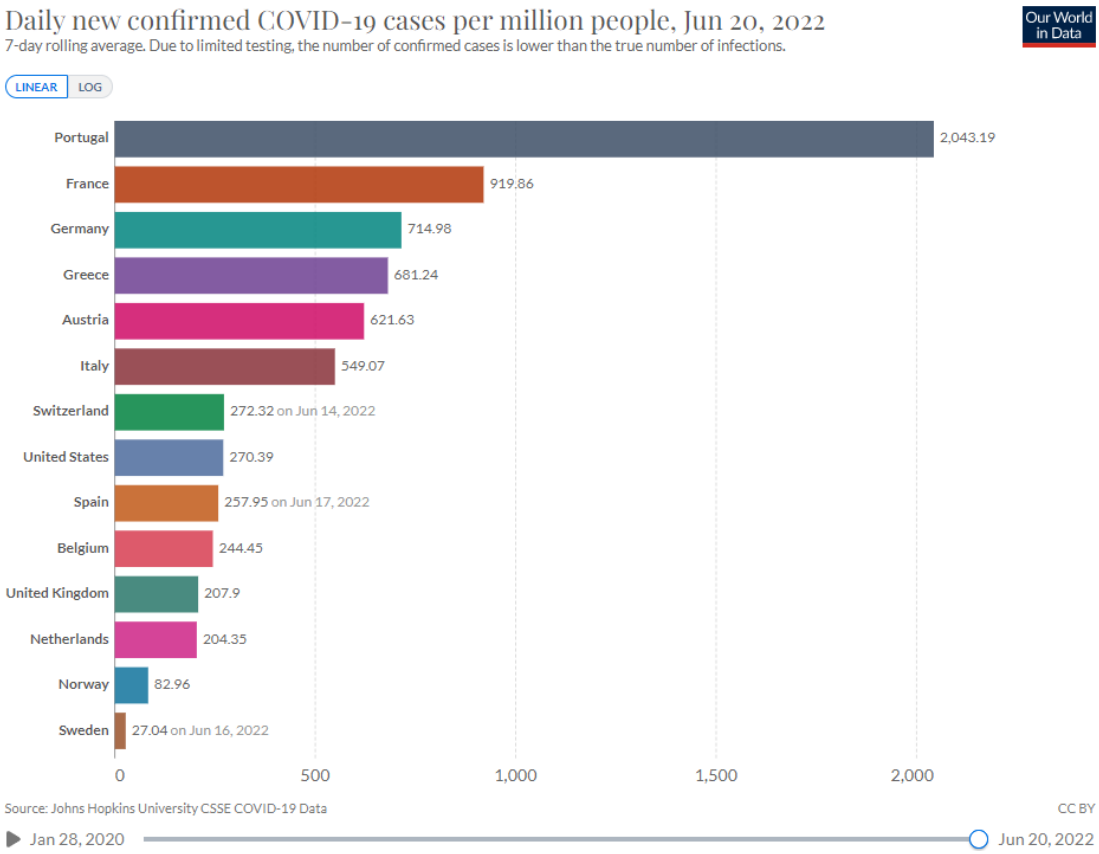
View REDI Updates

Infection Rates and Vaccine Update

Alice Pugh, WMREDI

Case numbers across Europe cases have risen across the majority of countries since the previous monitor, with the case numbers doubling in some countries. In the UK the new confirmed case numbers have risen from 93 per million people to 208 per million people. However, the reason for these increases is likely as a result of the majority of economies reopening and big events fully returning. For instance, large music events such as Eurovision and the Isle of Wight Festival, which has seen high volumes of travel across Europe. Additionally, travel restrictions between countries has mostly been removed and people are starting to travel abroad again, to countries with higher rates of infection.

Since 31 December 2019 and as of week 2022-23, **535 143 050 cases** of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including **6 328 694 deaths**.

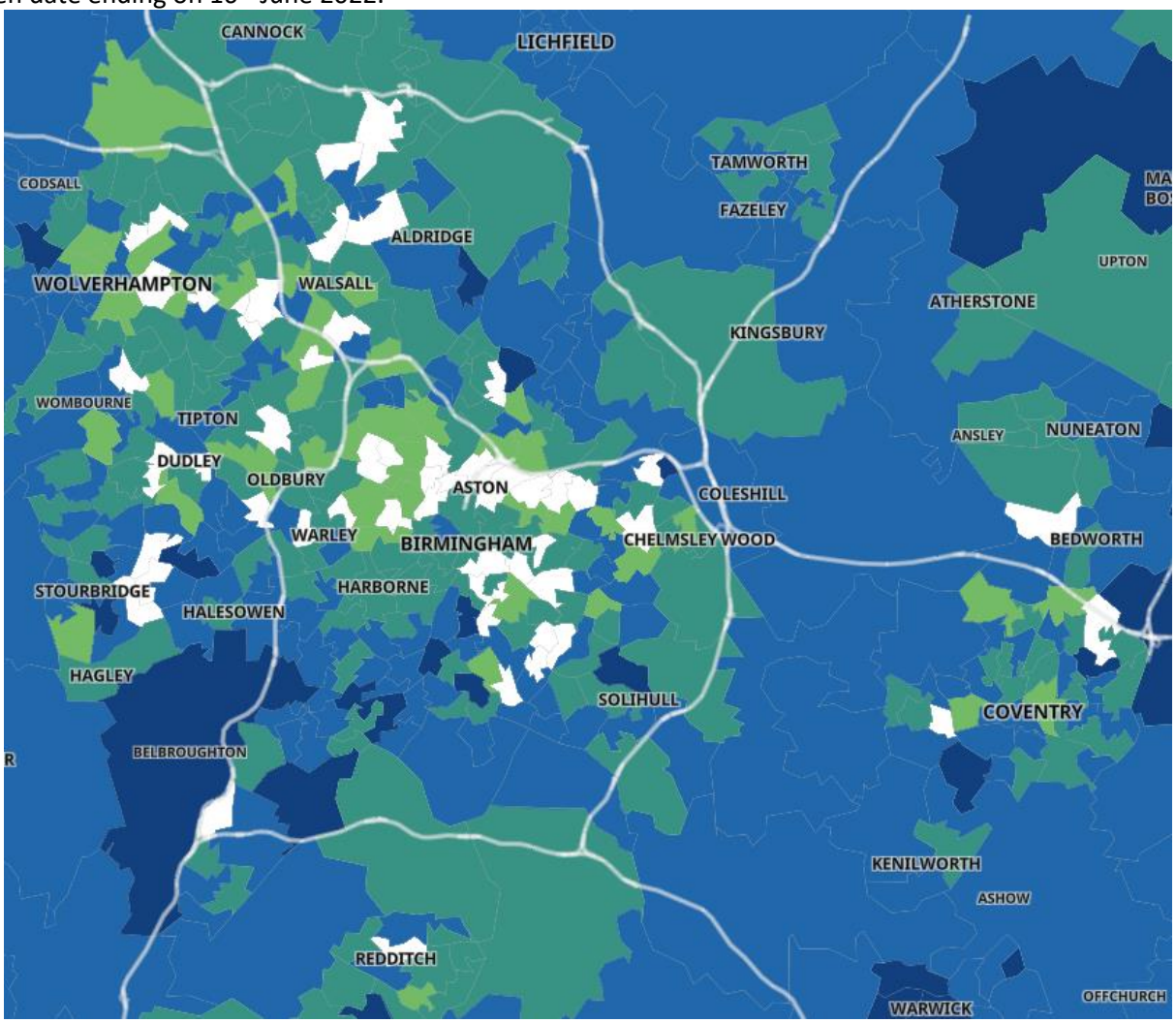


Latest ONS infection survey data (17th June 2022 next release to be 24th June 2022) states:

- There was an increase in the percentage of people testing positive for coronavirus (COVID-19) in England, Wales, Scotland and Northern Ireland likely caused by infections compatible with Omicron variants BA.4 and BA.5.
- In England, the estimated number of people testing positive for COVID-19 was 1,131,000 (95% credible interval: 1,066,000 to 1,196,100), equating to 2.07% of the population or around 1 in 50 people.
- In Wales, the estimated number of people testing positive for COVID-19 was 64,800 (95% credible interval: 49,400 to 83,400), equating to 2.13% of the population or around 1 in 45 people.
- In Northern Ireland, the estimated number of people testing positive for COVID-19 was 42,900 (95% credible interval: 32,600 to 54,300), equating to 2.34% of the population or around 1 in 45 people.
- In Scotland, the estimated number of people testing positive for COVID-19 was 176,900 (95% credible interval: 152,900 to 202,200), equating to 3.36% of the population or around 1 in 30 people.

The WM Weekly monitor is funded by the West Midlands Combined Authority, Research England/UKRI

The map below displays weekly data, which are updated every day here. Seven–day rolling rate of new cases by specimen date ending on 16th June 2022.



Covid 19 Hospital Activity

A number of data collections have been implemented to support incident management. The collections were activated at short notice and the content of the collections has evolved as the incident has developed. The data collected is classified as management information. It has been collected on a daily basis with a tight turn round time. No revisions have been made to the dataset. Any analysis of the data should be undertaken with this in mind.

Total reported admissions to hospital and diagnoses in hospital

The table below shows the latest daily rates

Name	06-Jun-22	07-Jun-22	08-Jun-22	09-Jun-22	10-Jun-22	11-Jun-22	12-Jun-22	13-Jun-22	14-Jun-22	15-Jun-22	16-Jun-22	17-Jun-22	18-Jun-22	19-Jun-22
ENGLAND	**606**	**577**	**664**	**627**	**589**	**583**	**659**	**722**	**763**	**842**	**822**	**829**	**797**	**942**
East of England	58	46	78	77	60	54	60	62	85	102	81	73	85	105
London	98	86	93	76	93	83	88	114	107	130	115	107	105	126
Midlands	98	113	107	123	128	118	94	138	151	151	174	162	157	163
North East and Yorkshire	110	95	124	101	84	99	121	117	124	130	111	141	127	149
North West	93	77	104	98	98	87	107	123	124	152	138	152	160	182
South East	91	106	88	98	70	88	108	96	108	98	115	122	118	142
South West	58	54	70	54	56	54	81	72	64	79	88	72	45	75

Mechanical Ventilation beds - occupied by confirmed COVID-19 patients

Name	08-Jun-22	09-Jun-22	10-Jun-22	11-Jun-22	12-Jun-22	13-Jun-22	14-Jun-22	15-Jun-22	16-Jun-22	17-Jun-22	18-Jun-22	19-Jun-22	20-Jun-22	21-Jun-22
ENGLAND	**124**	**127**	**117**	**125**	**126**	**128**	**130**	**132**	**130**	**120**	**138**	**139**	**150**	**149**
East of England	11	11	9	13	19	18	25	17	16	12	15	15	15	15
London	51	51	54	60	60	61	57	61	57	57	67	67	69	75
Midlands	15	18	14	15	13	16	13	12	18	10	11	12	12	9
North East and Yorkshire	18	17	14	15	9	7	9	9	9	8	10	11	14	11
North West	17	17	13	12	12	12	10	11	11	12	12	13	16	16
South East	7	5	6	5	7	9	9	14	15	15	16	13	17	15
South West	5	8	7	5	6	5	7	8	4	6	7	8	7	8

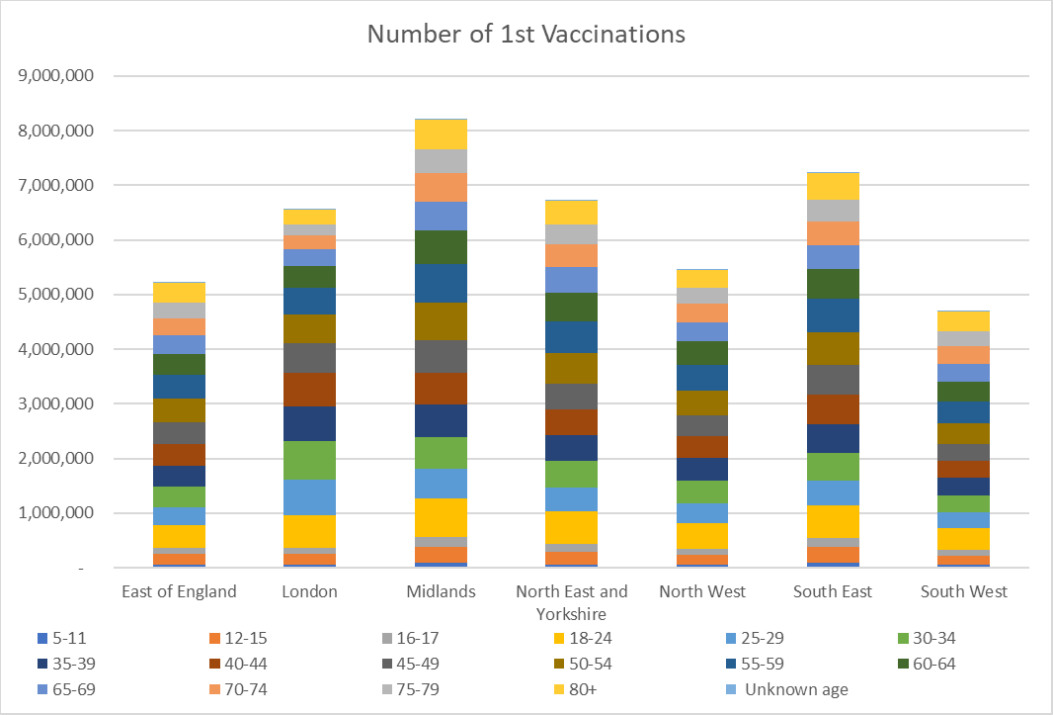
The WM Weekly monitor is funded by the West Midlands Combined Authority, Research England/UKRI

Total beds - occupied by confirmed COVID-19 patients (as at 08:00)

Name	08-Jun-22	09-Jun-22	10-Jun-22	11-Jun-22	12-Jun-22	13-Jun-22	14-Jun-22	15-Jun-22	16-Jun-22	17-Jun-22	18-Jun-22	19-Jun-22	20-Jun-22	21-Jun-22
ENGLAND	**4,096**	**4,082**	**4,262**	**4,257**	**4,408**	**4,602**	**4,722**	**4,843**	**5,008**	**5,037**	**5,183**	**5,436**	**5,726**	**6,002**
East of England	408	399	413	413	416	431	428	456	467	479	491	518	559	593
London	931	914	932	942	967	1,001	982	983	995	1,001	1,013	1,047	1,089	1,139
Midlands	701	744	766	787	841	839	871	899	936	904	916	969	1,001	1,061
North East and Yorkshire	680	688	710	680	680	720	769	782	812	810	831	866	922	958
North West	581	574	590	582	635	661	690	726	759	798	838	891	946	1,010
South East	492	463	533	543	556	616	625	639	678	670	690	730	781	803
South West	303	300	318	310	313	334	357	358	361	375	404	415	428	438

Vaccine Update

Between the 8th December 2020 and the 12th June 2022 the Midlands has successfully vaccinated **8,191,692** people with the first dose and **7,703,507** of these individuals have received the second dose as well. A further **6,041,525** have received their booster. Meaning the Midlands has successfully provided the most jabs out of any region including London.



NHS Region of residence name	% of people who have had at least 1 dose (using ONS denominators)															
	5-11	**12-15**	**16-17**	**18-24**	**25-29**	**30-34**	**35-39**	**40-44**	**45-49**	**50-54**	**55-59**	**60-64**	**65-69**	**70-74**	**75-79**	**80+**
Total	9.4%	58.8%	73.4%	81.7%	82.7%	89.2%	91.0%	96.3%	89.2%	94.9%	98.8%	100%*	99.1%	92.9%	100%*	98.5%
East of England	10.2%	61.9%	77.7%	85.6%	85.7%	89.6%	90.5%	96.1%	90.0%	94.9%	99.1%	100%*	98.5%	91.5%	100%*	98.5%
London	7.1%	46.1%	59.3%	80.4%	86.4%	84.2%	82.7%	89.4%	90.9%	92.5%	96.4%	98.9%	96.1%	90.6%	100%*	88.9%
Midlands	9.3%	58.4%	72.8%	75.8%	73.8%	85.1%	89.9%	95.7%	87.0%	94.9%	98.1%	100%*	98.1%	93.8%	100%*	100%*
North East and Yorkshire	8.6%	58.4%	72.7%	77.3%	76.6%	86.8%	91.1%	96.8%	86.0%	94.3%	97.6%	100%*	99.7%	93.9%	100%*	98.4%
North West	7.4%	55.2%	71.3%	77.7%	76.4%	85.4%	90.9%	97.2%	87.3%	94.4%	97.9%	100%*	99.8%	93.1%	100%*	98.9%
South East	11.9%	66.9%	80.9%	83.8%	85.8%	95.6%	94.7%	97.6%	90.2%	94.8%	99.2%	100%*	99.7%	91.3%	100%*	98.8%
South West	11.9%	65.9%	80.7%	86.8%	87.8%	94.6%	95.6%	99.4%	88.7%	94.4%	99.5%	100%*	98.0%	92.7%	100%*	100%*

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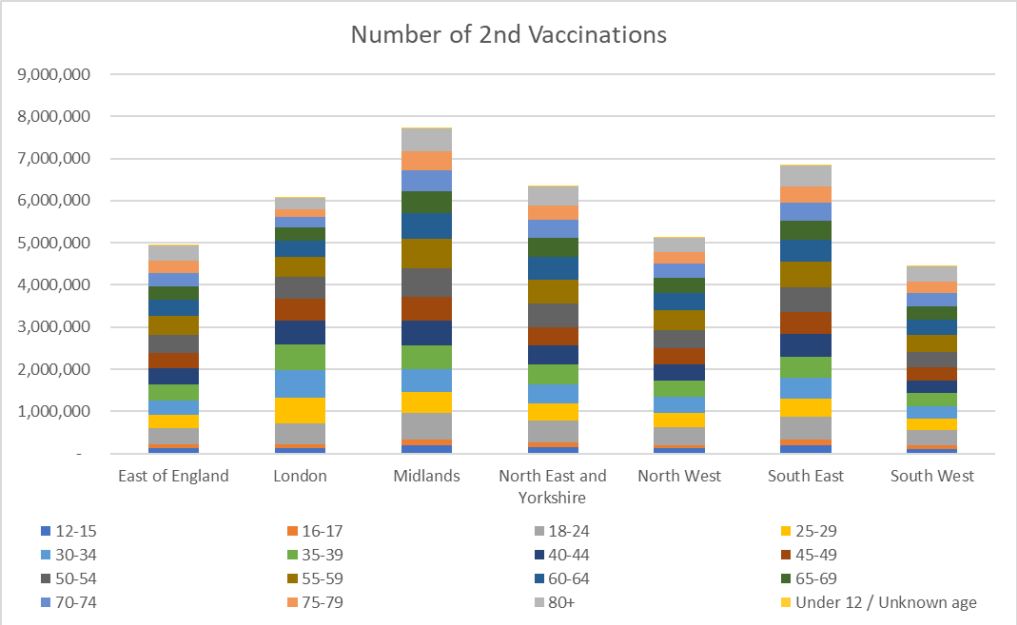
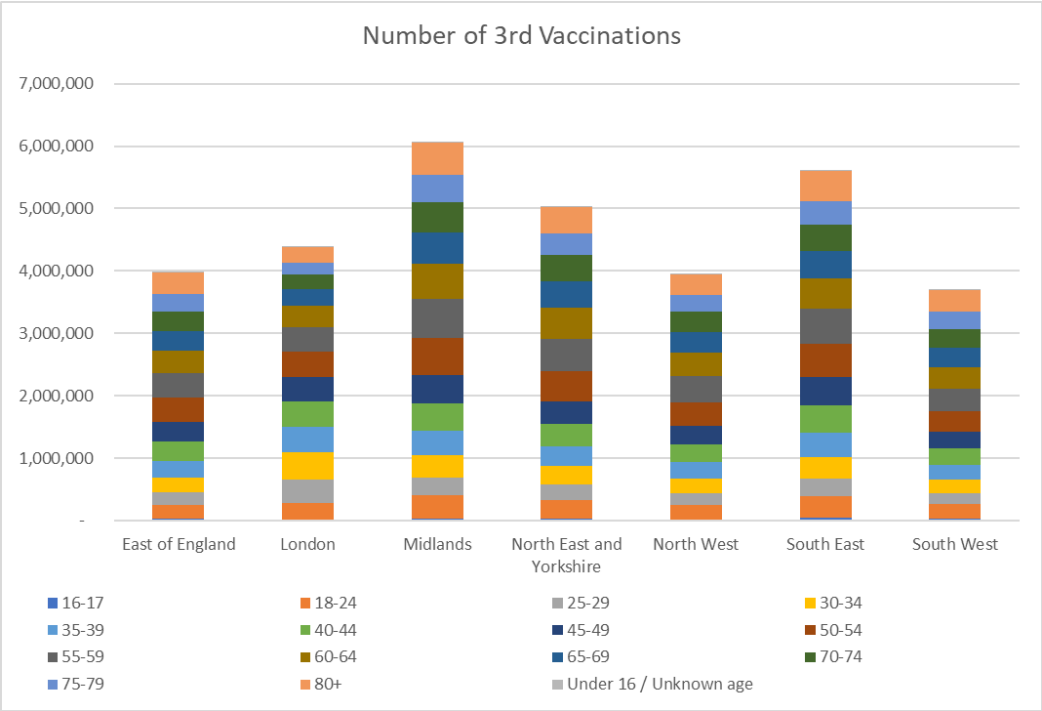


NHS Region of residence name	% of people who have had at least 2 doses (using ONS denominators)														
	12-15	16-17	18-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
Total	38.5%	55.9%	73.4%	76.6%	83.8%	86.6%	92.8%	86.7%	92.9%	97.1%	100%*	98.0%	92.1%	100%*	97.9%
East of England	41.4%	60.4%	78.5%	80.4%	84.9%	86.8%	93.2%	88.0%	93.3%	97.9%	100%*	97.6%	90.9%	100%*	98.1%
London	28.7%	42.8%	69.4%	79.8%	78.9%	78.2%	85.4%	87.5%	89.4%	93.4%	96.1%	93.6%	88.7%	100%*	87.6%
Midlands	38.0%	54.6%	68.4%	68.3%	79.8%	85.6%	92.3%	84.7%	93.1%	96.7%	100%*	97.2%	93.2%	100%*	99.6%
North East and Yorkshire	37.5%	54.2%	69.5%	70.6%	81.3%	86.6%	93.2%	83.8%	92.6%	96.3%	100%*	99.0%	93.4%	100%*	98.0%
North West	35.5%	53.2%	69.5%	70.3%	79.6%	85.9%	93.1%	84.5%	92.2%	96.2%	100%*	98.7%	92.4%	100%*	98.3%
South East	46.6%	65.0%	76.9%	80.6%	90.8%	91.2%	94.9%	88.3%	93.4%	97.9%	100%*	98.7%	90.6%	100%*	98.3%
South West	42.7%	63.3%	79.9%	82.6%	90.0%	92.1%	96.6%	86.9%	93.0%	98.3%	100%*	97.3%	92.1%	100%*	100%*



NHS Region of residence name	% of people (not just those eligible) who have had at least 3 doses (using ONS denominators)													
	16-17	18-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
Total	14.8%	42.2%	47.7%	55.6%	61.8%	71.3%	70.9%	80.6%	87.1%	93.3%	92.8%	89.0%	100%*	95.2%
East of England	16.2%	47.1%	51.6%	57.8%	63.6%	73.7%	73.9%	82.8%	89.4%	94.8%	93.5%	88.4%	100%*	96.0%
London	9.6%	35.3%	49.9%	52.2%	53.2%	61.1%	65.4%	71.0%	77.3%	83.0%	84.3%	82.5%	95.2%	82.4%
Midlands	14.0%	38.7%	40.8%	51.2%	59.8%	70.1%	69.0%	80.8%	86.7%	93.9%	92.3%	90.1%	100%*	97.0%
North East and Yorkshire	13.6%	40.1%	42.7%	52.6%	61.1%	71.4%	68.7%	80.9%	87.3%	93.4%	94.4%	90.6%	100%*	95.7%
North West	13.4%	37.2%	40.5%	49.0%	57.9%	68.5%	66.9%	78.5%	85.3%	93.0%	93.1%	89.0%	100%*	95.5%
South East	19.4%	48.3%	54.2%	64.7%	69.8%	78.0%	76.6%	84.5%	90.6%	95.9%	95.0%	88.4%	100%*	96.5%
South West	18.8%	51.2%	55.9%	64.8%	71.4%	80.0%	75.8%	84.5%	91.0%	95.9%	93.7%	90.0%	100%*	99.0%

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Weekly Deaths Registered: 10th June 2022

Black Country Consortium Economic Intelligence Unit

The following analysis compares the latest available time period (the week of the 10th June 2022) to the previous week period (the week of the 3rd June 2022) for the number of deaths registered and the number of deaths registered related to the Coronavirus[2].

Across England and Wales, the overall registered death figures increased from 6,825 in the week of the 3rd June 2022 to 11,742 in the week of 10th June 2022. The number of deaths registered that state Coronavirus on the death certificate increased from 186 to 284 people over the same period.

Regional level analysis shows that the West Midlands' overall registered death figures increased from 662 people in the week of 3rd June 2022 to 1,195 in the week of 10th June 2022. The number of registered deaths related to Coronavirus increased from 25 to 35 people.

There was a total of 790 deaths registered across the WMCA (3 LEP) area in the week of the 10th June 2022. There were 18 deaths registered that were related to Coronavirus over the same period. In comparison to the week of the 3rd June 2022, the overall registered death figures in the WMCA (3 LEP) area increased by 312, with the number of registered deaths related to Coronavirus decreasing by 1 person.

At local authority level in the week of the 10th June 2022, 11 local authorities the WMCA (3 LEP) area registered deaths related to the Coronavirus. Of the 18 registered Coronavirus related deaths; Birmingham accounted for 4 deaths, Nuneaton & Bedworth accounted for 3 deaths, Coventry and Walsall both accounted for 2 deaths.

Of the 18 registered Coronavirus deaths in the WMCA (3 LEP) involving Coronavirus in the week of the 10th June 2022, 15 were registered in a hospital, 2 deaths were registered at a care home and 1 death was registered at home.

Place and number of deaths registered that are related to Coronavirus in the week of 10th June 2022:

Area name	Care home	Elsewhere	Home	Hospice	Hospital	Other communal establishment	Total
Cannock Chase	0	0	0	0	1	0	1
East Staffordshire	0	0	0	0	0	0	0
Lichfield	0	0	0	0	0	0	0
Tamworth	0	0	0	0	0	0	0
North Warwickshire	0	0	0	0	0	0	0
Nuneaton and Bedworth	1	0	0	0	2	0	3
Rugby	0	0	0	0	0	0	0
Stratford-on-Avon	0	0	0	0	1	0	1
Warwick	0	0	0	0	0	0	0
Bromsgrove	0	0	0	0	0	0	0
Redditch	0	0	0	0	0	0	0
Wyre Forest	0	0	0	0	1	0	1
Birmingham	0	0	1	0	3	0	4
Coventry	0	0	0	0	2	0	2
Dudley	0	0	0	0	1	0	1
Sandwell	0	0	0	0	1	0	1
Solihull	0	0	0	0	1	0	1
Walsall	0	0	0	0	2	0	2
Wolverhampton	1	0	0	0	0	0	1
WM 7 Met.	**1**	**0**	**1**	**0**	**10**	**0**	**12**
Black Country LEP	1	0	0	0	4	0	5
Coventry & Warwickshire LEP	1	0	0	0	5	0	6
Greater Birmingham & Solihull LEP	0	0	1	0	6	0	7
WMCA (3 LEP)	**2**	**0**	**1**	**0**	**15**	**0**	**18**

[2] Please note that up-to-date counts of the total numbers of deaths involving COVID-19 are published by Public Health England (PHE) -ONS figures differ from the PHE counts as the latter include deaths which have not yet been registered. Source: ONS, Death registrations and occurrences by local authority and health board, 21st June 2022.

The WM Weekly monitor is funded by the West Midlands Combined Authority, Research England/UKRI

ONS Weekly Release Indicators

Black Country Consortium Economic Intelligence Unit

Economic activity and social change in the UK, real-time indicators

On the 16th June 2022, the Office for National Statistics (ONS) released 'economic activity and social change in the UK, real-time indicators'. These statistics are early experimental data and analysis on economic activity and social change in the UK. These faster indicators are created using rapid response surveys, novel data sources, and experimental methods.

ONS also provides, on a fortnightly basis, the social insights on daily life and events, including impacts on health and well-being and the cost of living from the Opinions and Lifestyle Survey (OPN).

Online Job Adverts

Figures are taken from jobs adverts provided by Adzuna. The Adzuna categories do not correspond to SIC categories and therefore not comparable with the ONS Vacancy Survey. Please note, Index of job adverts on Adzuna by category, 100 = average job adverts in February 2020.

Nationally, between the 3rd and 10th June 2022, total online job adverts decreased by 3.1%. On the 10th June 2022, total online job adverts were at 129% of their average level in February 2020. Out of the 28 categories (excluding unknown) 25 decreased from the previous week. The largest weekly decrease was in the category "manufacture", which decreased by 8.1% and was at 174.8% of the February 2020 level. The three categories that increased were "catering & hospitality" by 0.1% to 165.2%, "domestic help" by 0.3% to 223.1% and "wholesale & retail" by 1.8% to 199% of their average levels in February 2020. There were five categories below the February 2020 average level, these were; "legal" (88.1%) "energy/oil & gas" (92.3%), "healthcare and social care" (93.7%), "property" (95.5%) and "sales" (98.8%).

Online job adverts across all regions decreased between the 3rd and 10th June 2022. The West Midlands online job adverts decreased by 4.4% and on the 10th June 2022, it was at 130.9% of the average level in February 2020. All 12 regions were above their February 2020 levels, varying from; 114.1% in the East of England to 180.3% in Northern Ireland.

Google Mobility

Google Mobility data provide an indicator of changes in the volume of visits to different location types compared with a pre-coronavirus baseline. ONS have transformed the publicly available anonymised data into an indexed seven-day moving average to smooth the weekday and weekend.

As of the 10th June 2022, for the West Midlands region visits to retail and recreation, transit stations and workplaces had not yet returned to pre-coronavirus levels.

Visits to each location type for the West Midlands region in the week to 10th June 2022 compared with the previous week shows that grocery and pharmacy decreased by 0.9% (to 105.4%), residential deceased by 2% (to 102.8%), retail and recreation decreased by 11.1% (to 87.5%) and parks decreased by 20.3% (to 116.3%). While transit stations increased by 2.2% (to 83%) and workplaces increased by 28.6% (to 80.9%).

National Company Incorporations and Voluntary Dissolutions

Companies House data shows for the UK, there were 18,386 company incorporations in the week to 10th June 2022, up from 13,955 recorded in same week in 2021. This is down from 18,575 recorded in the same week in 2020 but up in the same week in 2019 (13,618).

Also, for the week to 10th June 2022, there were 5,941 voluntary dissolution applications, down from 6,424 recorded in the same week in 2020. This is up from 4,601 recorded in the same week of 2020 and in the same week in 2019 (5,430).

Potential Redundancies

HR1 forms are used by employers to notify the Insolvency Service's Redundancy Payments Service of potential redundancies. They are only required when firms wish to make 20 or more redundancies. The data is presented in a week-ending Sunday format. The data does not record the total number of redundancies; they record the number of potential redundancies filed on HR1 forms.

On the 5th June 2022, across the UK there were 24 employers proposing 2,805 potential redundancies. The potential redundancies 4-week rolling average was 3,064 and the employers proposing redundancies 4-week rolling average was 42. When indexed (100 = weekly average from week ending 21st April 2019 to week ending 23rd February 2020), the potential redundancies 4-week rolling average was 62 and the employers proposing redundancies 4-week rolling average was 76.

System Average Price of Gas

The System Average Price (SAP) of gas decreased by 28% in the latest week to 12th June 2022 (from the previous week), 44% higher than the equivalent period from the previous year and 300% higher when compared to the pre-Coronavirus baseline.

Business Insights and Conditions Survey

The final results from Wave 58 of the Business Insights and Conditions Survey (BICS) based off the 5,080 businesses surveyed across the West Midlands that businesses have a presence in with a response rate of 23.2% (1,180) and 3,036 businesses that are head quartered in the West Midlands, with a response rate of 22.5% (682). Please note, the survey reference period was 1st to 31st May 2022 with a survey live period of 30th May to 12th June 2022. Also, the data used is unweighted for regions and response levels can be low so the following results should be treated with caution when evaluating the impact of Covid-19. Due to weighted data being available for the UK a comparison has not been included.

Trading Status

99.5% of responding West Midlands businesses were trading over the survey period, split by 96.5% fully trading and 2.2% partially trading.

International Trading

Excluding “not sure” responses, 50.2% of responding West Midlands businesses reported “exporting stayed the same” in May 2022 when compared to May 2021. 18% of West Midlands businesses reported “exported less” and 16.4% reported “exported more”.

Excluding “not sure” responses, 54.9% of responding West Midlands businesses reported “importing stayed the same” in May 2022 when compared to May 2021. 11.6% of West Midlands businesses reported “imported less” and 18% reported “imported more”.

Intra UK Procurement

Excluding “not applicable”, 66.2% of West Midlands businesses were able to get the materials, goods or services it needed from within the UK in May 2022, 14.7% reported they were able to get what was needed but had to change suppliers or find alternative solutions. 7.6% of West Midlands businesses reported they were unable to get the materials, goods or services needed.

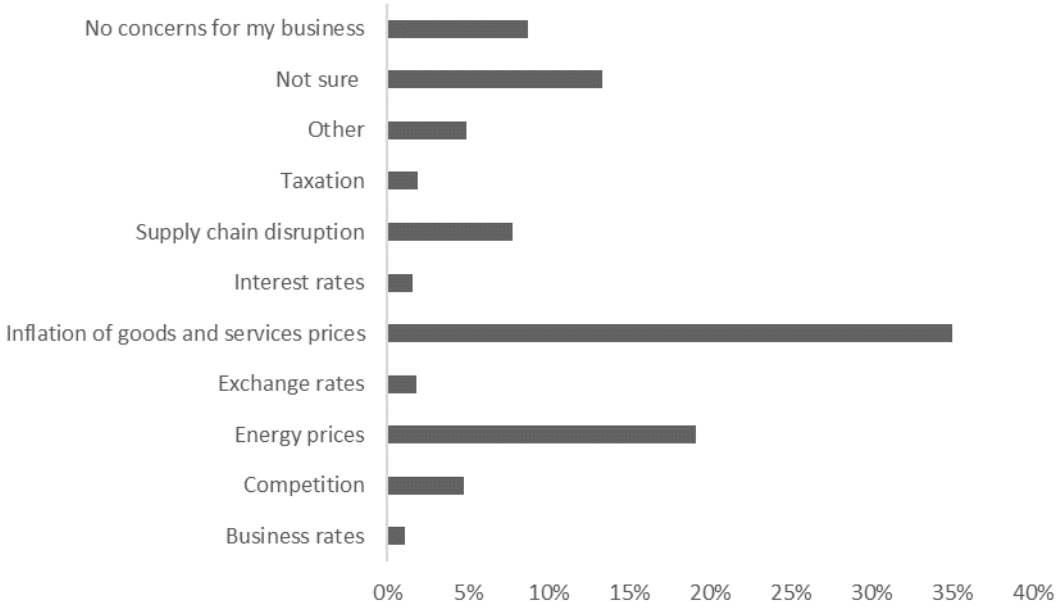
Global Supply Disruption

23.6% of West Midlands businesses reported experiencing global supply chain disruption in May 2022.

Main Concerns for Business

35% of West Midlands businesses reported the main concern for business was “inflation of goods and services prices”.

The following chart shows the main concern (if any) for businesses in the West Midlands:

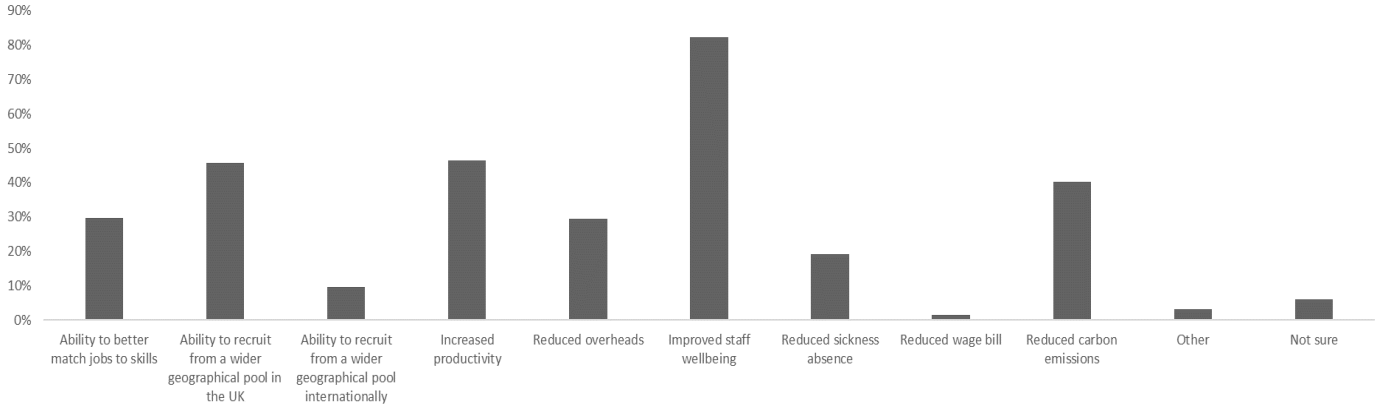


Homeworking

34.1% of West Midlands businesses are using, or intending to use, increased homeworking as a permanent business model going forward.

Of these businesses, 82.3% reported that they were using or intending to use, increased homeworking as a permanent business model going forward due to improved staff wellbeing.

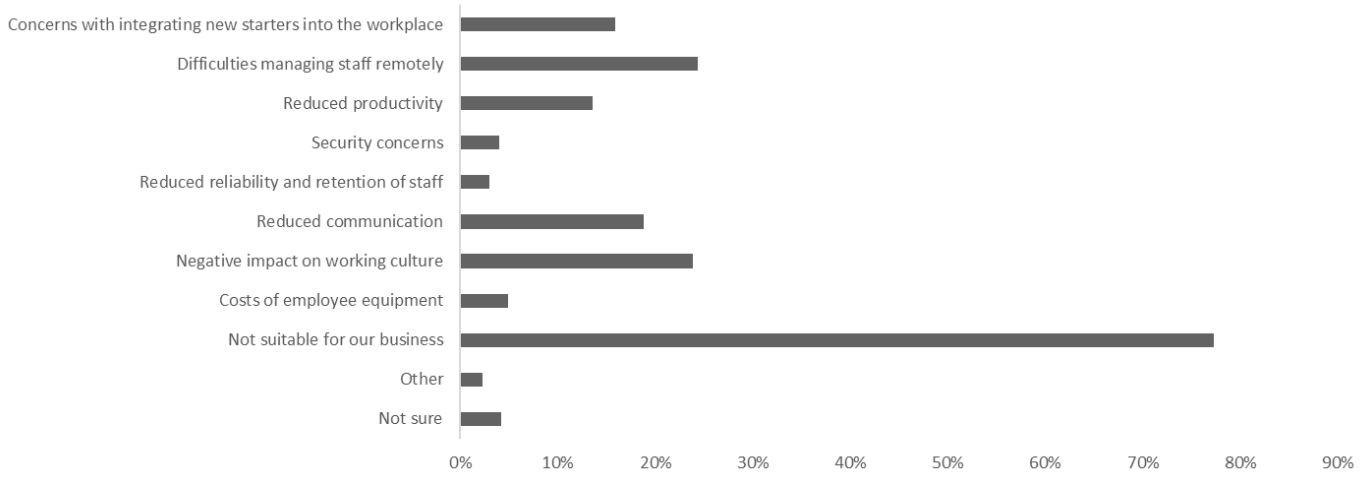
Why West Midlands businesses are using, or intending to use, increased homeworking as a permanent business model going forward:



44.9% of West Midlands businesses are not using, or do not intend to use, increased homeworking as a permanent business model going forward.

Of these businesses, 77.3% reported that they were not using or do not intend to use, increased homeworking as a permanent business model going forward due it not being suitable for the business.

Why West Midlands businesses are not using, or do not intend to use, increased homeworking as a permanent business model going forward:



Skills Demand and Support

30.3% of West Midlands businesses reported in the last 12 months there has been a high demand for manual skills.

19.5% of West Midlands businesses reported that the workforce required extra support or training in management or leadership skills.

What skills have been in high demand for West Midlands businesses in the last 12 months and the skills West Midlands businesses the workforce need extra support or training in:

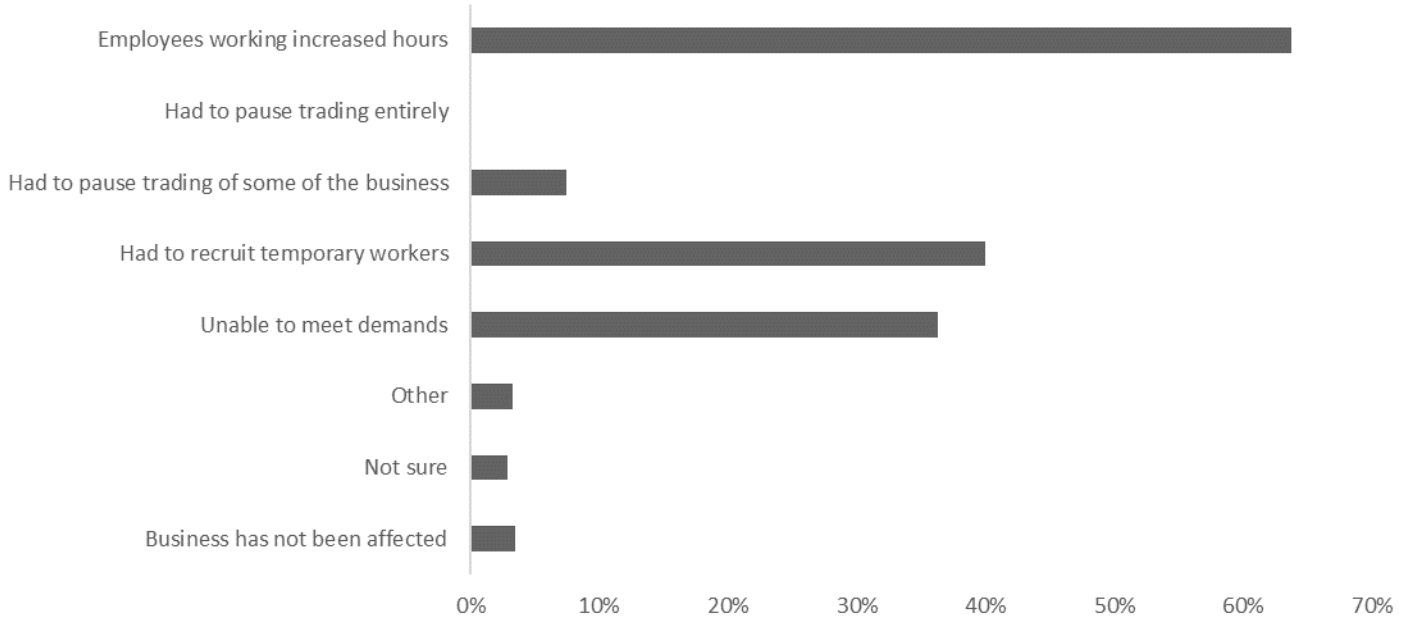
	West Midlands businesses - high skills demand for in the last 12 months	West Midlands businesses - which skills require extra support or training in
Advanced digital skills	13.4%	9.5%
Basic digital skills	15.3%	9.3%
Customer service skills	24.0%	12.5%
Management or leadership skills	25.0%	19.5%
Manual skills	30.3%	14.3%
Transferable skills	11.7%	8.2%
Other	3.8%	-
None of the above	31.5%	57.4%

Worker Shortages

38.6% of West Midlands businesses reported to currently experiencing a shortage in workers.

63.7% of West Midlands businesses reported that the worker shortage had caused employees to work increased hours.

How the shortage of workers has affected West Midlands businesses:



Public opinions and social trends

Breakdowns by region are no longer provided within this dataset because of the smaller responding sample size of the OPN survey. Estimates are based on data collected between 25th May to 5th June 2022, (the "latest period") and 11th to 22nd May 2022 (the "previous period") - the latest period included school half term in many parts of Great Britain and the Jubilee Bank Holiday.

Financial Situation

The proportion of adults who think they would not be able to save any money in the next 12 months (45% in the latest period, 34% in November 2021) has increased more gradually over the same time period. The proportion who could not afford to pay an unexpected, but necessary, expense of £850 (29% in the latest period, 27% in November 2021) has remained relatively stable over this time period.

Actions Following Cost of Living Increases

The most common actions reported by adults who reported their cost of living had increased continued to be spending less on non-essentials (60% - up 4% from the previous period), using less fuel such as gas or electricity at home (52% - up 2% from previous period), spending less on food shopping and essentials (41% - up 5% from previous period) and cutting back on non-essential journeys in vehicles (40% - up 1% from previous period) and

46% of adults reported that they were buying less food when food shopping. This proportion appears to be increasing, having been 44% in the previous period and 18% at the beginning of 2022.

Paying Energy Bills

The proportion of those who pay energy bills who are finding it very or somewhat difficult to afford them appears to be increasing. 42% of adults who pay energy bills reported they found it very or somewhat difficult to afford them in the latest period a slight decrease compared with 46% in the previous period. In comparison, 47% adults who pay energy bills reported it was very or somewhat easy to afford their energy bills in the latest period a slight increase compared with 42% in the previous period.

Among those who reported they have gas or electricity supplied to their home, 5% reported they were behind on these bills (4% in the previous period). This proportion has appeared to be relatively stable since the question was first asked in March 2022.

Worries, Well-Being and Loneliness

The most frequently reported worries (being very or somewhat worried) were about the conflict in Ukraine at 78% or the rising cost of living at 74%). While 55% reported they were worried about the environment. A smaller

proportion reported being worried about new variants of Covid-19 at 47% or the effect of the coronavirus pandemic on their lives at 36%.

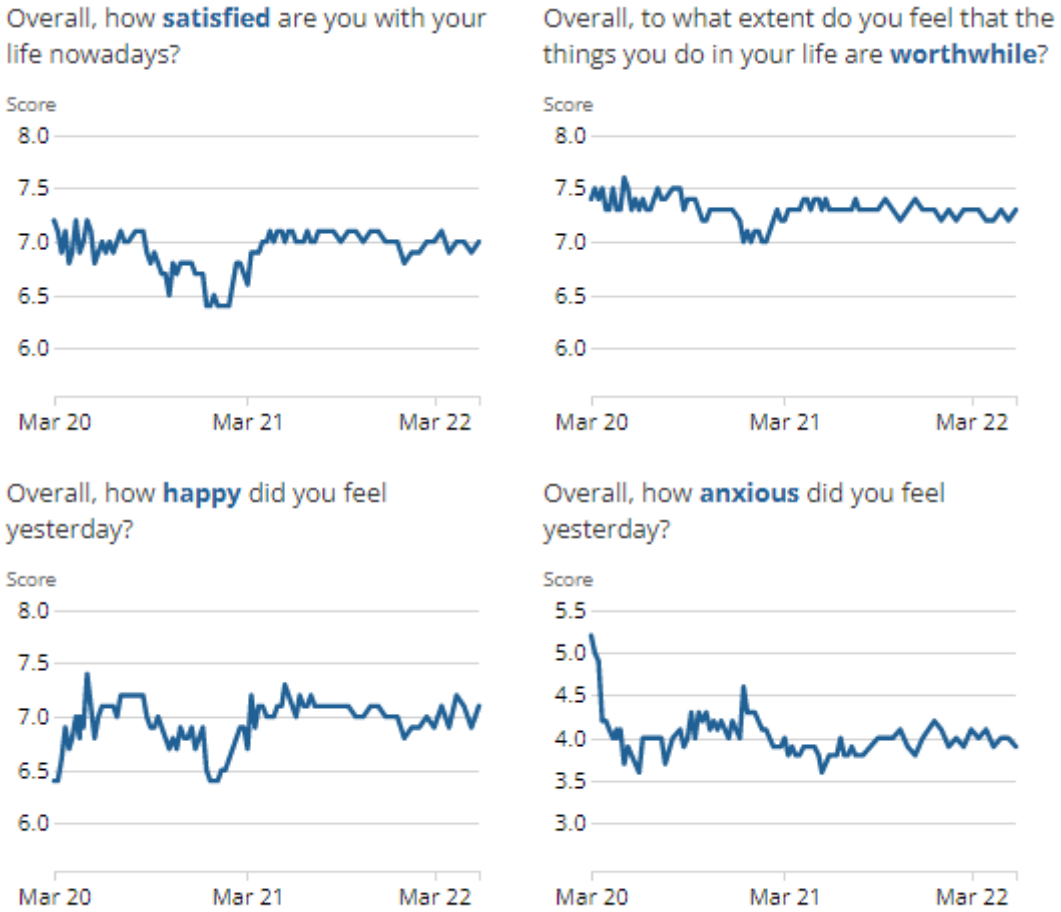
Life satisfaction – increased by 0.1 since the previous period to 7.0.

Feeling that the things done in life are worthwhile - increased by 0.1 since the previous period to 7.3.

Happiness - increased by 0.2 since the previous period to 7.1.

Anxiety – decreased by 0.1 since the previous period to 3.9.

Levels of personal well-being, Adults in Great Britain, March 2020 to June 2022:



Source: Office for National Statistics – Opinions and Lifestyle Survey

7% of adults reported feeling lonely always or often in the latest period (8% in the previous period). This increased to around a quarter of adults (26%) reporting feeling lonely always, often or some of the time in the latest period (25% in the previous period).

Disclaimer: The contents of this document are based on the latest data available and the contribution of regional partners in a fast paced environment, therefore we urge caution in its use and application
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