IfG ANALYSIS | LEVELLING UP

INSTITUTE FOR GOVERNMENT

What levelling up policies will drive economic change?

The need for a long-term focus on skills and cities

Thonas Pope | Eleanor Shearer | Peter Hourston

About this report

This report looks at what government policies are most likely to increase productivity in regions outside of London and the South East and how the government's current approach measures up. It draws on the available evidence for what policies work, set out in more detail in accompanying Insight papers on skills, infrastructure and innovation policies as well as case studies of previous successful examples of policies similar to levelling up.

@instituteforgov
www.instituteforgovernment.org.uk

July 2022

Contents

Summary

Levelling up was the flagship agenda of the Boris Johnson administration, and a desire to improve the economic performance of regions outside London and the South East, so closing the UK's 'productivity gap', is likely to be a major focus of the next government too. But this will not be easy. This gap is more than a century old, is driven by big economic forces and has been the subject of successive, but not successful, government initiatives throughout the post-war era. The *Levelling Up the United Kingdom* white paper recognised the long-standing nature of the problem, and outlined the scale of the government's policy ambitions.[1] The new administration should maintain momentum behind the reforms the white paper promised, but it will need to adjust its approach to some policies to deliver big change.

In specific areas, the government has been broadly pursuing the types of policies that have worked in the past and that could lead to improvements in wages and living standards. But these are not enough to deliver the transformation promised. We have found that achieving the five 2030 levelling up 'missions' that relate to skills, infrastructure, and research and development (R&D) would produce a £20 billion productivity boost but reduce the productivity gap between the South East and the rest of the UK only from 41% to 39%[*] – a meaningful improvement but well short of the scale of change promised.

In this paper we argue that the new administration should expand ambition on skills and R&D policy, specifically focusing far more on higher education and early-years policies – both areas the evidence suggests can have a meaningful impact on productivity. Indeed, improving access to higher education alone could, if well targeted, lead to gains of around £4bn.

But we also argue that to drive big economic change, policies must be geographically targeted and 'big' enough to influence people's decisions about where they work and live. Controversial as it is, that means focusing on cities such as Birmingham and Manchester, which have the biggest capacity to attract highly skilled workers and jobs but which under-perform economically in the UK. This will also benefit surrounding regions. But it contrasts with the outgoing Johnson government's approach of spreading money across the country.

Policies also need to be better co-ordinated and long-lasting to drive real change. The lack of these features is a historic weakness that the levelling up white paper acknowledges and, encouragingly, tries to address. A change of administration provides an early test of whether the levelling up missions will provide a consistent long-term policy focus. If the new government is serious about addressing regional inequalities it should commit to delivering the proposed "system reforms" in full.

* The £20bn calculation is based on analysis from the Royal Society for Arts (RSA) and discussed in more detail below.

Economic disparities in the UK have persisted for decades. The government's stated ambitions on levelling up go well beyond addressing these differences and extend to improving wellbeing. But economic disparities are a root cause of many of the other problems and it will be difficult to deliver improvements in wellbeing without improving regional productivity. This paper focuses on the economic element of levelling up and analyses what government can do.

Our key findings are:

Levelling up on a national scale is difficult and success is rare

The long-term dominance of London and the South East can be explained by the persistence of big economic forces that determine prosperity. That part of the UK has historic natural advantages for trade. That larger cities perform better also holds on any analysis: more businesses and workers in one place means more opportunity to share knowledge and allow greater specialisation, in turn supporting a wider pool of workers to match to jobs. Regional inequality is persistent in other countries too and examples of successful initiatives equivalent to levelling up are rare, although they do exist (for example, in post-unification Germany, and in the advance of cities like Barcelona in Spain and Lille in France).

In specific areas, the government's policies are broadly evidence based but will not lead to the big economic changes promised

Alongside this paper we have published evidence reviews in three specific policy areas that cover five of the 12 levelling up 'missions': on skills,[2] infrastructure[3] and innovation.[4] Between them they cover the main economic policies the government has at its disposal.

The government has so far broadly pursued the right *types* of policy. High-level non-university qualifications, such as apprenticeships, which it has targeted in its skills mission, have led to big productivity gains in the UK. Competitively awarded R&D grant funding, where much of the additional 'innovation' spending is set to go, has also proved its worth. That transport policy should focus mainly on improving links within regions, and specifically around cities, is also in the government's plan.

But these policies alone will not drive the kind of ambitious economic transformation targeted. Based on estimates from the RSA, drawing on the best available evidence on the impacts of different policies, we show that even if all five missions – for schools, skills, transport, broadband and R&D – were met by 2030, the total economic benefit would be around £20bn in today's terms (1% of GDP). Even if all those benefits accrued outside London and the South East, that would be enough to reduce the gap between those two regions and the rest of the UK only from 41% to 39%. This is not insignificant, and would improve people's lives – on average it would increase wages by £400 a year. But this would hardly constitute the major change in the UK's regional economic balance that the government has promised as average wages would remain £7,000 lower than in London and the South East.

The government should show more ambition in key policy areas

One thing that held the Johnson government back was that its policy approach was not ambitious enough in some areas, while it also ignored policy levers that would have been effective in others.

The skills mission – to increase the numbers taking high-level non-university courses by 200,000 a year by 2030 – is expected to generate a high productivity return. But even increasing participation by this much would still see many fewer new starts on non-university adult skills courses than in 2010. We calculate that a more ambitious mission (supported by appropriate funding) to return participation to 2010 levels could generate an additional £7bn of productivity gains.

The R&D mission is also relatively unambitious. It requires that government R&D spending outside of London and the South East should increase by 40%, but overall R&D spending (when taking private sector investment into account) is set to increase by that much anyway. A more stretching target that increased the *share* of R&D spending around the UK might have little effect on the total impact of R&D spending – but should ensure that more of the benefits accrue to lagging regions, the purpose of levelling up.

Two areas of government policy that could drive substantial productivity gains do not feature in the missions. Growing participation in higher education has led to big productivity gains in the past, and participation is much higher among young people in affluent areas than in so-called 'left-behind' places. A focus on improving access to higher education could, if well targeted, lead to productivity gains of around £4bn. In addition, the evidence shows that the policies that might have the most impact on attainment, especially among the most disadvantaged, is early-years interventions. Improving the public offer in this area now would not lead to big increases in productivity by 2030, but could lead to much bigger changes later once today's toddlers enter the labour market.

Policies must be delivered on a large scale in cities, be co-ordinated and long-term

Even more ambitious individual policies, if delivered broadly across the country, will not lead to big changes in where people and businesses locate. Past examples of initiatives equivalent to levelling up show that this kind of transformation can be delivered only if policies are targeted in the right places, co-ordinated and long-lasting. This has been a historic weakness in UK regional policy.

Policies must be delivered on a large scale and targeted in the right places. Small improvements to skills, transport or R&D in a place will lead to some productivity gains for those directly affected, but are unlikely to lead to major changes in the economic landscape – the types of people or businesses that want to locate there. These broader changes have been successful in the past, especially in cities where the potential for growth is greater. And the UK's regional cities (and in particular Birmingham and Manchester) stand out as prime candidates for levelling up, with below-average productivity levels that, if improved, would have ripple effects to their surrounding regions. The levelling up productivity mission appears to acknowledge the role of cities, aiming for a "globally competitive city in every region". But, so far, levelling up policy has not focused on cities, instead spreading limited money widely. The Levelling Up Fund, for instance, spreads only £1.7bn across 33% of the population, just £77 per person in the successful areas. Infrastructure and R&D investment in particular will work best in places that have high productivity potential, and should be more narrowly targeted.

Policies must be co-ordinated. Different levelling up policies are complementary. For instance, improving skills in a place, without broader policies to bring in jobs for highly skilled people, will see them move elsewhere to make the most of the skills they have gained. In past examples of levelling up, 'success' has always required more than one policy lever. The UK is starting in a very siloed place: policies tend to be made separately by different government departments, and co-ordination at a local level is hampered by limited powers and an inflexible funding model that prevents local prioritisation.

Policies must be long-lasting. Reducing regional disparities will not happen quickly: the benefits of many policies on transport, skills and R&D will be felt much more in 2040 than in 2030. Regular chopping and changing of policy has undermined past attempts in the UK. For example, in the past 30 years there have been 23 types of organisation responsible for adult skills, of which only seven remain. A consistent long-term approach – meaning a decade or more, spanning multiple parliaments, with regular evaluation and improvement of particular policy programmes – is needed.

The "system reforms" in the government's white paper explicitly acknowledge the importance of co-ordination and longevity in policy making, and make several welcome proposals to improve evaluation, to provide a long-term focus and to promote local leadership and autonomy.

As things stand, the government's approach to levelling up does not show the scale required to affect regional inequality, while promises on the flexibility of funding for local government, among other reforms to the way government operates, have yet to be put into action. It is crucial that the new administration commits to adopting the various reforms outlined in the white paper to encourage long-term, joined-up policy making while also ensuring it is targeting big economic investments on the regional cities with the most potential for growth.

Introduction

The *Levelling Up the United Kingdom* white paper,[5] published in February 2022, finally set out what the government meant by the phrase that featured so heavily in the 2019 general election.[6] This was that it wanted to reduce regional disparities across 12 policy areas, each with a corresponding 'mission' to be achieved by 2030.[7]

Levelling up is explicitly about more than just economic outcomes. Reducing disparities in productivity – the output produced per worker, or hour worked – is the first mission, but only one of 12. However, regional economic disparities are perhaps the most persistent of those targeted, and much of the 'diagnosis' of the problem laid out in the first chapter of the white paper[8] focuses on the causes of *economic* gaps. Many of the other missions – such as for transport, skills, broadband, education and R&D – are designed to contribute to improvements in productivity. And improving local economies could also help address other kinds of disparity, such as in terms of levels of crime and wellbeing.

There will be a new prime minister by the autumn, but a focus on reducing regional disparities is likely to be a key plank of the new administration's agenda, as it has been for most UK governments over the past 40 years.

This paper focuses on what policies are likely to best address the economic challenge of levelling up: to reduce the productivity gap between lower-performing regions of the UK and London and South East. As the white paper openly acknowledges, this is not the first time a government in the UK has tried to address this problem, and governments in other countries have also developed and delivered many policies designed to boost productivity in particular regions.

We draw lessons from past policies and efforts to reduce regional inequalities elsewhere and use these to evaluate and make recommendations about the government's current approach. This Analysis paper brings together our findings from evidence reviews of what policies are likely to improve local economic growth in skills, infrastructure and innovation policy, drawing on the available evidence, including policy evaluations and learning from case studies from previous successful examples of levelling up at a countrywide and region or city level.

In it we ask whether the existing policy approach is likely to be successful at delivering the economic transformation that the levelling up agenda requires. We also make recommendations about how the new administration should adjust its policy approach to make success more likely.

First, we lay out the scale and nature of the problem, showing that regional economic gaps have been persistent in the UK and in other advanced economies and that the forces driving divergence are big and structural. Examples of successful countrywide reductions in regional inequality are few and far between, and this shows that making a meaningful change to the UK's economic geography will be difficult.

We then assess how the existing policy approach, as laid out in its five missions on skills, schools, transport, broadband and R&D, match the evidence for what we would expect to work. While the types of policies that the government is pursuing are broadly evidence-based, on their own they will not drive economic transformation.

Finally, we make recommendations for how the government can scale up its policy response if it wants to change the economic geography of the UK. This includes recommendations in specific policy areas where the current missions could be more ambitious or which are currently ignored by them. We also make recommendations for how the overall policy approach can be more successful by targeting economic policies at the places with the highest capacity for growth and ensuring different policy areas are more co-ordinated and individual policies more long-lasting than has historically been the case in the UK.

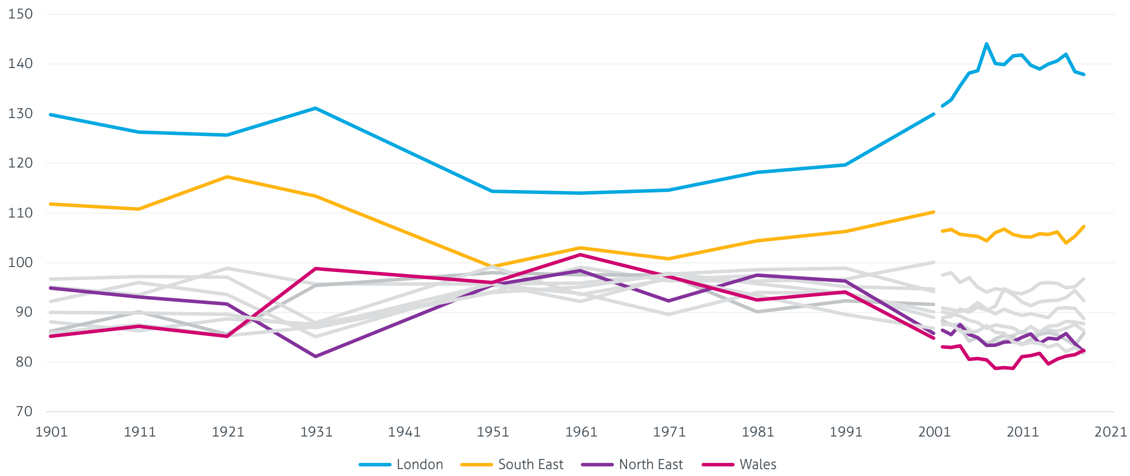
Levelling up on a national scale is difficult and rare

The government's productivity mission requires that the gap between the most and least productive regions of the UK closes (while productivity continues to increase everywhere). The experience of the UK and other developed economies shows that, on this definition, substantive levelling up is rare.

The regional productivity gap has been persistent in the UK

Figure 1 shows productivity (measured as output per worker) for all UK regions since 1901. It shows that some of the patterns the levelling up agenda wants to address have been present for more than a century. London and the South East have been the most productive UK regions throughout the entire period – their economic advantages based on London's strengths as a global city are not recent phenomena.

Figure 1 **Regional productivity since 1901 (UK=100)**



Sources: Institute for Government analysis of Geary F and Stark T, 'What happened to regional inequality in Britain in the twentieth century?', *The Economic History Review*, June 2015, retrieved 5 July 2022, https://onlinelibrary.wiley.com/doi/abs/10.1111/ehr.12114; and OECD.Stat, 'Regional GVA per worker', retrieved 15 June 2022, https://stats.oecd.org/index.aspx?queryid=67053. Note: excludes Northern Ireland. Measure is GDP per worker up to 2001 and gross value added (GVA) per worker thereafter.

The figure also shows that there have been changes in the size of the productivity gap over time, and the pattern during the 20th century was U-shaped: lower regional inequality between the 1930s and 1970s and expanding inequality from the 1980s.[9] When these changes have occurred, they have tended to happen over long timescales: decades rather than years.

Based on these historical patterns, the last period of 'levelling up' productivity occurred during the post-war period. By 1961, the productivity gap between the richest and poorest region was much lower than in 1931. A rich literature from economic history points to the importance of big structural economic factors, as opposed to the impact of specific policies, in driving the fall and subsequent increase. The post-war manufacturing boom gave rise to centres of different types of manufacturing outside of London and the South East.[10] It is especially notable that Wales and the North East, now among the poorest-performing regions, were almost as productive as the South East outside of London at that time.

Since the 1970s, the UK's manufacturing base has declined and its strength in services – the highest value of which are based in London and the South East – has seen that sector grow. This is attributable to wider economic forces, and globalisation, rather than the impacts of specific policies. Growing regional inequality since the 1970s is a feature shared by other advanced economies.[11]

In the past 25 years or so, inequality in productivity between the regions has been stable and persistently at a high level historically. This is also the case digging below the high-level regions and towards lower regional units. For example, at the International Territorial Level 3 (ITL3; upper-tier local authorities, of which there are 179 in the UK), different statistics used to measure inequality (such as the 80:20 ratio, the 90:10 ratio and the coefficient of variation) all show a stable pattern since the turn of the century.[12]

The causes of and reasons for productivity inequality are complex

Regional productivity differences tend to be persistent because the underlying economic factors that drive those inequalities are persistent too. The government openly acknowledged this in the first chapter of the *Levelling Up the United Kingdom* white paper.[13]

Figure 2 shows that more productive regions[*] tend to be those with a more highly skilled workforce (here defined as those with qualifications beyond A-level). Analysis by the Institute for Fiscal Studies shows that between two thirds and nine tenths of the differences in wages between different areas (which have a close link to productivity) can be explained by the characteristics of the people working there – principally their skills.[14]

* Here we define productivity as gross value added per filled job, which is the total amount of output produced in the region divided by the number of workers.

Figure 2 **Productivity and percentage of those aged 16–64 with qualifications at Level 4 and above by local authority in England, Scotland and Wales, 2019/20**

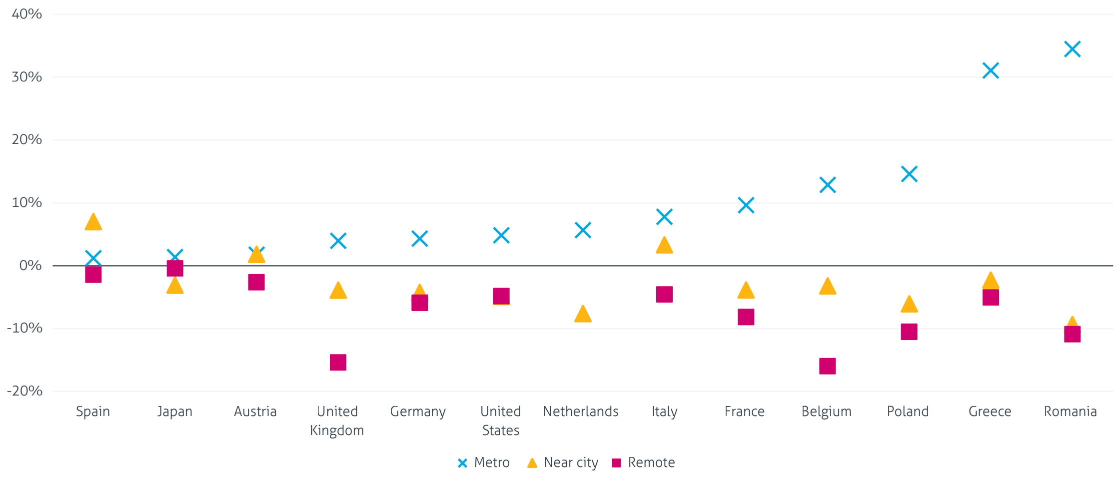
Source: Institute for Government analysis of Office for National Statistics, Annual population survey (2021); and Office for National Statistics, Labour productivity indices by local authority district (2021). Note: productivity measured as GVA per filled job. Qualifications at Level 4 and above are high-level qualifications such as apprenticeships and university degrees (Level 6).

However, even though differences in skills account for large parts of differences in productivity, it does not necessarily follow that skills policy will be the only solution. Principally, this is because people can and do move, and in particular highly skilled people tend to be more mobile than those with fewer qualifications.

People tend to move to, and the best jobs tend to be concentrated in, certain places because they have natural advantages that make them more productive. While skills can explain most of the difference in productivity between places, they cannot explain all of it: people tend to be more productive in some places than others. Economists say that this is due to 'agglomeration': big conurbations of businesses and workers benefit from more efficient knowledge sharing, allowing greater specialisation and giving businesses access to a wider pool of workers to enable more efficient matching between workers and jobs.

Agglomeration is the reason why cities tend to be more productive than other areas, and why there is at least some level of inequality between different regions in every country; attempting to equalise productivity everywhere would not be economically efficient or desirable. As Figure 3 shows, in most advanced economies the most productive places are urban 'metro' areas, and 'remote' areas tend to be less productive than average. Remote areas fare especially badly in the UK, although they only account for 10% of all areas, whereas the proportion is higher in some other countries.

Figure 3 **Productivity compared to the national average in metro, near-city and remote small regions in selected advanced economies (%),**



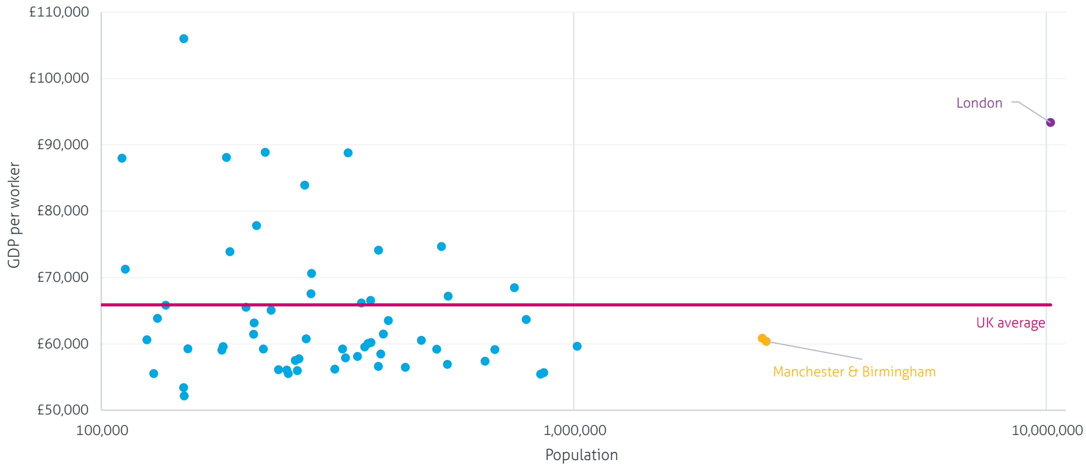
Source: Institute for Government analysis of OECD.Stat, 'Regional GVA per worker', retrieved 15 June 2022, https://stats.oecd.org/index.aspx?queryid=67053; and Organisation for Economic Co-operation and Development (OECD), Territorial grid and regional typologies, retrieved 15 June 2022, www.oecd-ilibrary.org/sites/reg_cit_glance-2018-50-en/index.html?itemId=/content/component/reg_cit_glance-2018-50-en&mimeType=text/html. Note: productivity is measured as GVA per worker across ITL3 regions (of which there are 179 in the UK). For each country, we take the most recent pre-pandemic year of data available from the OECD. For most countries this is 2019.

Agglomeration can lead to economies overall being more productive. But it does have implications for other places that do not experience the benefits of it. If skilled people tend to move to places with the best jobs and other amenities that make living there desirable, this in turn impacts the places they leave behind. Places can get stuck in a 'low-skill trap', where businesses provide only low-skill jobs, and there is little incentive for those living in those places to get higher skills (or, if they do, they move elsewhere).[15]

The economic fact of agglomeration also has implications for how the government can approach its productivity mission. While London is a very productive city, other big UK cities in the north of England and the Midlands are not as productive as international peers, and are even below the UK average (as shown in Figure 4).[16] These places do benefit from agglomeration – people working there are more productive than similarly skilled people elsewhere – but other factors mean they do not tend to attract high productivity businesses and highly qualified people. This suggests there is substantial potential to increase the productivity of those places, which would also benefit surrounding towns as there is a correlation between income in towns and the productivity of their nearest city.[17] The productivity mission aims to develop a "globally competitive city" in every region,[18] and while the *Levelling Up the United Kingdom* white paper does not provide a clear definition of this, it suggests that the government is aware of the importance of on cities as engines for growth.

But this also has implications for those places that do not have access to cities – the 'remote' areas in Figure 3. While it might be possible to increase their productivity somewhat, they are unlikely to achieve the productivity levels of urban areas or even average UK productivity levels. This is something that the government should acknowledge: not everywhere can be much more productive than it currently is, and so levelling up will need to look different in those areas.

Figure 4 **Population and productivity across UK cities, 2019**



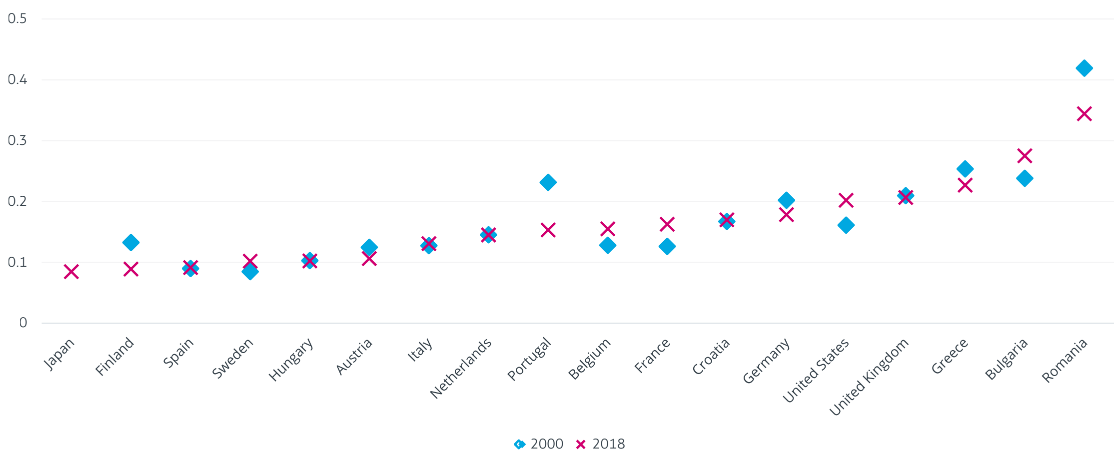
Source: Institute for Government analysis of Centre for Cities, Cities data tool, (no date), retrieved 15 June 2022, www.centreforcities.org/data-tool/#graph=map&city=show-all. Note: cities are measured as primary urban areas (PUAs), as defined by the Centre for Cities.

Regional inequality tends to be persistent in other countries too…

This pattern of a persistent regional economic gap does not only hold in the UK. Figure 5 shows one measure of inequality in productivity – the coefficient of variation – between low-level regions in other advanced economies.* The way in which countries are divided into regions is not entirely consistent, meaning that cross-country comparisons must be made with caution. But others have shown that the pattern for the UK here – that it is among the most unequal countries economically – holds across a broad swathe of measures and levels of geography.[19]

No such comparison issues arise when comparing regional gaps for the same country across time. And Figure 5 shows that, in most cases, regional inequality in productivity now is similar to the level it was in 2000.

Figure 5 **Inequality in productivity between low-level regions in advanced economies**



Source: Institute for Government analysis of OECD.Stat, Regional GVA per worker, retrieved 15 June 2022, https://stats.oecd.org/index.aspx?queryid=67053. Note: productivity is measured as GVA per worker across ITL3 regions (of which there are 179 in the UK). Includes OECD countries with more than 30 ITL3 regions and available data. For Japan, data is available only for 2018. For the United States, the 2000 figure is the figure for 2001.

* The coefficient of variation is calculated as the standard deviation of GVA per worker across regions in a country, divided by the average. It is accepted as a general measure of how dispersed a set of values is.

There are some notable cases where inequality was lower shortly before the Covid-19 pandemic than it was 20 years ago. But most of these instances are unlikely to be useful for the UK as it tries to level up. For example, Portugal has achieved reductions in inequality largely due to flat or declining productivity in its most successful regions such as Lisbon.[20] Other countries, such as Finland and Romania, are either at a very different stage of development than the UK or a much smaller country, meaning that they face a different set of regional challenges. The most relevant example over this period for the UK is Germany, which we draw upon further below.

… and even successful cases have been a mixed picture

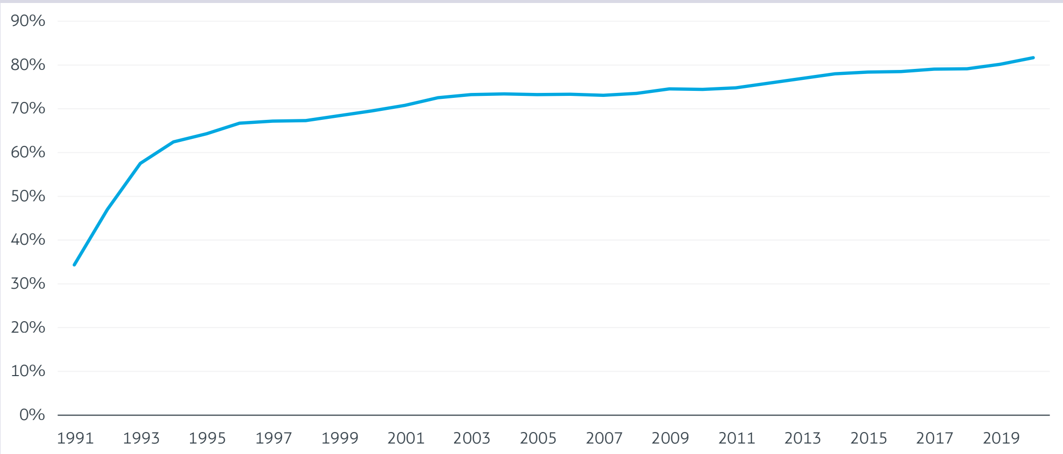
Here we focus on two of the biggest examples of regional convergence at a national scale in advanced economies: Germany after reunification and Japan in the post-war period to 1980. These are both large G7 countries, one federal and one unitary, with possible lessons for the UK. Their experiences are summarised in Boxes 1 and 2.

Box 1 **German reunification**

When Germany reunified in 1989, former East Germany was considerably behind the rest of the country. The new states went from 34% of the GDP per worker of the old states in 1991 to 82% in 2020, as shown in Figure 6. The rate of convergence between the new states in former East Germany and the old states was rapid in the years immediately after reunification, before slowing after 1995.

If the UK was able to close gaps on a similar scale, regional disparities would be considerably reduced, but the rapid convergence in the first five years after reunification would be almost impossible to achieve in the UK context. In 1989, the new states of Germany had around 25% of the population of the old states. The North East of England (currently the region with the lowest GVA per worker) has around 30% of the population of London, but it has 60% of the GVA per worker of London, while the new states of Germany had only around a third of the GDP per worker of the old states. If we apply the more modest convergence rate after 1996, a similar transformation in the UK would mean GVA per worker in the North East going from 60% of that of London now to around 73% in 24 years' time.[*]

Figure 6 **GDP per worker in the new states of Germany as a percentage of the old states, 1991–2020**



Sources: Institute for Government analysis of German Federal Statistics Office, GDP by Lander and Employment by Lander (2021).

The **German Unity Fund** was established in 1990 and ran until 1994. It provided around €140bn[**] of funding to finance the anticipated East German budget deficit, incurred from costs including improvements to infrastructure and the economic transition to a new currency and tax system.[21] When this came to an end, **Solidarity Pacts I and II** provided a total of around €300bn between 1995 and 2019. Both of these funds were intended for investment in capital projects

* Calculations based on the following UK data: Office for National Statistics, 'Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions', 23 July 2021, retrieved 5 July 2022, www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/subregionalproductivitylabourproductivity gvaperhourworkedandgvaperfilled jobindicesbyuknuts2andnuts3subregions

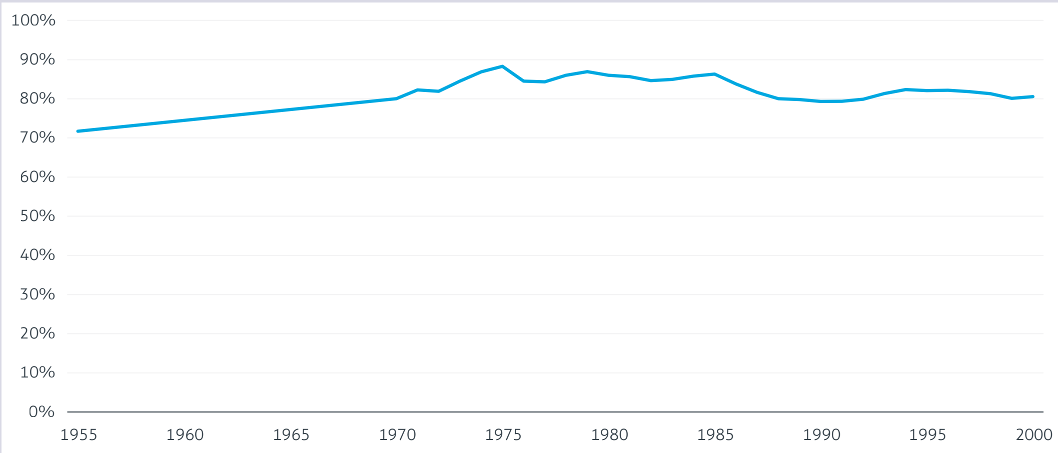
** Current prices.

such as infrastructure, with critics claiming that the new states instead used this money to plug their budget deficits.[22] One estimate implies that transfers from west to east (including federal funds, social insurance and tax relief) amounted to more than 60% of the new states' GDP in the early 1990s, and around 35% by the mid-1990s.[23] Solidarity Pacts I and II amounted to around 5% of the new states' GDP over the same period (1995–2019).

Box 2 **Regional convergence in Japan**

From the mid-1950s to the mid-1980s, Japan saw a convergence in regional output, with GVA per worker outside of the three main metropolitan areas – Tokyo, Osaka and Nagoya (in Aichi prefecture), also known as the Pacific Coast Belt – rising from 70% of the Pacific Coast Belt to almost 90% between 1955 and 1975 as shown in Figure 7.

Figure 7 **GVA per worker of Japanese prefectures outside Tokyo, Osaka and Aichi as a percentage of the three major metropolitan areas**



Sources: Institute for Government analysis of Research Institute of Economy, Trade and Industry, 'Regional-level Japan Industrial Productivity Database', 2017; and Kataoka M, 'Effect of public investment on the regional economies in post-war Japan', *Urban & Regional Development Studies*, 2005, vol. 17, no. 2, pp. 115–39.

This convergence rate was more modest than in the German case, but it would still be the equivalent of the GVA per worker of the rest of the UK going from 65% of that of London and the South East now to around 80% by 2042.* In the post-war period in Japan, a shift from light to heavy industry led to a concentration of activity in the three major cities where factories could have access to ports to import bulky materials. The **Comprehensive National Development Plan** was adopted in 1962, and responded to issues of regional inequality by aiming to disperse industrial and urban development outside the Pacific Coast belt. The **Second Comprehensive National Development Plan** in 1969 also made regional inequality a focus.

* Calculations based on the following UK data: Office for National Statistics, 'Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions', 23 July 2021, retrieved 5 July 2022, www.ons.gov.uk/employment andlabourmarket/peopleinwork/labourproductivity/datasets/ subregionalproductivity labourproductivity gvaperhourworkedandgvaper filledjobindicesbyuknuts2 andnuts3subregions

Policies to address regional disparities included higher public investment outside Tokyo and the Pacific Coast belt, which went towards an extensive road-building programme that was key to improving accessibility and facilitating the diffusion of industries outside the major cities.[24] The government also incentivised business relocation through tax incentives, such as through the 1972 **Law on Industrial Relocation**. The very high rate of growth that Japan saw until the mid-1970s made many of these redistributive policies possible.[25]

After the 1973 oil shock, Japan's economy experienced slower growth. In the 1980s, the country underwent a structural shift away from manufacturing and towards services. After 1985, Japan's major cities, especially Tokyo, began to pull away again and the country became more regionally unequal, although it is still among the most equal countries in productivity terms today.

In both of these case studies, the experience of 'levelling up' was a mixed picture. In Japan, convergence could not be sustained after the economy shifted towards services – a parallel to the UK experience over a similar timeframe.

And in Germany, reunification was not without its challenges. The 1990s saw a significant wave of immigration as East Germans – especially those who were young and skilled – moved to the west. Between 1990 and 2018, more than 1.2 million people emigrated from the new states – although since 2013, there has been net positive migration to the new states, mainly driven by families and young people moving there to study.[26,27] West Germany's economy also experienced a slowdown in growth after reunification: from 1992 to 2002, Germany as a whole had one of the lowest growth rates in Western Europe, at 1.4%.[28] The fact that most of the improvement in GDP per capita terms came in the first five years after reunification also suggests that smaller gaps can be more stubborn, with decades more investment producing only a fraction of the earlier improvements.

There are examples of smaller regions that have been successful in improving their economic performance, as the Industrial Strategy Council,[29] the National Audit Office[30] and the Chartered Institute of Public Finance and Accountancy have documented.[31] But many of these smaller case studies also show mixed results. In the Ruhr region, in Germany, poverty remains a persistent issue, with 21.1% of people in poverty compared to a national average of 15.5%.[32] San Antonio in Texas has also suffered from a high poverty rate – it was 18.6% in 2018, compared to 15.5% in Texas and 14.1% in the US as a whole.[33]

This is a reminder that it will be difficult for levelling up to make progress in all areas. 'Left-behind' regions in the UK could see significant productivity improvements while nevertheless continuing to struggle with poverty, unemployment and depopulation as skilled workers continue to move away.

Will the government's economic levelling up policies work?

Successful examples of levelling up are rare, but they do exist. There are also many other policies that have been evaluated and analysed that also affect productivity and can be implemented in a place-based way. The government can and should learn from these past examples as it continues to design its approach to levelling up, and as the new administration considers whether to change existing policies.

Three accompanying Insight papers summarise the evidence on what policies are likely to be effective based on a review of the available evidence and analysis of country-wide and region-specific case studies in three policy areas: skills,[34] infrastructure[35] and innovation.[36] Common insights across the three policy areas and the case studies also provide broader lessons about how policy should be designed to boost productivity in the UK's regions.

An important caveat at this stage is that the evidence does not provide a simple off-the-shelf blueprint or set of policies that, if delivered, would guarantee success. This is for two reasons.

First, there are gaps in the evidence base, which mean we do not always have a good understanding of how and whether previous policies have worked. This is mainly due to a failure of previous governments to evaluate policies and the National Audit Office has highlighted that this is a particular problem in relation to regional development policies.[37]

Second, how a policy works depends on its context. Some of the success in East Germany, for example, was possible because infrastructure was so poor at reunification, allowing for major gains in productivity from more infrastructure investment that may not be replicable in the UK. The 2020s in the UK will be its own specific context. Perhaps most pertinently, the Covid-19 pandemic has led to a dramatic change in working patterns. Use of public transport in London is still only around 70% of pre-crisis levels.[38] The future of working patterns is uncertain, but this new context is likely to change the effect of transport policies in particular as well as having potentially broader implications for where people work and how labour markets operate.

This means that the government's approach will need to adapt over time, and it points to the importance of better evaluation (which we highlight below) to inform the government on what policies are working. But even though the evidence that we have is not perfect, it does allow us to draw lessons about the policies that are most likely to work and how that compares to the government's approach.

In individual policy areas, the government has been pursuing the types of policies we would expect to increase productivity in the regions

The government's skills policies have the right focus, although early-years interventions and higher education are notable omissions

The skills mission requires that the government increases the number of people taking adult skills qualifications by 200,000 a year by 2030.

A robust evidence base shows high wage returns for people taking high-level non-degree post-18 qualifications (in particular, high-value apprenticeships). On average, people with these qualifications earn 20% to 30% more than people who have similar prior attainment and family background but do not gain these qualifications. These are exactly the courses that the government is expanding through its skills mission.

As well as focusing on formal post-18 qualifications as people leave school, an effective adult skills policy needs to promote lifelong learning and retraining, as people are likely to have multiple jobs throughout their career. This includes making it easier for people to take both formal and informal forms of training after they have started work. The government's Lifetime Skills Guarantee provides funding for people taking courses later in life, which should help here.

The evidence shows that it is important not only to develop skills, but also to use them well. In all countries, there are 'skill mismatches': some people are in jobs they are over-qualified for, while others are in jobs they are under-qualified for. These mismatches harm productivity because people are less effective at doing these jobs than ones they are suitably qualified for. Skill mismatches are worse in the UK than elsewhere – in a 2017 study by the Organisation for Economic Co-operation and Development (OECD), the UK was the highest in terms of the 19 OECD countries considered in terms of the percentage of workers over- or under-qualified for their job.[39] Skill mismatches are best solved at the local level, where local governments can tailor the training approach to the specific skills needs of their area's labour market.[40] Local skills improvement plans (LSIPs) are at an early stage but should, in principle, allow local areas to better understand the needs in their local area and tailor training to match.

The government's policies are aligned with the evidence on each of the three key points above, but our review also shows that there are other policies that the government can use to improve skills. The government has a separate schools mission, with an ambitious target to improve attainment. But its levelling up missions ignore early-years provision and higher education. Policies for the early years will take a long time to show up in productivity because toddlers will not be working for almost two decades, but the evidence shows that intervention at that stage could be the most effective way to drive better skills later in life, especially for those from disadvantaged backgrounds. And the evidence shows that expansions of higher education have been an important source of productivity advances over the past 30 years and it does not seem the UK has yet reached a saturation point where there are no more gains to be won. Children growing up in some poorer parts of the UK are still much less likely to go to university than those in more affluent areas like London. Below, we discuss how the government could make more use of these policy levers.

The government's infrastructure policies mainly focus on improving access to cities, which aligns with the evidence

There is convincing evidence that initial transformational infrastructure – such as the development of railways in the 19th century and the roll-out of broadband – led to major productivity gains. This is not especially relevant for the UK now, as most of its infrastructure networks are mature, and proposed changes will be less transformational. Evidence for productivity improvements from these changes is less conclusive but it still points to broad lessons for the UK.

Broadband is unlikely to play a major role in levelling up. Fast broadband is already available in most parts of the country, and especially in most urban areas where the evidence shows increases in productivity are most likely to be realised. Where the economic returns to broadband are high, expansion will probably be delivered by the private sector rather than government anyway. The government's broadband mission, to make broadband, 4G and 5G much more widespread, is therefore unlikely to drive major productivity gains, although it will contribute to other aspects of levelling up such as wellbeing.

The major focus of government infrastructure policy is on transport. The available evidence shows that transport policies will be most effective where they enable greater travel within regions and especially into and around cities, as opposed to focusing on transport in towns or between regions. This is because these are the policies that are most likely to capitalise on the potential agglomeration benefits of cities. A big increase in transport capacity in cities will not be delivered by road, as capacity in cities for road expansion is limited, meaning that better public transport is the best approach.

The government's transport mission is vague – for local transport connectivity to be "significantly closer to the standards of London" – but the language in the white paper suggests this will mean a major focus on intra-city connectivity. The government's other big policy in this area is the integrated rail plan, which aims to promote a more integrated regional economy in the north of England and the Midlands and to free up capacity for more local train routes. Both of these are motivated by a desire to promote agglomeration benefits.

Competitive R&D grants – the main focus of the government's R&D policies – are likely to be the best way to use innovation policy to level up

A broad and convincing evidence base has pointed to high economic returns to R&D, such as research to develop new drugs and other products. The social benefits are likely to be higher than those that the innovator captures directly themselves because knowledge diffuses and contributes to many businesses' activities. For example, initial research on mRNA technology at universities eventually led to the creation of the Pfizer and Moderna coronavirus vaccines and other vaccines, which will be profitable for their creators rather than the scientists who originally developed the technology. As a result, there is a good case for government involvement to stimulate additional R&D – encouraging businesses to take on additional projects and directly funding projects with potential high returns but which would not be attractive to the private sector.

In addition, there is evidence that – with the right broader environment – the location of R&D matters, and it can contribute to local economies even though the knowledge also provides benefits across a broader geography. R&D is most likely to contribute to a local area if there are enough skills and businesses in the area to make use of the technology.

The government provides generous support for businesses through R&D tax credits, but it has rightly not tried to use this lever to direct spending to the regions: a regionally differentiated tax break would be an inefficient way to do this, given how difficult it would be to prevent tax avoidance. Instead, the government will mainly expand public R&D by spending more in grants to businesses, universities and other researchers. The evidence shows that grants are effective at encouraging additional private sector innovation. It shows that they will be most effective when they are awarded competitively (that is, on the basis of objective review of a bid according to criteria; for example, through the research councils) than if they are awarded ad hoc by politicians attempting to 'pick winners'. A competitive approach does not preclude a spatial focus – politicians can set the overarching objectives and criteria – but it ensures that projects chosen are those that have a sound case and are likely to be effective. Most of the additional R&D spending that the government is planning – more than £8bn by 2026/27 – will be delivered through grants, many of which should be competitive.

Our review also emphasises that innovation policy should be broader than a focus on R&D. In some lower-tech sectors, where the UK lags comparators in productivity, innovation will look different – diffusing existing best practice, for example through better management, rather than spending on new discoveries. As these sectors are a bigger share of the economy in some of the lowest-productivity places in the UK, improving broader innovation may be more effective for these places than a narrow R&D focus. This is a relatively small focus for the government, but it has introduced schemes to try to improve management practices in the private sector, which could be scaled up if they prove successful.

But these policies on their own will not drive economic transformation

The existing evidence base allows us to develop central estimates of how much meeting the missions in these three key areas – skills (including schools), infrastructure (broadband and transport) and R&D – would make to economic outcomes (see Table 1). Between them they cover five of the 12 missions, and the main policies that we would expect to drive better productivity. While the precise gain from these policies is uncertain, the estimates provide a reasonable sense of the scale of change the policies might bring.

In each case we draw on estimates developed by the Royal Society for Arts (RSA), which in turn uses evidence that we rely on in each of our reviews. The estimates can be derived from the available evidence most easily if the mission is well defined, which is the case for R&D, skills, schools and broadband. The transport mission – that local transport connectivity will be "significantly closer to the standards of London" – is vaguer. The RSA assumes that this means increasing transport capacity in the 20 largest cities and towns in the UK, which would entail substantial investment. In other areas, too, the estimates are quite optimistic. For example, they assume that the returns to skills qualifications observed so far will persist when the qualifications are expanded further.

Table 1 **Productivity benefits from achieving levelling up missions**

Mission	Description	Estimated productivity gain (2021 terms)
Education	By 2030, the number of primary school children achieving the expected standard in reading, writing and maths will have significantly increased. In England, this will mean that 90% of children will achieve the expected standard, and the percentage of children meeting the expected standard in the worst-performing areas will have increased by more than a third.	**£7bn**
Skills	By 2030, the number of people successfully completing high-quality skills training will have significantly increased in every area of the UK. In England, this will lead to 200,000 more people successfully completing high-quality skills training annually, driven by 80,000 more people completing courses in the lowest-skilled areas.	**£5bn**
Transport	By 2030, local public transport connectivity across the country will be significantly closer to the standards of London, with improved services, simpler fares and integrated ticketing.	**£4bn**
Broadband	By 2030, the UK will have nationwide gigabit-capable broadband and 4G coverage, with 5G coverage for the majority of the population.	**£1bn**
R&D	By 2030, domestic public investment in R&D outside the Greater South East (GSE) will increase by at least 40%, and over the spending review period by at least a 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.	**£3bn**
Total		**£20bn**

Source: Haldane A, *Levelling Up: Sizing the prize, seizing the prize*, Royal Society for Arts, 2022, retrieved 6 July 2022, www.thersa.org/globalassets/_foundation/new-site-blocks-and-images/ceo-office/levelling-up-ceo-article.pdf.
Note: for education, we take the mid-range of the schools estimate (£5bn–£10bn). Full details of the methodology can be found in the source.

Adding these estimates together shows overall gains of £20bn in today's terms, a little under 1% of total UK GDP, with the biggest benefits arising from higher school attainment and an expansion of skills provision. This would constitute success in each of the policy areas – the missions are aspirational and (especially in the case of schools where the benefits are largest) difficult to achieve. Indeed, with the exception of R&D and skills – where the 2021 spending review provided enough funding to meet the missions – the policies and funding that the government has announced so far may not be large enough to make these missions a reality.[41]

While a gain of just under 1% of GDP would represent policy success, it would do little to address the big regional economic disparities laid out above. Even assuming that all of the policy benefits accrued outside of London and the South East, which is unlikely given that some of the uplift in schools and skills in particular will happen there, it would make only a small dent in the overall gap in productivity. In 2019, output per worker was 41% higher in London and the South East than the rest of the UK.[42] Even if all of the economic benefits manifested in productivity (rather than higher employment), a £20bn uplift outside of London and the South East would narrow the gap to 39%. Assuming this fed through into wages, it would mean average full-time earnings outside of the South East increasing by £400 to £29,100, still far below £36,000 in London and the South East.

How can the government adjust its approach to deliver economic transformation?

The previous section has shown that successful delivery of the levelling up missions, taking each individually, will not make a meaningful difference to the economic geography of the UK. We now address how the government's approach would need to change to drive bigger transformation. First, we point to specific policies that the government should be pursuing, or pursuing more of, that would help contribute to levelling up. And second, a common insight from case studies of successful levelling up is that the *way* policies are combined and targeted can also lead to bigger effects than an individual policy operating in isolation, and we also look at how the government can do this more effectively.

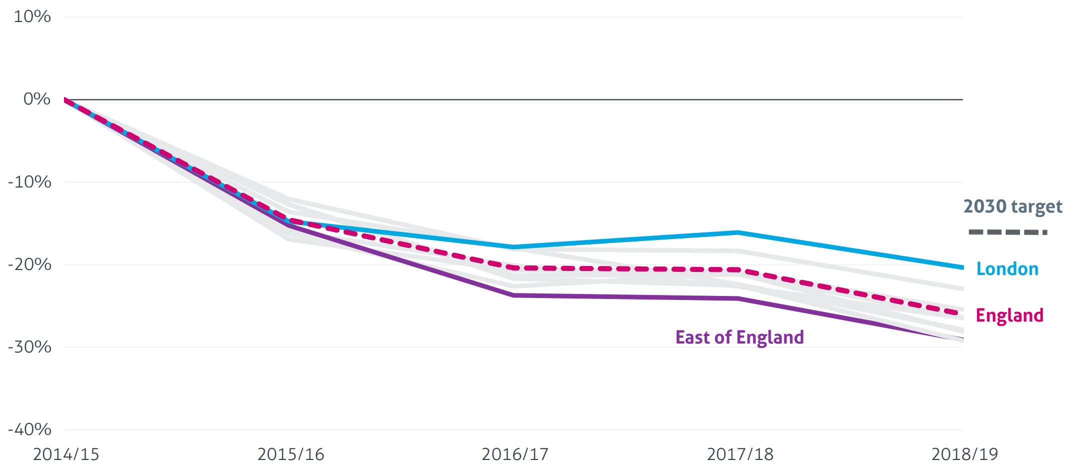
The government should increase its ambition and broaden its policy focus

The skills mission should be made more ambitious, alongside appropriate funding

As discussed above, the evidence suggests that adult skills qualifications have high returns. So it is right that the skills mission aims to improve the number of people completing these qualifications. But the current mission to have 200,000 more people a year in high-quality skills training by 2030 is not especially ambitious – this would leave numbers below where they were in 2014/15 (see Figure 8).

It is possible that returns to these courses will not be as high as the evidence suggests: currently the evidence is based on very small numbers of people completing high-level courses such as apprenticeships, so the impact on this small group may not replicate when access is widened. This points to the importance of constant evaluation of these programmes.

Figure 8 **Percentage change in the number of 19+ further education and skills achievements since 2014/15**



Source: Institute for Government analysis of Department for Education, Further education and skills geography tool, 2014/15 to 2018/19 (July 2020).

Assuming that these courses continue to show high returns, the government should set a more ambitious target, with appropriate funding behind it to ensure that provision is of a high quality. Restoring numbers to where they have been historically would mean 500,000 new completions a year, rather than 200,000. Based on the RSA's methodology detailed above, this would translate to a £12bn boost to productivity (as opposed to around £5bn from the current target).

The R&D mission should be made more ambitious to ensure a growing share of public R&D is spent outside of the Greater South East

Previous Institute for Government work on the levelling up missions has noted that the R&D mission is designed only to prevent a bigger concentration of spending in the Greater South East (GSE), rather than reversing the inequality in R&D spending.[43] This is because the commitment to spend at least 40% more outside the GSE is in line with the planned increase to the overall R&D budget set at the 2021 spending review.[44]

There is nothing to stop the government spending more than 40%, as the target is phrased as "at least" this increase. But a more ambitious target would aim to reduce the inequality by committing to spending outside the GSE, which would definitely outstrip the planned increase in the overall R&D budget. For example, the government could commit to the share of R&D spending outside the GSE rising from 39% (where it was in 2019) to at least 45%, while still maintaining the commitment to increase the overall budget so that this does not come from a decrease in the money available to the GSE.

This would be unlikely to lead to a big increase in productivity *overall* relative to spending more in the GSE, but it would ensure this spending led to more benefit outside the South East and so better contribute to levelling up.

The government should add a levelling up focus to early-years and university policy

Early-years interventions can help prevent significant skills gaps opening up before children start primary school. This is crucial given the evidence that skills training later in life mainly benefits adults with some qualifications anyway; across the OECD, adult education provision has not been able to close gaps once they occur.[45]

Investing in early-years interventions requires patience: the government would not see productivity gains by 2030 because children helped now would still be in school. However, in the long term, these investments could produce significant productivity gains. Pre-school interventions are likely to be critical in delivering the mission on schools, which aims to have 90% of pupils reaching the expected standard in Key Stage 1 by 2030, which the RSA estimates will add around £7bn a year to the UK economy.

A target to expand access to high-quality pre-school provision could also produce further gains. Research from the Department for Education (DfE) on the influence of pre-school on GCSE attainment suggests a positive effect on the likelihood of achieving five or more good GCSEs.[46] We also know, based on 2014 DfE research, that children with five or more good GCSEs have on average £100,000 higher lifetime earnings.[47] Therefore, a target to expand the percentage of three- and four-year-olds registered for funded childcare from 90% to 95% could add around £1.5bn a year in productivity terms.[*] Beyond a target for more childcare provision, the government could also explore other interventions known to have an effect on educational outcomes. The Early Intervention Foundation (EIF) has evaluated the effectiveness of various early-years interventions. Some policies with strong evidence include intensive home visits between birth and age two,[48] and various parenting classes such as the Incredible Years Preschool programme, which provides support for parents with concerns about the behaviour of a child between the ages of two and six.[49]

Evidence from the Institute for Fiscal Studies and the National Institute for Social and Economic Research also suggests that there are good returns to university degrees in terms of higher average lifetime earnings[50] and improved productivity.[51] While it is right to have a focus on technical education through the skills mission, higher education has so far been largely missing from the levelling up agenda. Instead, the government has recently consulted on whether to cap student numbers and introduce minimum eligibility requirements, both of which would reduce the number of people getting degrees.[52]

Bringing every region of the UK up to the average in terms of progression to higher education would lead to a 5% increase in annual enrolments, or an additional 36,000 graduates a year. Assuming higher discounted lifetime earnings of £115,000 for each of these graduates,[53] this would boost productivity by around £4bn a year.[**]

This estimate, as with most attempts to quantify the productivity gains of a particular policy, comes with a degree of uncertainty. In particular, it is likely that there is a point where higher education has diminishing returns – although, given there are OECD countries such as Japan and Ireland with higher rates of higher education participation than the UK and both have higher productivity, the UK has likely not yet reached that point.[54]

It is also not the case that every degree produces the same returns – the type of subject studied and the institution attended both make a difference.[55] As this is also true of apprenticeships,[56] it does not undermine the setting of a target in itself, but does suggest that the government should consider policies to support degree quality as well as expanding access to higher education. For example, the Centre for Transforming Access and Student Outcomes in Higher Education has found emerging evidence that learning analytics – the measurement, collection, analysis

* This estimate is based on the assumed increase in the number of children each year achieving five or more good GCSEs from the observed effect in the 2014 DfE study (see Sammons P, Sylva P, Melhuish E and others, *Influences on Students' GCSE Attainment and Progress at Age 16*, Department for Education, 2014, www.ucl.ac.uk/ioe/sites/ioe/files/16-Influences-Students-GCSE-Attainment-Progress-RR.pdf). Statistics on childcare enrolment are from GOV.UK, 'Education provision: children under 5 years of age', 2021, retrieved 6 July 2022, https://explore-education-statistics.service.gov.uk/find-statistics/education-provision-children-under-5/2021

** Calculations based on applying Universities and Colleges Admissions Service (UCAS) entry-rate data to Higher Education Statistics Agency (HESA) figures on total first-year enrolments. The UCAS data does not cover all higher education provision in the UK, particularly undercounting enrolments in Scotland, so the data from Scotland was excluded when calculating the average UK entry rate. This is consistent with the methodology the RSA used to calculate the return to the skills mission.

and reporting of data about learners – can have a positive effect on outcomes, and there can be a role for government in supporting data collection and use by higher education providers.[57]

The government must ensure that policies are targeted, co-ordinated and long-term

Expanding the ambition and scope of policies will go some way to better achieving levelling up, but given the individual policy estimates outlined above, this would still not drive economic transformation: the dent in the interregional productivity gap would be relatively small.

We know from past examples of levelling up that bigger reductions in the productivity gap can and do happen. In these cases, policies are able to have a greater impact than individual estimates would suggest. Specifically, policies can drive more transformative change if they are delivered at scale in the right places, co-ordinated and long-lasting.

In this section we show why each of these features is crucial and assess how the government's approach can deliver policies more effectively to level up.

Policies could have a bigger impact if they are geographically targeted

Earlier in this paper, we laid out the big economic forces – substantial differences in skills, reinforced by the agglomeration benefits of London – which explain major regional disparities in productivity.

Small changes to policies in a place – such as increasing the skills of a small share of the workforce, making minor changes to transport connectivity or a small R&D investment – are unlikely to do much to counteract these major economic forces. Policies adopted at relatively small scale will generate economic benefits, but they will not have major second-round effects – for example, by making a place much more attractive to skilled workers – that could drive a bigger change in where high-productivity jobs are located.

Most of the evidence from policy evaluations and other studies estimates the impacts of relatively small changes to policies. But policies that are big enough to change broader private sector decisions around where businesses locate could yield a much bigger return (and better value for money) than smaller improvements to skills and transport links in a place. This is particularly true if policy is focused on areas that could plausibly benefit from the types of economic forces that have contributed to London's dominance – especially large towns and cities.

The experience of various regions in the case studies we have examined also points to the importance – and potentially transformative benefits – of big policies. In East Germany, an estimated €2 trillion was invested in equalising living standards, although some of that money involved transfers through the welfare system such as pensions and unemployment benefits.

In the smaller case studies, too, the scale of the investment often stands out. Lille, for example, received money from the French government and through European Structural Funds, and this was critical to the regeneration effort.[58] Through just one fund from central government, offered for urban regeneration in the early 2000s, Lille received €100 million (equivalent to €143m today, or around £120m, £120 per inhabitant).[59]

Case studies of regional economic success tend to centre on cities or well-connected broader regions, showing the importance of agglomeration potential. And in Germany, the evidence suggests that the remaining gap between east and west is partly attributable to the fact that the former East German states are less urbanised – further demonstrating the importance of cities in driving productivity growth.[60]

But focusing on cities does not mean the benefits will flow only to city centre residents. As we outlined above, there is a strong link between incomes in a town and the productivity of the nearest city, and we should expect thriving cities to bring broader benefits to the UK's regions, which will flow to surrounding towns.

This focus on cities is especially important for big economic investments, such as infrastructure, that are fixed in a place. Our review of the evidence shows that transport policies will be most effective when the focus is on improving intra-city connectivity. This rationale is not so important for investments in people – skills policy – because skilled people can move around the country and better skills will lead to some productivity benefits everywhere.

But levelling up is the opposite of geographically focused

The government's approach to levelling up so far has not been geographically targeted, and thus is unlikely to drive bigger changes in private sector decisions around where to locate and work. Almost every area needs levelling up according to one of the missions. Even London trails on some metrics, such as wellbeing. And although the productivity mission aims to develop a "globally competitive city in every region", suggesting it acknowledges the role of cities to drive growth, this has not been apparent in its policy approach so far.

The government's approach to spending on levelling up has provided further evidence of a broad focus. The main dedicated spending for levelling up before the white paper was the Levelling Up Fund, which will award £4.8bn to different places based on a formula to determine need and by appraising specific bids that local areas make. So far, the first tranche has been awarded to more than 80 local authorities, comprising 33% of the UK population and 30% of GDP. The £1.7bn awarded amounts to around 0.3% of one year of GDP in those places. Furthermore, relative to both output and population, the money has gone disproportionately to rural areas rather than to the urban areas that could be better candidates for changing the economic geography of the UK.

The Levelling Up Fund is not intended to be the sole or main driver of levelling up, and levelling up is intended to achieve more than reductions in productivity disparities. But it is illustrative of the government's broad focus when it comes to levelling up, which may also limit the ability of future policies to drive transformation.

In response to criticisms that there is 'no new money' for levelling up, both Andy Haldane[61] and Neil O'Brien MP,[62] two architects of the agenda, have emphasised that relatively small changes to the distribution of overall government spending (around £900bn in 2021/22) could be quantitatively much more important than dedicated new funds. But if that money is spread across the whole country outside of London and the South East, it will mean a small slice of the pie for any given area. Even if the government were to move 5% of spending that currently takes place in London and the South East, redistributing it evenly among the other regions would amount to only £250 per head, or 1% of output, extra in each area.

If the government wants to drive more transformational economic change, without substantial extra spending, its approach will need to be more geographically targeted, including focusing economic investments such as transport and R&D on cities with the greatest potential to become high-productivity hubs through agglomeration.

By way of illustration, the £20bn worth of productivity gains from policies outlined above would make a bigger dent in the productivity gap between the north of England and London if all the activity were focused in that region.* It would reduce the productivity gap to London by 16% (from 44% to 37%). But better targeting at the right places could drive bigger economic benefits.

The performance of the UK's largest cities outside of London (such as Birmingham and Manchester) lags those in other countries. But we know that they do have the capacity to be much more productive given the right policy focus. Workers in those places benefit from agglomeration, meaning they are more productive than similarly skilled workers in smaller places. But on the whole these are not places where high-productivity businesses (or people) have wanted to locate. Big transport and R&D policies centred on these underperforming cities could generate much more levelling up by making those places much more attractive.

Policies have more impact if they are co-ordinated in a place

A further way for policies to drive changes to productivity is if they are deployed effectively in a co-ordinated fashion in places. A common insight across our reviews of the evidence and the case studies is that policies can have more impact in combination than in isolation.

This applies to each of skills, infrastructure and innovation policy. Improving the provision of skills in an area will have limited impact on productivity in the area if it is not accompanied by other policies that encourage businesses to locate good

* Measured here as the following three statistical regions: the North East, the North West, and Yorkshire and the Humber.

jobs there. Otherwise, skilled people are likely to move. Improvements to transport capacity will only drive improvements in productivity if there is enough demand from commuters in the first place, otherwise the additional transport capacity will be underused. And spending on R&D is only likely to generate wider economic benefits in a place if it has 'absorptive capacity' – the right businesses and skilled workforce to put the innovation to additional productive uses.

In each successful example of levelling up surveyed, multiple policy tools have contributed to improved economic performance. For example, in Fukuoka in Japan, successive urban plans aimed to improve the city's quality of life in order to attract residents. In surveys, Japanese people rank the city as the one they would most like to live in, and its public services, levels of pollution, safety and cost of living all factor into its image as a low-cost alternative to Tokyo.[63] The city government has also focused on attracting businesses to the area through initiatives such as Start Up City Fukuoka, launched in 2012, which offers funding, rent subsidies and other business support.[64] Likewise, the suite of policies adopted in East Germany was extremely broad. But the same also applies to any of the regional case studies we have looked at: no one policy tool delivered success.

UK regional economic policy has been siloed for a long time

The starting point for the government is that the key policies for economic regeneration tend to be made in siloes independently of one another. The Department for Education, the Department for Transport and the Department for Business, Energy and Industrial Strategy control the key policies we have explored. The government has set out its plans for rail,[65] skills[66] and R&D[67], but the relevant department has developed each one and the plans tend to say little about how other policies fit in.

In general it is difficult to co-ordinate these policies at a national level, especially when what is relevant is co-ordination *within a place*. In principle, this suggests a role for devolution of some policy levers, and that parts of the skills and transport briefs are devolved. However, the way in which local government is funded prevents these policy levers from being effectively co-ordinated at a local level. Estimates from the Local Government Association imply that local authorities could bid into more than 200 different funding pots every year from 2015/16 to 2018/19,[68] with the best projects awarded funding as decided by the parent department.

This model hampers the use of complementary policies at a local level. Some policies might be more effective if combined with others that would be funded out of a separate pot, but each project is considered on its individual merits. The model also encourages areas to focus on bids that they expect will look most attractive to central government, and so are more likely to win rather, than the projects that they expect to drive the most transformation.

A small example of how this model of funding can prevent strategic policy making comes from the Community Renewal Fund (the forerunner of the UK Shared Prosperity Fund). Councils could make multiple bids for projects, and projects were each considered on their merits. Warwickshire County Council made seven bids and was approved for three, all of which focused on youth unemployment (as this was a priority for the government at the time the bids were being chosen). But this gave Warwickshire a large budget for projects to support young unemployed people, while several other projects – for example, ones focused on developing entrepreneurship and access to finance – were unsupported.[69]

Policies will drive levelling up most effectively if deployed over long periods

In all policy areas we explore, the full productivity benefits from public intervention will take years or even decades to be realised. Investment in early-years and school education will not translate into labour market outcomes for a decade or more, yet the eventual returns from spending then could be greater than purely focusing attention on those already in the labour market. Likewise, the biggest productivity benefits from infrastructure and public R&D spending (which is often earlier-stage research) show up many years later.[70] Indeed, for some policies – especially schools and transport – 2030 is likely to be too soon for big interventions now to show up in productivity and 2040 is a more reasonable time horizon.

Delivering these policies therefore requires politicians to be willing to prioritise the long term, and a recognition that changes will not be made overnight. More broadly, policy consistency is important to drive the changes in the private sector that would be most transformational. For example, one problem with adult skills policy in the UK has been a constant chopping and changing of qualifications and institutions. This makes for a confusing landscape where employers and workers might be uncertain of the value of different courses, which reduces the incentive to invest in skills.[71]

The importance of policy stability is a common thread running through past examples of successful levelling up. In Germany, equalising living standards was put into the constitution and programmes were set up to run for decades, outlasting any individual government, and continues to be a priority to this day.

While exactly what constitutes sufficient longevity will depend on the context, the lesson from case studies is that meaningful change tends to happen over at least a decade. This does not mean exactly the same set of policies being pursued over that time, but it does require a consistent goal and approach, with policies tweaked and improved over time.

Policy churn has harmed past attempts to reduce regional inequalities in the UK

Policy longevity has been a notable weakness of UK regional policy over the past 40 years, as previous Institute for Government research has highlighted.[72] Further education, regional governance and industrial strategy are all policy areas where institutions and policies have changed far too frequently. For example, since 1988 there have been 23 different types of public sector organisation responsible for the delivery of further education, only seven of which still remain today.[73] And regional governance organisations have also undergone substantial churn: previous institutions such as metropolitan counties, New Labour's regional development agencies and development corporations have come and gone. We now have local enterprise partnerships and mayoral combined authorities.

This churn in organisations has fed into frequent changes in policy too, especially in further education where many versions of A-level-equivalent technical qualifications have been introduced and withdrawn. The most recent initiative, T-levels, promises simplification but is relatively short-lived so far.[74]

As noted above, policy churn prevents these policies from making more transformative impacts over the long term and provides uncertainty for businesses and people. Previous Institute for Government research[75] and past examples of levelling up reveal several causes of policy churn and how it can be addressed.

Long-term planning at the centre of government is needed

The centre of government – No.10, the Treasury and the Cabinet Office – has frequently failed to devote enough attention to long-term planning in these policy areas. As a result, there is a tendency towards short-term, piecemeal policy changes rather than a long-term plan based on a coherent view of what policy can and should achieve.[76] This has been a particular problem in areas such as skills because it has rarely been towards the top of a government's agenda. This has also meant that the relevant departments have had frequent changes in leadership, with different secretaries of state allowed to pursue their own policy agenda, which then changed once they moved on.

Policies need to be evaluated and based on the evidence

We have already highlighted that the evidence base for levelling up policies is not as strong as it should be because past policies have not been evaluated well. This also has implications for policy longevity. If there is no solid evidence base that shows how effective a policy has been, it is then very easy for that policy to be changed when the political winds shift.[77] Better evaluation can ensure that the government learns and adapts policies over time so that they have maximum impact. If possible, evaluation should also try to take into account multiple policy interventions happening at the same time in places, to better understand the additional impact that policies can have if they are made in a complementary way.

Formal policy evaluation is not the only way to generate robust evidence on the impact of policies. With access to the right data, researchers can assess the impact of policies after the fact. A good example of this is skills policy, where the government has allowed researchers secure access to a dataset called Longitudinal Economic Outcomes (LEO), which links people's education and tax records.[78] This has led to a huge leap forward in the quality of evidence on the benefits of different types of further education, which forms the basis of some of our conclusions to our Insight paper on skills.[79]

Local leadership is key

In past examples of levelling up, effective local leadership has been key. Local mayors are often instrumental in pushing forward flagship projects or being advocates for their area. For example, in Lille, the mayor played a role in securing the Eurostar train station, which was important in the city's regeneration; and in Fukuoka in Japan, the mayor was critical in creating the vision for transforming the city into a hub of entrepreneurship.[80] A clear vision from local leaders can be key to ensuring policies remain consistent even as national governments change. For example, in Barcelona, regeneration took place over a 25-year period, with a single mayor, Pasqual Maragall, leading efforts for 15 years between 1982 and 1997.[81]

However, with a few notable exceptions, the UK has tended to lack this strong local leadership due to the frequent churn in local institutions and the concentration of policy control in the centre of government, which means that there is a limit to how much local leaders can do to drive economic change. But the experience of metro mayors so far suggests that these leaders have had some success in providing more coherent local leadership.[82]

The levelling up white paper recognises the need for co-ordination and longevity, but the government must follow through on its commitments

The need for a co-ordinated, multi-pronged and long-term policy approach is a key feature of the *Levelling Up the United Kingdom* white paper.[83] The 'six capitals' framework – that prosperity in a place relies on physical, human and intangible capital (directly related to the three areas of policy we have reviewed) as well as social, institutional and financial capital – builds a need for policy co-ordination in the government's understanding of the problem. This is also a lesson that the white paper takes from past case studies of successful levelling up: "Large-scale central government investment is not enough on its own. This suggests the need to craft local growth strategies that crowd in private finance."[84]

The white paper also proposes "system reforms", which are designed to promote co-ordinated and long-term policy making. These include changes that are supposed to address each of the problems we outline above.

The 12 missions for 2030 are an explicit attempt to expand the time horizon of the government so that decisions are made in a long-term way. They should also promote less siloed policy making where multiple policy levers are needed to deliver a particular mission.

The white paper makes strong commitments to evaluate policies better and make better use of data, although we are still waiting for further details of what this will mean in practice.

The most radical of the system reforms concerns a renewed focus on devolution – expanding the coverage of devolution deals and deepening existing ones. As we noted in our initial response to the white paper,[85] if these changes are delivered successfully they represent a meaningful shift in the way policy is made in England and could contribute to more co-ordinated, long-term policy making. The white paper also includes an ambition to provide local government with more flexible funding, and promises an update on this later in the year.

It is welcome that the government has recognised that overcoming the problems we have identified will be critical if levelling up policies are to be successful in the long term. A change of administration provides an early test of the agenda: the system reforms in the white paper have either not yet had been introduced or had time to bed in. Changing the way policy is made will be crucial to the long-term success of levelling up, and a new government that is serious about reducing regional inequalities should prioritise delivering these system reforms.

The government must ensure it delivers on the promises in the white paper to promote further devolution, evaluation and long-term thinking, for example on flexible funding, spatial analysis and devolution deals, and be willing to make further changes if they do not appear to result in better policy co-ordination and longevity.

Conclusions and recommendations

Making a meaningful change to the UK's economic geography by improving productivity in areas outside of London and the South East has been an explicit focus of the government's levelling up agenda, but it will not be easy. The economic forces that have driven the current disparities are powerful and persistent. There are few examples where a big reduction in a regional productivity gap has happened elsewhere.

While the government's policies on skills, infrastructure and innovation are broadly the *types* of policy that we would expect to work, we show that on their own they will not deliver a major change to the UK's economic geography. Even if the five relevant missions were achieved and all economic benefits went to places outside of London and the South East, this would only reduce the productivity gap between those two regions and the rest of the UK from 41% to 39%.

We now make specific recommendations in individual policy areas to deliver bigger productivity gains.

- **The government should increase the ambition of the skills mission**, alongside appropriate funding. The current ambition would still see the number of eligible qualifications taken each year remain below 2010 levels. Returning the number of people undertaking these qualifications to pre-austerity levels would require an additional 500,000 starts each year, rather than the current 200,000, and could provide a boost to output of £7bn in today's terms.

- **The government should ensure the R&D mission is also made more ambitious** so that the *share* of public R&D spending outside of London and the South East increases, rather than just requiring that the level of spending outside of those regions increases. This would not lead to big overall productivity gains but would ensure that the benefits accrued more in areas with lagging productivity.

- **The government should revisit its approaches to higher education and early years** – two areas that are likely to have high economic returns but which do not fall under any of the levelling up missions. In particular, it should:

    - Set out plans for increasing the share of 18-year-olds going to university in places that lag far behind the national average, as well as exploring policies such as foundation years or financial support for students to widen participation to the most disadvantaged.[86] Lifting up participation in regions that lag the national average to that average could provide a return of around £4bn.

- Set out plans for additional early-years provision, including parenting support and intensive home visits, both of which are interventions with good evidence of reducing disparities.[87] While these would not lead to big productivity gains by 2030, there could be big gains to productivity beyond that, once today's toddlers enter the labour market.

But even delivering these policies on their own would not necessarily drive economic transformation. The lesson from past examples of levelling up is that policies that are geographically targeted, co-ordinated and long-lasting can have much bigger effects. The government's levelling up white paper acknowledges that a lack of policy co-ordination and longevity has been a historic weakness of UK regional economic policy and proposes reforms to address that. But levelling up has a broad geographic focus and this means that the government risks not driving bigger economic transformation by spreading the focus of economic policy too widely and so failing to cause big changes in private sector decisions about where businesses and people locate.

If the government wants its levelling up policies to drive economic transformation, it should:

- **Prioritise the UK's underperforming large cities outside London for economic investments.** People working in Birmingham and Manchester already get a productivity boost from the agglomeration benefits of working in a big hub, but their productivity is low because people there are relatively low-skilled. A big focus on improving the attractiveness of those places for businesses and highly skilled people could drive major changes in the UK's economic geography. Other interventions can and should happen to ensure other places reach their potential, but the biggest impact will arise from targeting policies at these big hubs.

- **Ensure it delivers the "system reforms" proposed in the white paper** that are designed to improve policy co-ordination and longevity and be willing to make further changes if they do not have the desired effect. Specifically:

  - **The government should prioritise evaluation and ensure all new levelling up policies have an evaluation plan from the outset.** It should also explore opportunities to provide more data to external researchers to allow for better analysis of previous policies and try to evaluate the impact of different policies in combination rather than in isolation. It should also adapt its policies as it learns more, for example by prioritising skills courses that show the highest returns.

  - **The government should take concrete steps to make funding for subnational governments in England more flexible**, to allow them to make policy in a strategic way and provide the strong local leadership that has been critical to past examples of success. This should include fewer competitive pots and more blocks of funding that do not need to be used for a specific purpose.

References

1 HM Government, *Levelling Up the United Kingdom*, CP 604, The Stationery Office, 2022, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052706/Levelling_Up_WP_HRES.pdf

2 Pope T, Shearer E and Hourston P, *Levelling Up and Skills Policy: How qualifications and training can help boost regional productivity,* Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/levelling-up-skills-policy-evidence-review

3 Pope T, Shearer E and Hourston P, *Levelling Up and Infrastructure Policy: How connecting the UK's cities could be the key to boosting productivity,* Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/levelling-up-infrastructure-policy-evidence-review

4 Pope T, Shearer E and Hourston P, *Levelling Up and Innovation Policy: How R&D and other policy can reduce regional inequality,* Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/levelling-up-innovation-policy-evidence-review

5 HM Government, *Levelling Up the United Kingdom*, CP 604, The Stationery Office, 2022, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052706/Levelling_Up_WP_HRES.pdf

6 Shearer E, Shepley P and Soter T, *Levelling Up: Five questions about what the government means by the phrase*, Institute for Government, 2021, retrieved 6 July 2022, www.instituteforgovernment.org.uk/publications/levelling-up

7 Shearer E, *Will the Levelling Up Missions Help Reduce Regional Inequality?*, Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/levelling-up-missions

8 HM Government, *Levelling Up the United Kingdom*, CP 604, The Stationery Office, 2022, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052706/Levelling_Up_WP_HRES.pdf, p. 1.

9 Geary F and Stark T, 'What happened to regional inequality', *The Economic History Review*, 2016, vol. 69, no. 1, pp. 215–28, retrieved 6 July 2022, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2716825

10 *Ibid.*

11 Roses R and Wolf N, 'The return of regional inequality: Europe from 1900 to today', VoxEU, 14 March 2018, retrieved 15 June 2022, https://voxeu.org/article/return-regional-inequality-europe-1900-today

12 OECD.Stat, 'Regional GVA per worker', retrieved 15 June 2022, https://stats.oecd.org/index.aspx?queryid=67053

13 HM Government, *Levelling Up the United Kingdom*, CP 604, The Stationery Office, 2022, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052706/Levelling_Up_WP_HRES.pdf, p. 12.

14 Overman H and Xu X, *Spatial Disparities Across Labour Markets*, Institute for Fiscal Studies, 2022, https://ifs.org.uk/inequality/wp-content/uploads/2022/02/Spatial-disparities-across-labour-markets-IFS-Deaton-Review-Inequality-FINAL.pdf

15 Organisation for Economic Co-operation and Development, *Better Use of Skills in the Workplace*, 2017, retrieved 15 June 2022, www.oecd-ilibrary.org/employment/better-use-of-skills-in-the-workplace_9789264281394-en, p. 21.

16 Centre for Cities, *Why Big Cities are Crucial to Levelling Up*, 2020, www.centreforcities.org/wp-content/uploads/2020/02/Why-big-cities-are-crucial-to-levelling-up.pdf, p. 3.

17 National Infrastructure Commission, *Infrastructure, Towns and Regeneration*, 2021, https://nic.org.uk/app/uploads/NIC-Infrastructure-Towns-and-Regeneration-Report.pdf, p. 9.

18 Shearer E, *Will the Levelling Up Missions Help Reduce Regional Inequality?*, Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/levelling-up-missions

19 McCann P, 'Perceptions of regional inequality and the geography of discontent: insights from the UK', *Regional Studies*, 2020, vol. 54, no. 2, pp. 256–67, retrieved 6 July 2022, www.tandfonline.com/doi/full/10.1080/00343404.2019.1619928

20 Organisation for Economic Co-operation and Development, 'OECD regions and cities at a glance: Portugal', 2020, www.oecd.org/cfe/Portugal-Regions-and-Cities-2020.pdf, p. 4.

21 Protzman F, 'Germans in accord on a unity fund', *The New York Times*, 17 May 2020, retrieved 15 June 2022, www.nytimes.com/1990/05/17/world/germans-in-accord-on-a-unity-fund.html

22 Locke S, 'The Solidarity Pact that provided cash and financial stability to eastern German states following reunification is about to expire', *The German Times*, October 2019, retrieved 15 June 2022, www.german-times.com/the-solidarity-pact-that-provided-cash-and-financial-stability-to-the-eastern-german-states-following-reunification-is-about-to-expire

23 Boss A, 'How Germany shouldered the fiscal burden of the unification', Kiel Working Paper 851, Kiel Institute of World Economics, February 1998, www.econstor.eu/bitstream/10419/995/1/241267005.pdf, p. 17.

24 Multu S, 'Regional disparities, industry and government policy in Japan', *Development and Change*, 1991, vol. 22, no. 3, pp. 547–86.

25 *Ibid.*

26 Federal Government Commissioner for the New Federal States, *Annual Report of the Federal Government on the Status of German Unity*, 2019, retrieved 6 July 2022, www.bmwk.de/Redaktion/EN/Publikationen/annual-report-of-the-federal-government-on-the-status-of-german-unity2019.pdf?__blob=publicationFile&v=4, p. 12.

27 Stawarz N, Sander N, Sulak H and Rosenbaum-Feldbrügge M, 'The turnaround in internal migration between East and West Germany over the period 1991 to 2018', *Demographic Research*, 2020, vol. 43, no. 33, pp. 993–1008, www.demographic-research.org/volumes/vol43/33/43-33.pdf

28 Schleunes K, Turner HA, Barkin K, Bayley CC, Duggan LG et al, *German Economic Unification and Beyond*, Britannica, retrieved 15 June 2022, www.britannica.com/place/Germany/Economic-unification-and-beyond

29 Taylor A, Sampson S and Romaniuk A, *What Does It Take to 'Level Up' Places?*, Industrial Strategy Council, 2021, https://industrialstrategycouncil.org/sites/default/files/attachments/What%20does%20it%20take%20to%20%E2%80%9Clevel%20up%E2%80%9D%20places.pdf

30 National Audit Office, *How European Cities Achieve Renaissance*, National Audit Office, 2007, https://webarchive.nationalarchives.gov.uk/ukgwa/20170207052351/https:/www.nao.org.uk/wp-content/uploads/2013/02/EU_Cities_Renaissance.pdf

31 Matsu J, Taylor A, Green A, O'Farrell L, Read H et al, *Investing in Regional Equality: Lessons from four cities*, Chartered Institute of Public Finance and Accounting, 2022, www.cipfa.org/-/media/Files/CIPFA-Thinks/Insight/Investing-in-regional-equality.pdf

32 DW.com, 'Germany: poverty gap widens between rich and poor regions', 12 December 2019, retrieved 15 June 2022, www.dw.com/en/germany-poverty-gap-widens-between-rich-and-poor-regions/a-51637957

33 Taylor A, Sampson S and Romaniuk A, *What Does It Take to 'Level Up' Places?*, Industrial Strategy Council, 2021, https://industrialstrategycouncil.org/sites/default/files/attachments/What%20does%20it%20take%20to%20%E2%80%9Clevel%20up%E2%80%9D%20places.pdf

34 [Skills insight paper]

35 Infrastructure insight paper

36 Innovation insight paper

37 Comptroller and Auditor General, *Supporting Local Economic Growth*, HC 957, Session 2021–22, National Audit Office, 2022, www.nao.org.uk/wp-content/uploads/2021/06/Supporting-local-economic-growth.pdf

38 Department for Transport, 'Transport use during the coronavirus pandemic', 15 June 2022, retrieved 15 June 2022, www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic

39 McGowan MA and Andrews D, 'Labour market mismatch and labour productivity', OECD Economics Department Working Papers No. 1209, 2015, www.oecd-ilibrary.org/labour-market-mismatch-and-labour-productivity_5js1pzx1r2kb.pdf?itemId=%2Fcontent%2Fpaper%2F5js1pzx1r2kb-en&mimeType=pdf

40 Organisation for Economic Co-operation and Development and International Labour Organization, Better Use of Skills in the Workplace, OECD Publishing, 2017, retrieved 15 June 2022, www.oecd-ilibrary.org/employment/better-use-of-skills-in-the-workplace_9789264281394-en, p. 21.

41 Shearer E, *Will the Levelling Up Missions Help Reduce Regional Inequality?*, Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/levelling-up-missions

42 Office for National Statistics, 'Regional labour productivity including industry by region, UK, 2019', 7 July 2021, retrieved 15 June 2022, www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/bulletins/regionallabourproductivityincludingindustrybyregionuk/2019

43 Shearer E, *Will the Levelling Up Missions Help Reduce Regional Inequality?*, Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/levelling-up-missions

44 Grove J, 'Plan to "level up" UK research funding "unambitious"', *Times Higher Education*, 4 February 2022, retrieved 29 March 2022, www.timeshighereducation.com/news/plan-level-uk-research-funding-unambitious

45 Organisation for Economic Co-operation and Development, 'Indicator C6: How many adults participate in adult learning?', in *Economics at a Glance 2014: OECD indicators*, OECD Publishing, 2014, www.oecd.org/education/EAG2014-Indicator%20C6%20(eng).pdf

46 Sammons P, Sylva P, Melhuish E and others, *Influences on Students' GCSE Attainment and Progress at Age 16*, Department for Education, 2014, www.ucl.ac.uk/ioe/sites/ioe/files/16-Influences-Students-GCSE-Attainment-Progress-RR.pdf

47 Hayward H, Hunt E and Lord A, *The Economic Value of Key Intermediate Qualifications*, Department for Education, 2014, https://dera.ioe.ac.uk/21533/1/RR398A_-_Economic_Value_of_Key_Qualifications.pdf

48 Early Intervention Foundation, 'Family Nurse Partnership', (no date), retrieved 15 June 2022, https://guidebook.eif.org.uk/programme/family-nurse-partnership

49 Early Intervention Foundation, 'Incredible Years Preschool', (no date), retrieved 15 June 2022, https://guidebook.eif.org.uk/programme/incredible-years-preschool

50 Britton J, Dearden L , Van Der Erve L and Waltmann B, *The Impact of Undergraduate Degrees on Lifetime Earnings*, Institute for Fiscal Studies, 2020, https://ifs.org.uk/uploads/R167-The-impact-of-undergraduate-degrees-on-lifetime-earnings.pdf

51 Holland D, Liadze I, Rienzo C and Wilkinson D, 'The relationship between graduates and economic growth across countries', BIS Research Paper No. 110, Department for Business and Skills, August 2013, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/229492/bis-13-858-relationship-between-graduates-and-economic-growth-across-countries.pdf

52 Secretary of State for Education, *Higher Education Policy Statement and Reform Consultation*, CP 617, The Stationery Office, 2022, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1057091/HE_reform_command-paper-web_version.pdf

53 Britton J, Dearden L, Van Der Erve L and Waltmann B, *The Impact of Undergraduate Degrees on Lifetime Earnings*, Institute for Fiscal Studies, 2020, https://ifs.org.uk/uploads/R167-The-impact-of-undergraduate-degrees-on-lifetime-earnings.pdf

54 Coulter S, Mulheirn I, Scales J and Tsoukalis C, *We Don't Need No Education? The case for expanding higher education*, Tony Blair Institute for Global Change, 2022, https://institute.global/sites/default/files/articles/We-Don-t-Need-No-Education-The-Case-for-Expanding-Higher-Education.pdf

55 Britton J, Dearden L, Van Der Erve L and Waltmann B, *The Impact of Undergraduate Degrees on Lifetime Earnings*, Institute for Fiscal Studies, 2020, https://ifs.org.uk/uploads/R167-The-impact-of-undergraduate-degrees-on-lifetime-earnings.pdf

56 Conlon G and Halterbeck M, *Assessing the Economic Returns to Level 4 and 5 STEM-based Qualifications*, Gatsby Foundation, 2017, www.gatsby.org.uk/uploads/education/reports/pdf/le-gatsby-assessing-the-economic-returns-to-level-4-and-5-stem-based-qualifications-final-07-06-2017.pdf

57 Transforming Access and Student Outcomes in Higher Education, 'Learning analytics (post-entry)', retrieved 15 June 2022, https://taso.org.uk/intervention/learning-analytics-post-entry

58 Taylor A, Sampson S and Romaniuk A, *What Does It Take to 'Level Up' Places?*, Industrial Strategy Council, 2021, https://industrialstrategycouncil.org/sites/default/files/attachments/What%20does%20it%20take%20to%20%E2%80%9Clevel%20up%E2%80%9D%20places.pdf

59 Provan B, *Lille City Story*, London School of Economics, 2015, https://eprints.lse.ac.uk/67846/1/casereport104.pdf

60 Belitz H, Gornig M and Schiersch A, *Productivity: Urban–rural differences affect productivity more than east–west differences*, DIW, 2019, www.diw.de/documents/publikationen/73/diw_01.c.684470.de/dwr-19-43-1.pdf

61 Institute for Government, 'In conversation with Andy Haldane: how to make levelling up work', Institute for Government, 1 March 2022, retrieved 15 June 2022, www.instituteforgovernment.org.uk/events/andy-haldane-levelling-up

62 Institute for Government, 'Levelling up: what is it and will it work? In conversation with Neil O'Brien and Sebastian Payne', Institute for Government, 29 March 2022, retrieved 15 June 2022, www.instituteforgovernment.org.uk/events/levelling-up

63 Matsu J, Taylor A, Green A and others, *Investing in Regional Equality: Lessons from four cities*, Chartered Institute of Public Finance and Accounting, 2022, www.cipfa.org/-/media/Files/CIPFA-Thinks/Insight/Investing-in-regional-equality.pdf

64 *Ibid*.

65 Department for Transport, *Integrated Rail Plan for the North and Midlands*, CP 490, The Stationery Office, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1062157/integrated-rail-plan-for-the-north-and-midlands-web-version.pdf

66 Department for Education, *Skills for Jobs: Lifelong learning for opportunity and growth*, CP 338, The Stationery Office, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957856/Skills_for_jobs_lifelong_learning_for_opportunity_and_growth__web_version_.pdf

67 Department for Business, Energy and Industrial Strategy, *UK Innovation Strategy: Leading the future by creating it*, The Stationery Office, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1009577/uk-innovation-strategy.pdf

68 Local Government Association, *Fragmented Funding*, 2020, www.local.gov.uk/sites/default/files/documents/Fragmented%20Funding_final.pdf

69 Department for Levelling Up, Housing and Communities, *UK Community Renewal Fund: Successful and unsuccessful bids*, The Stationery Office, 2021, retrieved 15 June 2022, www.gov.uk/government/publications/uk-community-renewal-fund-successful-bids

70 Infrastructure paper; innovation paper

71 Organisation for Economic Co-operation and Development, *Raising the Basic Skills of Workers in England*, OECD Publishing, 2020, retrieved 15 June 2022, www.oecd-ilibrary.org/sites/4ff42de8-en/index.html?itemId=/content/publication/4ff42de8-en

72 Norris E and Adam R, *All Change: Why Britain is so prone to policy reinvention, and what can be done about it*, Institute for Government, 2017, www.instituteforgovernment.org.uk/publications/all-change

73 Pope T and Hourston P, 'Churn in "levelling up" policies in the UK', Institute for Government, 24 March 2022, retrieved 15 June 2022, www.instituteforgovernment.org.uk/explainers/churn-levelling-policies

74 HM Government, 'T-Levels', GOV.UK, (no date), retrieved 15 June 2022, www.tlevels.gov.uk

75 Norris E and Adam R, *All Change: Why Britain is so prone to policy reinvention, and what can be done about it*, Institute for Government, 2017, www.instituteforgovernment.org.uk/publications/all-change

76 *Ibid.*

77 *Ibid.*

78 ADR UK, 'The Longitudinal Education Outcomes (LEO) dataset is now available in the ONS Secure Research Service', 15 July 2021, retrieved 15 June 2022, www.adruk.org/news-publications/news-blogs/the-longitudinal-education-outcomes-leo-dataset-is-now-available-in-the-ons-secure-research-service-426/#:~:text=LEO%20is%20a%20de%2Didentified,of%20members%20of%20the%20public

79 [Skills insight paper]

80 Matsu J, Taylor A, Green A and others, *Investing in Regional Equality: Lessons from four cities*, Chartered Institute of Public Finance and Accounting, 2022, www.cipfa.org/-/media/Files/CIPFA-Thinks/Insight/Investing-in-regional-equality.pdf, p. 24.

81 National Audit Office, *How European Cities Achieve Renaissance*, 2007, https://webarchive.nationalarchives.gov.uk/ukgwa/20170207052351/https:/www.nao.org.uk/wp-content/uploads/2013/02/EU_Cities_Renaissance.pdf

82 Paun A, Nice A and Rycroft L, How metro mayors can help level up England, Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/metro-mayors

83 HM Government, *Levelling Up the United Kingdom*, CP 604, The Stationery Office, 2022, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052706/Levelling_Up_WP_HRES.pdf

84 *Ibid.*, p. 102.

85 Pope T, Tetlow G, Paun A and others, *Levelling Up: The IfG view on the white paper*, Institute for Government, 2022, www.instituteforgovernment.org.uk/publications/levelling-up-ifg-view

86 Transforming Access and Student Outcomes in Higher Education, 'Evidence toolkit', (no date), retrieved 15 June 2022, https://taso.org.uk/evidence/toolkit

87 Early Intervention Foundation, 'Family Nurse Partnership', (no date), retrieved 15 June 2022, https://guidebook.eif.org.uk/programme/family-nurse-partnership; Early Intervention Foundation, 'Incredible Years Preschool', (no date), retrieved 15 June 2022, https://guidebook.eif.org.uk/programme/incredible-years-preschool

About the authors

Thomas Pope

Tom is the deputy chief economist and works within the public finances team. He leads the Institute's work on levelling up. He also leads and contributes to projects on public services, fiscal policy and regulation. He was previously an economist at the Institute for Fiscal Studies.

Eleanor Shearer

Eleanor is a researcher at the Institute for Government, working in the public finances team. She has a Master's degree in Political Theory from the University of Oxford, and previously worked for the AI-policy consultancy Oxford Insights, where she led their work on the annual Government AI Readiness Index.

Peter Hourston

Peter is a research assistant, working on the Institute's public finances programme. He graduated with a degree in Economics and International Relations from the University of St. Andrews in 2021. He has also completed an ERASMUS+ placement at Sciences Po Paris and interned with a strategic financial advisory firm in Toronto, working on corporate restructuring.

Acknowledgements

We are grateful to the experts from the UK, Japan and Germany who gave up their time to speak to us during the course of our research and kindly provided comments on earlier drafts of this report and the accompanying evidence reviews on infrastructure, innovation and skills policies.

Thank you also to our colleagues at the Institute for Government: Bronwen Maddox, Emma Norris, Gemma Tetlow and Giles Wilkes for feedback on earlier drafts of this report; and Melissa Ittoo, Sam Macrory and Will Driscoll for their role in publishing the report.

Any errors remain the authors' alone.

The Institute for Government is the leading think tank working to make government more effective.

We provide rigorous research and analysis, topical commentary and public events to explore the key challenges facing government.

We offer a space for discussion and fresh thinking, to help senior politicians and civil servants think differently and bring about change.

instituteforgovernment.org.uk
enquiries@instituteforgovernment.org.uk
+44 (0) 20 7747 0400 +44 (0) 20 7766 0700
@instituteforgov

Institute for Government, 2 Carlton Gardens
London SW1Y 5AA, United Kingdom

 Our main funder is the Gatsby Charitable Foundation, one of the Sainsbury Family Charitable Trusts.