Levelling up

Rebalancing growth-enhancing spending

Neil O’Brien OBE MP | Guy Miscampbell

Edited by Will Tanner

ONWARD
About Onward

Onward is a campaigning thinktank whose mission is to develop new ideas for the next generation of centre right thinkers and leaders. We exist to make Britain fairer, more prosperous and more united, by generating a new wave of modernising ideas and a fresh kind of politics that reaches out to new groups of people. We believe in a mainstream conservatism – one that recognises the value of markets and supports the good that government can do, is unapologetic about standing up to vested interests, and assiduous in supporting the hardworking, aspirational and those left behind.

Our goal is to address the needs of the whole country: young as well as old; urban as well as rural; and for all parts of the UK – particularly places that feel neglected or ignored in Westminster. We will achieve this by developing practical policies that work. Our team has worked both at a high level in government and for successful thinktanks. We know how to produce big ideas that resonate with policymakers, the media and the public. We will engage ordinary people across the country and work with them to make our ideas a reality.

Onward is an independent, not-for-profit thinktank, registered in England and Wales (Company Registration no. 11326052).

Thanks

The authors would particularly like to thank the staff of the House of Commons library and officials at ONS for their help in finding data and academic research for this publication. We also owe a debt of thanks to Edward Goodall for his invaluable thoughts and help in preparing earlier stages of this paper and to the Onward research team, including James Blagden and Jess Hopwood.
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of the argument</td>
<td>4</td>
</tr>
<tr>
<td>Recommendations</td>
<td>7</td>
</tr>
<tr>
<td>The challenge: Why Britain’s regions are at the heart of our productivity problem</td>
<td>9</td>
</tr>
<tr>
<td>Not all spending is created equal: What do we mean by growth-enhancing spending?</td>
<td>12</td>
</tr>
<tr>
<td>Divergence: How growth-enhancing spending is distributed by region</td>
<td>19</td>
</tr>
<tr>
<td>Levelling up: Why and how should we change the way we allocate growth-enhancing spending?</td>
<td>43</td>
</tr>
<tr>
<td>Conclusion</td>
<td>62</td>
</tr>
<tr>
<td>Endnotes</td>
<td>65</td>
</tr>
</tbody>
</table>
Summary of the argument
The British economy has two enduring and linked problems: weak overall national productivity, and greater imbalances in economic performance between areas than similar countries. These issues hold back opportunities for certain people and places, and hamper UK economic growth overall. They have also contributed to widespread political dissatisfaction and volatility.

One possible way to level up growth in poorer areas, and so improve our overall performance, would be for government to rebalance spending on things which are particularly effective at enhancing growth and productivity. In this paper we look at four such areas: transport, housing, innovation and culture.

In the recent debate on “levelling up” there has been a lot of focus on the Treasury’s Green Book and government cost-benefit analysis - particularly for transport projects. This is an important component but it is only one part of the picture. There has been much less discussion about how other policy decisions and formulae tend to direct other types of growth-enhancing spending to already thriving areas.

The surprising truth is that, on a per-head basis, spending to improve productivity is lower in less productive regions, and higher in regions that are already more productive. This is not new - it has been the case under governments of all political parties for many decades.

We might think this is surprising enough. However, this paper reveals that if we look in more detail at growth-enhancing spending, the headline figures published by the Treasury conceal even wider variations in the kinds of spending most likely to get the local economy moving.

As this document reveals, the differences are dramatic in all four areas we examine:

- **Transport.** Capital spending on transport in London was around £6,600 per head between 2007/8 and 2018/19. This was more than three times higher than in the East Midlands (£1,880) or South West (£1,980) and nearly three (2.75) times the average in the rest of England of £2,400.

- **Innovation.** Taking direct government spending and university research funding together, London saw R&D funding per head of nearly twice the UK average - £3,900 compared to a national average of £2,300 over the period 2001 to 2017. The next highest spending was seen in other high productivity regions: the East, South East and Scotland. The share of the core research budget spent in just three cities, Oxford, Cambridge and London, rose from 42.1% in 2002/3 to 46% in 2017/18.

- **Housing.** Spending on affordable housing in the current (2016-21) programme is five times higher per head in the capital: £650 per head compared to £120 per head in the rest of England. Funding to unlock housing supply (including private housing) is also concentrated in the south: the Housing Infrastructure Fund has spent £115 per head in the East of England, £97 in London, £95 in the South East, and £79 in the South West, compared to £10 in the West Midlands and just £4 in Yorkshire.
Culture. Taking Arts Council England spending and direct DCMS funding of national institutions together, London received around half (47%) of the total spending in England over the period 2010/11 to 2017/18. Over the period culture funding per head\(^1\) in London was £687. This was nearly five times the average in the rest of England (£144).

The new Government must rethink an approach which has meant that for decades growth enhancing spending has been skewed to the most the areas which are already the most productive and richest.

This paper reveals and challenges some of the assumptions that have driven this pattern of spending. It calls for changes which would level up poorer areas and boost growth overall.
## Summary of recommendations

### Problem with how we allocate growth-enhancing spending

<table>
<thead>
<tr>
<th>How we fix it</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport</strong></td>
</tr>
<tr>
<td>The formal process has often historically been overruled, with a bias towards funding projects in London. The process is not transparent.</td>
</tr>
<tr>
<td>Too much project appraisal is static, not dynamic, and favours richer areas by using current prices.</td>
</tr>
<tr>
<td>For macroeconomic and welfare reasons we might want to weight growth enhancing spending towards poorer areas, but wider economic welfare analysis is rarely carried out in practice.</td>
</tr>
<tr>
<td>Some areas are in a stronger position to generate more and better bids.</td>
</tr>
<tr>
<td><strong>Science, technology and innovation</strong></td>
</tr>
<tr>
<td>UK spending on R&amp;D is heavily focused on early stage research in a small number of research-intensive universities. In practice this means funding is concentrated in the richest regions. It may also mean less economic impact than more industrially focused spending would.</td>
</tr>
<tr>
<td>Business spending on R&amp;D is more evenly spread across the country than government spending. However, some regions combine both low public and private R&amp;D investment so are stuck at low levels of innovation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review the Green Book appraisal methodology to take into account of <em>relative</em> as well as absolute returns to local economies within the project appraisal process</td>
</tr>
<tr>
<td>2. We should weight BCR’s for the economic and social advantages of more balanced growth.</td>
</tr>
<tr>
<td>3. Central government should publish the business cases for all proposed infrastructure projects, including comparable BCRs.</td>
</tr>
<tr>
<td>4. Government should devolve transport powers to more places in England</td>
</tr>
<tr>
<td>5. We should devote the growth in the innovation budget to funding streams which are more industrially focused.</td>
</tr>
<tr>
<td>6. Government should ringfence funding for regions that combine low public and private R&amp;D investment.</td>
</tr>
<tr>
<td>7. We should also reform the spending which does flow through universities in ways that would make for a more even spread, as well as a greater economic impact.</td>
</tr>
</tbody>
</table>
### Housing

London had around 21% of those on waiting lists for social housing in England in 2019. London also has more social housing: 22.6% of homes, compared to just 17.1% in the rest of England. Yet without any assessment of value for money, over half the affordable housing budget is devolved to London.

Money that might fund one social property in London might fund more than one in a cheaper region, but funding rules exclude such areas.

Funds for housing infrastructure are very heavily skewed towards the south of England.

In both affordable housing and housing infrastructure programmes there is little consideration of the second-round effects of such spending on growth. In some cases data on the distribution of spending per head is not even published.

#### 8. Government should review the rationale for the regional distribution of its housing spending.

#### 9. Homes England should start publishing data in a more timely and transparent way, including spending per head per region.

#### 10. The Government should immediately drop the 80:20 rule for Housing Infrastructure Funding and affordability rules which effectively limit social housing spending to the south of England.

### Culture

Unlike the other fields discussed here, it is not the case that there are strong value for money or cost-benefit arguments being made for the current distribution of spending. The current pattern seems to simply reflect historical patterns of spending which hugely favour London.

The economic impact of culture funding is not emphasised enough.

#### 11. The Government should redirect money away from the national institutions and reinvest the savings in growing cultural provision outside London.

#### 12. The Government should encourage and build up new institutions in areas where there is a clearer link across to economic development and regeneration.
The challenge

Why Britain’s regions are at the heart of our productivity problem
UK workers are estimated to be, on average, around 30% less productive than their counterparts in the US, France and Germany.²

This UK productivity problem has multiple causes, including low levels of fixed investment, automation and R&D, low skill levels in parts of the country, and regulatory barriers in different sectors.³

The UK also suffers from more unbalanced growth and a longer tail of low-performing companies than France, Germany or the US.⁴

There is reason to think a more balanced economy might be stronger overall. Among the G20 there are no large countries which are more regionally imbalanced than the UK and also richer than the UK per head. The reverse is also true; all large countries which are richer than the UK appear to be more balanced.⁵

One possible reason for this correlation between balance and overall strength is that more balanced economies may be allocating resources more efficiently. In an unbalanced economy land and other assets might be underutilised in some areas, while others experience congestion.⁶

Another reason may be that imbalances cause problems with matching in the labour market. Lower skilled people are less likely to move to find work, in part because they rely more on family and community networks. Greater imbalances and longer travel times to reach “good jobs” make it harder to match people to higher wage jobs they are capable of doing.

The question of investment is relevant to solving both of these problems:

- Better transport connections might help attract new jobs to a struggling town, enable residents to access good jobs in a nearby area, and allow businesses to cooperate across a wider geographic area.
- Greater levels of innovation spending may attract businesses to start up in, or move to that area, or help existing businesses to grow faster.
- Better or cheaper housing might improve the ability of people to move to and live near good jobs. It might also make an area more attractive to skilled people, or encourage younger people to move to or stay in an area
- Improved cultural amenities might improve the attractiveness of an area to workers, families and investors, and help support employment in the creative sector or industries that rely on creative talent and expertise.

Growth-enhancing spending might in some sense unlock or catalyse growth in poorer areas where land and congestion constraints don’t bite hard, but there are too few good jobs. If it did, it might reduce the pressure to spend on infrastructure in already booming areas.

However, the experience over recent decades suggests the opposite approach. The data shows that, at least in terms of productivity, there is no sign of more balanced growth over recent decades.
Instead, the productivity of different regions has diverged, with London’s productivity pulling further ahead. The differences are dramatic: no region in the country apart from the South East had a higher level of GVA per hour in 2017 than London did in 1998.

**Figure 1: Regional GVA per hour worked, 1998-2017**

**Figure 2: Difference in GVA per hour between London and English regions, 1997-2017**

*Source: Onward analysis, ONS Labour productivity tables*
Not all spending is created equal

What do we mean by growth-enhancing spending?
Does this diverging pattern of economic activity just reflect the outcome of market forces? Or might it partly reflect conscious or unconscious choices that policymakers have made over successive governments of all parties?

This paper argues that when it comes to certain types of spending, policy decisions over several generations have had the effect of actively increasing regional imbalances.

The overall impact of tax and spending is of course to move money from rich to poorer people and from richer to poorer areas, as in other developed countries. The extent of these fiscal transfers between areas reflect choices about the balance of taxation, the changing demographics of different areas and decisions about what we spend taxpayers’ money on.

If there are more old people, and they cluster together (for example by moving to seaside towns), or if we choose to spend more on the NHS or pensions, or if we choose to have a more progressive tax system, all these things will significantly change the balance of spending and transfers between parts of the country based on the underlying demographics of those regions.

Only a very small part of these transfers reflects any conscious thought about what the geographic effects will be: they are mainly decided on their own merits.

**Total spending versus growth-enhancing spending**

Some will object to the idea that we should spend more on growth-enhancing things in poorer areas on the grounds that there are already large transfers between areas, or that total spending per head is higher in some poorer areas. Both of these things are true, but they miss the distinction between different types of spending. The point of this paper is to look at some of the (relatively small) subset of spending with the biggest economic multipliers which do most for growth.

Within England, total spending per head is (roughly) inversely proportional to income per head in each region, with the important exception of London. Total spending per head in London was around 12% above the UK average in 2008/9, rose to 17% above in 2010/11, and subsequently fell to around 9% above in 2018/19.\(^9\) Northern Ireland, Wales and Scotland have higher public spending than England. Of these, Scotland has the highest productivity outside London and the South East, while Wales and Northern Ireland have among the lowest in the UK.

The combined effect of tax and spending policies is to redistribute money from richer areas to poorer just as in other countries. The average Londoner contributes £4,369 more to public services than they cost, while the average person in the North West benefits from a fiscal transfer of approximately £2,762.\(^10\) How large these transfers are reflects the design of the tax system, the demographics of different areas, and the choices we make about the pattern of public spending.

But not all spending is equal: some kinds of spending do more for economic growth than others. **Overall higher** levels of spending we see in some poorer regions conceal **lower** levels of spending on the things that might do the most to get them growing faster.
If we look at HM Treasury’s Country and Regional Analysis we can see that spending per head on “Economic Affairs” was a greater proportion of total spending in higher productivity regions like London and Scotland, and lower in lower productivity regions like the East Midlands, Yorkshire and the South West. As a result, while overall public spending per head in 2018/19 was a bit higher in London than Yorkshire & the Humber (£10,425 vs £9,123), spending on Economic Affairs was twice as high (£1,280 vs £624).

The Economic Affairs category contains lots of the types of spending we might think do most for economic growth like transport and science. Within the “other” category are things like housing, where once again, the highest productivity regions see much greater spending.

**Figure 3: Total public spending per head, broken down into economic affairs, social security and other, 2018-19**

This leads to the strange situation that spending on productivity-enhancing things is a bigger part of total spending per head in the regions that are already the most productive, and higher per head in these regions.
Table 1: Household income, productivity, and per head Economic Affairs spending, relative to UK average (UK=100)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>81</td>
<td>89</td>
<td>75</td>
</tr>
<tr>
<td>North West</td>
<td>86</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Yorkshire &amp; Humber</td>
<td>83</td>
<td>85</td>
<td>72</td>
</tr>
<tr>
<td>East Midlands</td>
<td>87</td>
<td>85</td>
<td>69</td>
</tr>
<tr>
<td>West Midlands</td>
<td>87</td>
<td>88</td>
<td>76</td>
</tr>
<tr>
<td>East</td>
<td>103</td>
<td>94</td>
<td>87</td>
</tr>
<tr>
<td>London</td>
<td>143</td>
<td>133</td>
<td>158</td>
</tr>
<tr>
<td>South East</td>
<td>116</td>
<td>107</td>
<td>90</td>
</tr>
<tr>
<td>South West</td>
<td>97</td>
<td>90</td>
<td>81</td>
</tr>
<tr>
<td>Wales</td>
<td>81</td>
<td>84</td>
<td>107</td>
</tr>
<tr>
<td>Scotland</td>
<td>93</td>
<td>98</td>
<td>155</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>81</td>
<td>84</td>
<td>107</td>
</tr>
</tbody>
</table>

Source: Onward Analysis, Public Expenditure Statistical Analyses 2019, ONS Labour productivity tables and Regional gross disposable household income
But even these averages published by the Treasury conceal wider variations. If we look at particularly high impact areas like R&D or housing infrastructure, we see much bigger variations than the broader category “economic affairs”.

And the more we zoom in on the most growth-enhancing spending, the bigger the gaps are: for example, if we look at *capital investment* in transport, we see bigger differences than just looking at *total* transport spending.

This paper aims to zoom in further and look at *how* and *why* growth enhancing spending is skewed to more productive areas. It looks at the extent to which that is true in four different areas: transport, innovation, housing and culture. Each one sees funding allocated in different ways.

**Overview of the four areas**

- **In transport**, a number of different funding formulas determine allocation of routine investment in things like road maintenance and public transport. Programmes for major new road and rail investments are grouped into periods of investment, over which a large number of individual projects are funded (e.g. the “Roads Investment Strategy 2” (2020 to 2025) or “Control period 6” for rail (2019 to 2024).

  Projects are supposed to be appraised, and their cost-benefit ranked using similar methodologies (set out in the Treasury’s “Green Book), with the best value projects then funded. Certain major projects (HS2) sit outside this framework.
In **innovation**, the core research budget is held by BEIS and allocated through the “dual funding” system: universities bid for funding for specific projects from subject based Research Councils, but also receive funding as institutions from the Higher Education Funding Councils which they can put towards their own priorities through “QR” (Quality Related) funding. This is allocated on the basis of research excellence, as measured by the Research Excellence Framework: an expert peer-review process held every couple of years, which aims to rank departments on the quality and impact of their research. In 2017 the Research Councils and Higher Education Funding Councils spent £5.7 billion. A smaller sum - less than a tenth of this, or half a billion a year - is allocated by Innovate UK, an arm’s length body of BEIS. Innovate which runs a series of competitions in which firms and universities can bid for grants.

Outside BEIS, a number of other departments like the MOD, NHS and DFID have their own large research budgets which include funding their own in-house labs. Spending from other departments, outside the Research and Higher Education councils was £5.2 billion in 2017, of which about 1.5 billion was the MOD.

In **housing**, the bulk of capital spending goes through the “Shared Ownership and Affordable Homes Programme”. This is broken into multi-year programmes: the current one runs from 2016 to 2021 and will allocate £4.7 billion to England outside London. London’s devolved government receives its own budget (£4.8 billion), for the same period, so just over half of the total for England. In 2018, an additional £2 billion investment in social housing was announced, half of which is to be spent in London. In the rest of England, housing associations bid for funding, mainly for individual projects.

Then there are programmes to support more house building overall, including private construction. The main such fund, the Housing Infrastructure Fund (HIF) will allocate £5.5 billion to local authorities between 2018/19 and 2023/24. An October 2018 Policy Paper set out that this and various smaller schemes to unlock new supply will all see 80% of the funds available allocated to the 50% of local authority areas which have the highest house price to earnings ratio. (163 out of the 326 authorities).

In **culture**, Arts Council England (ACE) and equivalent bodies for Scotland and Wales deliver most spending. ACE has three main funding streams which are: (1) The National Portfolio; (2) Grant for Arts and Culture and (3) Strategic Funds. From 2018-22, £407 million annually is to be paid to National Portfolio Organisations (NPO), £97.3 million in Arts Council National Lottery project grants and £72.2 million in Arts Council Development funds.

Additionally, the Department for Culture, Media and Sport (DCMS) also directly provides funding to UK museums and galleries which are deemed to be national in scope and importance. This funding totalled around £448m in 2019. This means that in total DCMS and the various Arts Councils spent approximately £1.1 billion in 2017/18. Historic England also spends around £100 million a year.

Levels of spending on these different areas varies significantly across the country. The next section looks at why we see the patterns of spending that we do and what the impacts are.
Interlude: Flood spending

The Government is in the process of reforming the allocation of spending for flood defences. The previous funding formula was driven by how much damage schemes could protect against.

But such a one-dimensional formula had the side-effect of skewing funding to areas where property prices are highest.

A new more rounded approach is now being put in place which puts more value on health impacts and disruption to people’s lives.

From the Times, 23 February 2020:

*The Environment Agency is to rewrite its controversial flood defence funding formula after claims that it pours cash into England’s richest regions, mostly in the south, at the expense of poorer flood-prone areas mainly in the north.*

*The formula is criticised for favouring the southeast because it is based on property values. It means up to 60% of the £2.6bn flood defence funding from 2015 to 2021 will be spent around London...*

*Under the scheme, to take effect next year, flood defence proposals would still have to follow the current cost-benefit formula, with each £1 spent preventing £8 worth of potential damage. However, the calculation would include the damage to health as well as property.*

This is a good example of how a more rounded approach to assessing the value of spending in different areas can help drive levelling up of growth enhancing spending.
Divergence

How growth-enhancing spending is distributed by region
Why is growth-enhancing spending weighted towards richer, faster growing areas? And how heavily weighted is it towards them?

Table 2 presents data from the Treasury’s published regional analysis. London is the only English region to consistently receive higher per-head spending across all of the growth-enhancing categories we look at here, and the only other region to do so in the UK is Scotland.

Table 2: Published spending levels on growth-enhancing spending, per-head, 2018-2019*, compared to England average

<table>
<thead>
<tr>
<th>Region</th>
<th>Transport spending</th>
<th>Science and Technology</th>
<th>Housing and Community amenities</th>
<th>Recreation, Culture and Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>£486</td>
<td>£81</td>
<td>£159</td>
<td>£95</td>
</tr>
<tr>
<td>North West</td>
<td>£412</td>
<td>£81</td>
<td>£103</td>
<td>£101</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>£276</td>
<td>£88</td>
<td>£164</td>
<td>£99</td>
</tr>
<tr>
<td>East Midlands</td>
<td>£268</td>
<td>£89</td>
<td>£108</td>
<td>£86</td>
</tr>
<tr>
<td>West Midlands</td>
<td>£467</td>
<td>£82</td>
<td>£123</td>
<td>£87</td>
</tr>
<tr>
<td>East of England</td>
<td>£493</td>
<td>£94</td>
<td>£129</td>
<td>£83</td>
</tr>
<tr>
<td>London</td>
<td>£903</td>
<td>£101</td>
<td>£272</td>
<td>£126</td>
</tr>
<tr>
<td>South East</td>
<td>£422</td>
<td>£95</td>
<td>£133</td>
<td>£86</td>
</tr>
<tr>
<td>South West</td>
<td>£308</td>
<td>£99</td>
<td>£102</td>
<td>£87</td>
</tr>
<tr>
<td>England average</td>
<td>£474</td>
<td>£91</td>
<td>£149</td>
<td>£96</td>
</tr>
<tr>
<td>Wales</td>
<td>£395</td>
<td>£84</td>
<td>£409</td>
<td>£165</td>
</tr>
<tr>
<td>Scotland</td>
<td>£642</td>
<td>£128</td>
<td>£260</td>
<td>£187</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>£354</td>
<td>£48</td>
<td>£411</td>
<td>£281</td>
</tr>
<tr>
<td>UK Average</td>
<td>£481</td>
<td>£93</td>
<td>£182</td>
<td>£112</td>
</tr>
</tbody>
</table>


While this is striking, it doesn’t tell the full story. If we concentrate on the most growth enhancing budgets within these categories, the gaps are even bigger. For example, transport capital spending is more concentrated than total transport spending. R&D funding as calculated by the ONS is far less balanced than the “science and technology” category presented here. Culture funding is much more concentrated than the wider category presented here, which would include things like local leisure centres, which are more evenly distributed across the country. So we now go on to look in more detail at these areas.
Transport capital investment

- **Why it is weighted to richer areas:** Appraisal of economic benefits for new infrastructure is quite narrowly focused on journey time savings rather than wider economic analysis, which tends to favour better off areas. Journey time savings are likely to be higher where there has been more growth; more people commuting means more people’s time to save, and in particular more people commuting using the same infrastructure tends to mean congestion and longer journey times. There is some suggestion that formal cost benefit calculations have historically been overridden in a way biased to the capital.

- There also seems to have been some tendency for projects with worse cost-benefit rations to be signed off if they are in London. It could also be argued that that high spending per capita in London also reflects a prior decision to spend a large part of transport capital on rail, which is a small share of journeys in most of the country, but a larger share in London. There may be further factors: imbalances in local government capacity may mean some areas are more able to generate good bids and schemes to be considered. Some areas with strong devolved governments (like London) are in a stronger position to develop schemes and bids, and in some areas have devolved budgets.

- **How weighted it is towards richer areas:** Between 2007/8 and 2018/19 capital spending on transport in London was around £6,600 per head. This was three times more than the East Midlands (£1,880) or South West (£1,980) and nearly three (2.75) times the average in the rest of England (£2,400).

Innovation

- **Why it is weighted to richer areas:** Compared to other countries UK innovation spending is heavily channelled through universities, and is weighted towards purer research rather than industrial development. 64% of the government’s civil R&D budget was spent in universities in 2017, compared to just 14% in businesses. The decision to focus on universities and pure research matters, because businesses own R&D spending tends to be more balanced across the country than government’s spending.

  Money for universities is heavily weighted towards top performers on the Research Excellence Framework: a measure of academic performance as assessed by other academics. As a result, funding is heavily concentrated at older and more prestigious institutions. With some important exceptions, these happen to be concentrated in London, Oxford and Cambridge for historical reasons. Government also spends money on its own laboratories. Again, for historical reasons, these are often located in the south of England, so, as we will see below, funding is skewed to richer regions.

- **How weighted it is towards richer areas:** Looking at R&D performed by government or universities we can see that London has substantially higher spending. Over the period 2001 to 2017 London saw funding per head nearly twice the national average - £3,900 compared to a national average of £2,300. The next highest spending was seen in other high productivity regions: the East, South East and Scotland. Funding was lowest in the north, midlands, Wales and Northern Ireland. Funding in the West Midlands was half the
national average (£1,060). For every pound government spent on R&D in London, business spent £1.15. In the West Midlands business spent £5.07 for every government pound, a ratio which increased over the last decade. The East Midlands, East and Northern Ireland also saw high rates of business investment compared to public investment.

Housing investment

- **Why it is weighted to richer areas:** As noted above, housing spending is heavily geared towards areas where housing affordability is worst, measured by the ratio of housing costs to incomes. This is so either explicitly (for things like the Housing Infrastructure Fund) or implicitly (the choice to spend half the affordable housing budget in London). High house price areas tend to be areas where there has been more growth and where land values are much higher.

- **How weighted it is towards richer areas:** Having half of all affordable and social housing spending in England granted in a block to London means spending per head is five times higher per head in the capital: £650 per head compared to £120 per head in the rest of England. With around half of funding outside London now allocated, we can project how much different areas will receive over the whole programme. The North West is set to receive substantially more than lower productivity areas like the midlands or Yorkshire, while the lowest level of funding is in the south east and east. Turning to funding to unlock housing supply, Housing Infrastructure Funds have spent £115 in the East of England, £97 in London, £95 in the South East, and £79 in the South West, compared to £10 in the West Midlands and just £4 in Yorkshire.

Culture

- **Why it is weighted to richer areas:** First there is a portion of spending allocated to a set of "national" institutions, which happen to be overwhelmingly in London. Then Arts Council England also spends far more per head in London than other regions. There is no declared particular policy rationale or cost-benefit calculation driving this - it is purely a continuation of a historical pattern.

- **How weighted it is towards richer areas:** Taking Arts Council England and direct DCMS funding of national institutions together, London received nearly half (47%) of the spending in England over the period 2010/11 to 2017/18. Over the period funding per head in London was £687 in today’s prices, this was nearly five times the average in the rest of England (£144). It was around thirteen to fourteen times higher than places like the East of England (£52), East Midlands (£51) and South East (£48), and nearly seven times higher than the West Midlands (£102). Outside London, funding per head was generally higher in lower income areas which are more distant from the capital, and the North West saw the second highest funding per head.
Figure 5: Cumulative capital investment in transport, 2007-2019

Source: Onward analysis, ONS, Country and Regional Analysis, 2018-19
Figure 6: Cumulative Government and Higher Education R&D spend, 2001-2017

Source: Onward analysis, ONS, Country and Regional breakdown of expenditure on R&D in the UK by sector of performance, 2019

Figure 7: Projected funding per head, Affordable Housing Programme, 2016-2021

Source: Onward analysis, Homes England Shared Ownership and Affordable Housing Programme 2016-2021 allocations programme, 2019
Figure 8: Housing Infrastructure Funding per head, to July 2019

Source: House of Commons Library analysis of MHLG, Housing Infrastructure Fund landing page and Approved Marginal Viability Funds projects spreadsheet; ONS, Mid-2018 population estimates.

Figure 9: Cumulative culture spending, national institutions and arts councils, 2010/11-2017/18

Source: Onward analysis and House of Commons Library data, Arts Council England investment by applicant regions and spend on National Portfolio organisations, ONS, Mid-2018 population estimates, 2019/20 prices.
In some cases, these types of spending are formally recognised by government as doing more for growth than others. For example, the OBR assumes a larger multiplier for capital than current spending.\textsuperscript{13} In other cases (like innovation), government has chosen to increase the budget explicitly because it is regarded as growth enhancing.

In cases like culture, the budgets are smaller and the evidence for its impact on growth is weaker, but the “cultural offering” is normally regarded as part of the pitch for most local inward investment agencies: it is a pull-factor to increase the attraction of the area as a place to work and live. Following the work of Richard Florida,\textsuperscript{14} there is a whole literature on the role of the “creative class” in growth and urban regeneration.

We now explore the spending pattern in each of these four types of spending in further detail and start to look at why the regional pattern of spending is the way it is.

### 3.1 Transport

Per-head spending on transport (current prices) in is significantly higher in London than any other part of the country and rose steadily over several the past several years, even as investment across other regions remained broadly static.

London’s level of per-head spending was £707 in 2013-14, compared to an average\textsuperscript{15} of £247 for other regions of the UK; a gap of £460. By 2018-19 this gap had increased to £512, though it was down significantly from the peak of £669 in 2017-18.

**Figure 10: Spending levels on transport, per-head, 2007-2019, UK regions**

![Figure 10: Spending levels on transport, per-head, 2007-2019, UK regions](source: Onward Analysis, HMT Country and Regional Accounts, 2007-2019)
The advantage that London receives in per-head spending exists across both investments in transport capacity (capital spending) and operating costs (current spending). While total spending on transport per person in London was 21% higher than the national average, capital spending was 235% higher over the period 2007/08 to 2018/19.

In turn, nearly all of this gap in capital spending appears to be driven by expenditure on railways. Over the period 2007/08 to 2018/19, nearly £5,500 was spent on capital investment in rail per Londoner - dramatically more than any other region.

**Figure 11: Capital investment in transport by region and category, 2007/08 - 2018/19**

Rail spending seems to have particularly accelerated away from the rest of the country. In 2018-19 an estimated £569 per Londoner was invested in this area, compared to just £65 per person in the North East. This gap was much bigger than in 2007. To a greater extent than other types of spending, some of this rail infrastructure also benefits people who live in other regions. But much of this spending (which includes the tube, DLR and London Overground as well as National Rail) also benefits journeys purely within London.
The heavy skew of funding towards London matters for growth because the higher economic potential of cities stems from the concentration of skilled individuals, capital, and economic opportunities. Public transit infrastructure allows economic centres to link together better, generating higher levels of economic gain for the local population and reducing difficulties in “exchanging goods, people, and ideas.”

The deficit in capital investment across other UK cities therefore means that they lose out on a highly influential enabler of productivity. Lower journey times and greater connectivity are associated with higher levels of GVA per job. Analysis of journey time data shows that local authorities in which the average time to travel to a major rail station by public transport or on foot is less than 30 minutes generate an average GVA per job of £61,000. There are just 26 such local authorities and 18 of them (69%) are in London. In the local authorities where the average time to travel to a rail station by public transport or walking takes on average more than an hour, the average GVA per job is just £30,000. None of these areas are in London.

This is not just a function of rurality. The relationship between public transport connectivity and GVA per job is much stronger amongst urban areas but also holds for rural ones. It is of course true that more rural areas have longer journey times on average. Nevertheless, the quicker the journey to an economic centre, the greater the productivity of that Local Authority.
Figure 13: Average travel time to nearest rail hub, using public transport/walking vs. GVA per job

Figure 14: Average travel time to town centre, using public transport/walking vs. GVA per job

Figure 15: Travel time to nearest employment centre vs. GVA per job, 50 most urban local authorities

Figure 16: Travel time to nearest employment centre vs. GVA per job, 50 least urban local authorities

Note: Average travel times are provided for a mix of LAs and Counties. For the purposes of this analysis only LAs were included so comparison between GVA figures could be conducted.

Source: Onward analysis, NOMIS job estimates and ONS GVA estimates, and Department for Transport journey time statistics.

Note: Employment centre is defined as 2011 Census Lower Super Output Areas with 500-4999 jobs.

Source: Onward analysis, NOMIS job estimates and ONS GVA estimates, and Department for Transport journey time statistics.
3.2 Investment in Science, Technology and Innovation

Another type of investment that catalyses economic activity is investment in science, technology and innovation. Often granted at an early stage to high-potential ideas and high growth potential businesses, this is exactly the type of spending that can help companies establish themselves and grow, boosting local economies and driving the formation of clusters.

In the UK innovation funding is heavily channelled through universities - much more so than in other countries where a greater proportion of government R&D funding is spent via businesses or translational institutions or government labs.

In 1985 the traditional block grants that had been paid to universities were split into a teaching element and a research element. The research grants were to be allocated in line with the Research Assessment Exercise, which was carried out in 1986, 1989, 1992, 1996, 2001 and 2008. This was replaced by the Research Excellence Framework, which was conducted in 2014 with the next in 2021.

These reviews see researchers submitting a selection of their work with evidence of impact and quality to a series of peer review panels. University funding is then allocated on the basis of quality of research.

For a variety of historical reasons this tends to mean that research funding, following top university researchers, tends to be concentrated in London and the greater south east.

For this paper we updated some analysis published by government in 2015\textsuperscript{18}. We found that the proportion of research council and higher education funding council spending allocated to higher education institutions in Oxford, Cambridge and London (the so called “Golden Triangle”) has steadily increased from 42.1% in 2002/3 to 46% in 2017/18. The Golden Triangle is receiving nearly half the core research budget, and its share seems to have been stable at this level since around 2013\textsuperscript{19}. 
Looking at QR funding specifically, in 2018/19 a third of QR research funding was spent in the top 4 institutions (Oxford, Cambridge, UCL, Imperial). More than half the budget was spent in the top ten institutions, leaving 48% split between the other 115 institutions which received some funding. The graph below gives some sense of how concentrated it is. Universities are ranked from left to right by how much they receive, with those shown on the left receiving many times more than lower funded institutions on the right.

Comparing QR research funding to knowledge exchange funding makes clear the relative scale and different distribution of the two. Total research funding was around £1.6 billion, and total knowledge exchange funding around £210 million. While for an institution like Teesside University, knowledge exchange funding was actually greater than research funding, for the top recipient (Oxford, shown on the far left) it was only around 3% of its total receipts.
The effect of this is a pronounced regional skew. In 2017, £2.7 billion was spent on R&D by Government and Higher Education institutions in the north and midlands, an area home to 26 million people. But £5.2 billion was spent in the greater south east - London, the South East and East – also an area with 26 million people. So funding per head was twice as high.

Per capita, London received over three times the amount that the midlands and more than double the amount either the North East does. This is partly due to the concentration of universities in London; the city has 39 qualifying universities.

Innovate UK funding is included within these totals. Unlike QR, Innovate UK grants are also available to firms and other bodies outside higher education.

For this reason, the funding has a somewhat different distribution to the spending of the research and higher education councils. London, the South East and East still do well, but, the North East and West Midlands - relatively industrial areas - do much better, and are the top recipients per head.
Figure 19: Combined Government and HE expenditure on R&D per-region (2001-2017)

Source: Onward analysis, ONS, Country and Regional breakdown of expenditure on R&D in the UK by sector of performance, 2019
Notes: In a few years the source data merges figures for the East and West Midlands, or for the North East and North West. In this case the total figures have been used to infer the estimated level of spending in the Governmental sector for these regions.

Figure 20: Innovate UK spending per person, 2004-2020

Source: Onward analysis, Innovate UK funded projects since 2004, 2020
The ONS does not collect data on the total spending of other government departments by region, but in response to a request by the authors of this paper have produced data on their spending where it is carried out within government-owned institutions.

In contrast to Innovate UK, it is even more heavily skewed towards high-productivity regions than the spending of the research councils and higher education funding councils.

**Figure 21: Government-performed spending on R&D, non BEIS departments and MOD, 2017**

The inequity in innovation spending matters because there are strong reasons to believe that it is growth enhancing, both in the short-term, and as part of expanding the suite of technologies and businesses that can grow and prosper in a region.

- Even more than in transport, the benefits of research investment are likely to be felt over a wide area, or even globally. But there are good reasons to think that local areas with higher levels of innovation investment benefit in particular. It is not hard to see why this might be: firms gravitate to places where they can access a pool of researchers and technically able staff; university lecturers start a spin out company and base it in the same town; technology firms cluster around labs and translational research facilities where they can access people and equipment.
Figure 22 shows that, generally speaking, there is a positive relationship between output per hour in the Professional, scientific & technical activities industry and per head spending on science and technology. The Government’s investment decisions correlate with productivity. The Greater South East is particularly concentrated in the top-right corner - with the rest of the country clustered below - marking out these three regions as having significantly more productive science & tech industries and as recipients of more per capita public investment in this sector.

**Figure 22: Productivity vs. investment; real output per hour for ‘Professional, scientific & technical activities’ and real per head expenditure on ‘Science & technology’ (1999-2017)**

![Figure 22: Productivity vs. investment](image)

Source: Onward Analysis, ONS Labour productivity tables and Country and Regional accounts, 1998-2017

Given the impact that innovation, research, and development spending can have on enhancing growth, it should be of a significant concern that across nearly ever dimension spending is so heavily skewed towards already thriving areas.
3.3 Investment in housing infrastructure and capacity

Investment in the provision of housing infrastructure and affordable housing is focused on areas with the highest affordability challenges, as measured by the ratio of housing costs to incomes.

However, this means that these types of growth enhancing spending are geared towards London and the South East and other higher productivity areas.

Affordable housing

- A case in point is the provision of affordable housing schemes. The main scheme for England, outside London, is the Shared Ownership and Affordable Homes Programme (SOAHP), which aims to deliver homes for a mix of help-to-buy, shared ownership, rent to buy, supported homes, and elderly people’s rental accommodation. In total £4.7bn of capital funding is allocated for the five years of the programme (2016-2020) across the country.\(^{20}\)

- London’s plan to increase the supply of new and affordable homes, Building Council Homes for Londoners, will receive £4.8bn of capital funding to support it over the same period.\(^{21}\)

- So just over 50% of total affordable housing spending is going to London, a region home to approximately 16% of the English population. The other half of funding is then focused on the other 84% of the population.

The prospectus for the affordable housing programme is clear that funding will favour schemes where there is a low “Grant per home compared to the overall Area average” (para 82). But it is silent about the allocation between regions outside London.

In a letter to the authors of this paper, Homes England stated that funding will be “predominantly allocated to the areas of high house prices.” But they give no further definition of what they mean by this:

“The geographic shape of the affordable homes programme is driven by the bids received, rather than a pre-determined distribution of funding. The expectation is that the homes bid for in the programme will be predominantly allocated to the areas of high house prices and/or low incomes where affordability is an issue for households. Bidders and local planning authorities will have the best view of the local market and local need and thus where affordable housing is most required and sustainable and understand the market sales risk to their business in relation to affordable home ownership. There is no geographic targeting at either local authority or region for the programme.”
Unhelpfully, Homes England only publishes data for how it allocates affordable housing funding on the basis of its own operating areas, which cut across a number of the Government Office Regions which are used for most government statistics. In response to a request for the populations of their operating areas (to calculate per head figures) Homes England was unable to supply this information, encouraging the authors of this paper to calculate it for ourselves.

This does not suggest a strong focus on “levelling up.”

In 2018 then Prime Minister Theresa May announced that the Affordable Homes Programme would have an extra £2 billion invested in it to provide Social Housing - i.e. housing with a deeper discount to market rents than Affordable Housing.

An Addendum to the Affordable Housing Programme published in June 2018 specified that half this new budget (£1 billion) would be spent in London, and that beyond this:

“Social Rent funding will only be available within a local authority that is subject to high affordability pressures. The key metric is the difference between average social rents and private rents and we will fund Social Rent in local authorities where the difference between these is £50 per week or more.”

The document also provided a map of eligible areas - essentially only areas in the south of England are eligible for funding (plus a handful elsewhere).

The dramatic skew of funding towards London in the current affordable housing programme appears to be a long-standing feature of such programmes though also it fluctuates over time.

In 2007/08 around 45% of all spending on the National Affordable Housing Programme was in London. In the 2011-15 programme, around 30% of spend was allocated to London.
Figure 23: Areas eligible for social housing funding under the Addendum to the Affordable Housing Programme

*Source: Shared Ownership and Affordable Homes Programme 2016 to 2021; Addendum to the Prospectus, 2018*
The same logic as social housing spend dictates much of the housing supported by the Housing Infrastructure Fund (HIF). In this case the funding is more explicitly intended to unlock growth.

Designed explicitly to “unlock up to 650,000 new homes” the HIF aims to do so by funding “much needed infrastructure in areas of the greatest housing demand.”

The implications of this tend naturally towards funding areas where affordability is worst and demand is highest. The result is that three quarters (78%) of spending on the HIF has been in the greater south east - London, the South East and East.

Even after accounting for these areas being more populous these areas receive significantly more per-capita; London received £97 per person, whereas the North East received just £18, less than a quarter of what Londoners received, and Yorkshire and the Humber received just £4 per person, less than one twentieth.

In practice, the HIF is comprised of two components, with one element driving the majority of this regional disparity:

- The smaller component of the HIF is Marginal Viability Funding (MVF), designed to provide final or finishing pieces of infrastructure to unlock additional development, or to unblock developments. As of July 2019, some £758m had been announced under this fund.

Reflecting the emphasis on local leadership and bidding that is part of the decision-criteria, this fund is actually distributed in a less concentrated way across the country. London (£86.7m) actually receives less than the North West (£95.4m). Although there are some significant inequalities, for example between Yorkshire and the Humber (£23.4m) and the South East (£193.6m), there is less of a clear regional dimension to the distribution.

Accounting for population differences this remains true; London (£9.7pp) actually receives less per-head than the English average (£13.6pp) and only a few regions appear to receive substantially less than this; Yorkshire and the Humber (£4.3pp) and the East Midlands (£8.4pp).
● The much larger component of the HIF, the Forward Fund, has made allocations of £2.56bn. It is aligned to support “strategic and high-impact infrastructure schemes.” In practice, as of July 2019 support under the fund was tilted towards the South of England, and especially London (£777m), the South East (£675m) and the East of England (£634m).

By comparison, the North East, West Midlands and Yorkshire and the Humber had received no support under this portion of the fund. The North West (£124m) and the East Midlands (£44m) had some support, but this significantly lagged that received in the South. On a per-capita basis this remained true; London (£87pp) received five times the amount that the North West did (£17pp) and the East of England (£102pp) received six times the amount.

Again - this reflects a conscious choice in response to policy circumstances; areas with higher levels of growth tend to have larger affordability challenges. In turn, policies which are, entirely justifiably, driven towards addressing these challenges, focus money on those areas.

This is an explicit goal not just of the HIF, but other funds as well. A 2018 policy paper highlighted this clearly, noting that between 5 key housing funds there would be an objective to target a minimum of 80% of total funding into areas of the ‘highest affordability pressure’ over the period 2018-2023. This definition means that, in effect, the 50% of areas with the highest cost levels will be expected to receive 80% of funding towards housing and housing infrastructure.

In addition, other policies such as the New Homes Bonus, a program to encourage authorities to build new houses in return for funding, has the size of the reward component determined at least in part by the relative value of properties, with homes built in areas of highest need being more expensive. Again, this manifests itself in practice with London and the South East receiving a much higher level of support, with London receiving £189m in 2017-18, 23% of the total, despite having around 13% of the total population. The South East also received a more proportional £135m, 16% of the total. In comparison the North East received only £36m; 4% of the total, and the North West received £85m, or 10% of the total.

While there are of course arguments for this distribution of funding, there are also counter arguments, which are explored in the next section.
3.4 Culture

Spending on cultural amenities is very heavily weighted towards London, but in England outside London, it tends to be higher in lower income areas. This is a function of two sets of decisions.

First, the location of many 'national' institutions which are headquartered in London means that funding which is directed towards them necessarily benefits the capital, with spillover growth and impacts being therefore limited to one part of the country.

Second, the relative prominence of London as a cultural and artistic hotspot means that within a grant-funding system there is a self-reinforcing tendency for the capital to receive a larger share of cultural spending.

- Of the funding from DCMS to directly-funded cultural organisations, over 2010/11 to 2017/18 approximately nine in every ten pounds (89%) was spent in London. This is the part of spending most heavily weighted to the capital.

- A similar though less dramatic imbalance is seen in funding decisions made by Arts Council England. In 2010/2011 London alone received around 45% of funding from this source. Reflecting a stated desire in 2015 to address this balance, this figure has since shrunk to 36% in 2017/18.

- A more regionally balanced type of “culture” spending is Historic England, which spent around 14% of its budget in London over the four years 2015/16 to 2018/19. Unfortunately figures by region don’t go back further.

- Taking Arts Council England, and direct DCMS funding of national institutions together, London received nearly half (47%) of the spending in England over the period 2010/11 to 2017/18. Over the period funding per head in London was £687 in today’s prices. This was nearly five times the average in the rest of England (£144). It was around thirteen to fourteen times higher than places like the East of England (£52), East Midlands (£51) and South East (£48), and nearly seven times higher than the West Midlands (£102). Outside London, funding per head was generally higher in lower income areas which are more distant from the capital, and the North West saw the second highest funding per head.

Some action has been taken to address this imbalance. In 2018 the Cultural Development Fund (CDF), a package of £20 million was announced to support culture, heritage and the creative industries in “towns and cities across England,” with a focus on geographic areas rather than specific projects and an explicit focus on non-London funding.

However, as in other areas discussed in this paper like innovation, this funding stream is relatively tiny, compared to the very large funding advantages that London receives through the main budgets.
This disparity matters precisely because of the impacts of cultural spending that the CDF identified, and the potential to catalyse investment, job creation, and regeneration. Whilst evidence and attribution are difficult to quantify, the creative industries make a large contribution to both GDP and GVA, as well as some estimates suggesting that they create significant GVA and employment spillover effects.\(^{40}\)

The 2016 White Paper “Our Culture” claimed that: “In 2014, the economic contribution of museums, galleries, libraries and the Arts was £5.4 billion, representing 0.3 per cent of the total UK economy. This is up 59 per cent (in nominal terms) since 2010 – a massive increase compared to total economic growth of 16 per cent (nominal terms) over the same period. Heritage tourism accounts for 2% of GDP, contributing £26 billion per year. The number of people employed in the cultural and creative sectors has been increasing since 2011 and now stands at 321,000.”

There is also evidence that cultural spending helps promote clustering of highly-skilled workers and that creative cities tend to be more productive.\(^{41}\) Whilst this relationship is indirect and subtle, this does add to the concern that the high imbalance is in turn exacerbating regional inequalities.
Levelling up

Why and how should we change the way we allocate growth-enhancing spending?
As we have seen, investment that could help catalyse economic growth is spread unequally across the country, with lower spending in poorer regions.

Of course, as noted above, there are a number of positive reasons why policymakers might want to continue with unbalanced spending. Surely transport money should follow congestion? Science funding to excellent science, and arts money to high art? Surely we should spend our housing money in areas that are expensive?

And yet there are counter arguments, for a more balanced approach. We will explore them in detail below, but there are also a number of problems which are common across all four areas we have examined.

**Common problems**

A common problem with all these fields is that policy is somewhat circular, and ignores second-round effects. Metaphorically, it is as if we are trying to use petrol to put out a fire, or saying we will only water our plants if they grow.

This is the so-called Matthew effect of accumulated advantage, named after the line from Matthew’s gospel: “Whoever has will be given more, and they will have an abundance”. For example, the transport and housing money we hope will ease congestion and housing costs in richer areas may also stimulate more growth, more congestion, and higher house prices.

In some cases there are strong self-reinforcing tendencies in policy which keep some areas permanently ahead. For example, if we concentrate so much of our R&D money towards “excellent” institutions, other centres may never get a chance to become excellent in the next round of funding.

Another common problem is that the effect spending has on the local economy is only one consideration for policy makers: this is particularly true for innovation, and for culture. If your goal is to win Nobel prizes for pure research, you don’t necessarily care about your local economic impact. If you want to put on a great opera, likewise.

Perhaps in these fields part of the answer is to put more weight on the economic impact of such spending, which often seems to be a secondary consideration.

In several of these fields a strong consensus exists that the current way of thinking about funding is the only way to think about it. Some huge decisions, for example spending half the affordable housing budget in London, seem to be taken without any public justification.

For example, in research funding, it is often argued that there is a choice between a better regional spread and preserving a focus on “excellence”. Yet it is clear that business has a very different view about where in the country it can do “excellent” research than government does. This should give us pause for thought.

Policy makers often have a nagging fear that without concentration of resources (excellence) certain institutions will lose critical mass and drop out of the global premier league. Focusing on
keeping these institutions and agglomerations excellent isn’t unreasonable. But is there any evidence that a somewhat more balanced approach would endanger this - particularly where budgets are growing, as in innovation?

Furthermore, the views of high-end institutions are often very well represented in Westminster, which is home to all the main policymakers in what is a relatively centralised state. Twenty-one percent of MPs went to either Oxford or Cambridge and a further third to a Russell Group university. London and Scotland have strong devolved governments, but poorer regions lack them. It is not hard to see why people fear policy might be skewed towards the richer areas and leading institutions.

Specific problems and concerns

Beyond these common challenges, there are specific criticisms we can make in each area.

4.1 Transport spending

There are a number of different complaints about the current for allocating spending.

We will record them here without comment and go on to investigate them.

1) **The formal process is overruled, with a bias among officials towards London:** Officials calculate Benefit Cost Ratios (BCR), but in practice decision-making is political and high BCR investments in poorer regions are frequently ignored in favour of lower BCR projects in London. London-based officials may be unduly sceptical about prospects for growth in areas they are less familiar with: for example, the decision to let the Northern rail franchise in 2004 on the assumption there would be no growth in use, which led to catastrophic overcrowding. There is no transparency about how many bids are being assessed, no systematic publication of cost benefit studies and little post-project reevaluation of studies.

2) **Too much project appraisal is static, not dynamic, and favours richer areas by using current prices.** Project assessment is too focused on narrow measures rather than wider economic benefits. But such static rather than dynamic analysis tends to favour areas that are already richer and prices are higher. For example, transport appraisals put too much weight on the minutes (theoretically) saved rather than wider GVA growth which might be unlocked by, for example, opening up a new area for housing development. Although the Green Book has *in theory* allowed for wider analysis since 2018, it isn’t generally done or core to the process: for individual smaller projects it may not be practically possible. This means falling back on static analysis which skews spend towards richer areas, where congestion is higher but growth constraints (e.g. land availability) may also be higher.

There is a circularity about the logic of investing to address high congestion costs. Project appraisal does not take into account the way such investments have second round effects which may be self-defeating, inducing further congestion or population growth in already constrained areas.
3) **We should weight for the social and macro-economic advantages of more balanced growth.** For welfare reasons you might want to weight growth-enhancing spending towards poorer areas. Research on wellbeing suggests growth might have a higher wellbeing benefit in poorer areas - not least because the wellbeing costs of unemployment are very high. In some parts of the country there is essentially full employment. How often do transport appraisals consider the impact on unemployment?

4) **Some areas are in a stronger position to generate more and better bids**, because they have strong devolved governments.

We now explore these concerns in more detail.

### 4.1.1 The process is overruled, with a bias among officials towards London.

- Economists Diane Coyle and Marianne Sensier argue that many major transport decisions are taken on political rather than economic grounds, and show how BCRs can be manipulated to justify decisions that have already been made. Following other authors, including Tom Forth, they note that projects with good BCRs outside London have often not been funded while projects with lower BRCs in London have been.\(^{42}\)

- The NAO’s 2013 report on over-optimism in government planning claimed strategic misrepresentation was a behavioural factor in explaining why certain projects had poor cost consideration.\(^ {43}\) Looking at the geographic spread of investment decisions - it appears these tend to prioritise London at the expense of projects with higher return elsewhere in the country.
Figure 24: Public transport schemes ranked by BCR, approved and not approved

Notes: Lower panel - out of London; upper panel - in/to London; HS2 presented separately.
Source: Coyle, D, & Sensier, M (2018), The Imperial Treasury: Appraisal methodology and regional economic performance in the UK, Bennett Institute for Public Policy
**Table 3: List of projects approved or rejected**

<table>
<thead>
<tr>
<th>Name of project</th>
<th>BCR</th>
<th>Approval</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bletchley Link 2 Public Transport Scheme</td>
<td>3.1</td>
<td>Yes</td>
<td>South East</td>
</tr>
<tr>
<td>Cambridge Guided Bus</td>
<td>2</td>
<td>Yes</td>
<td>East of England</td>
</tr>
<tr>
<td>Coleshill Multi Model Interchange</td>
<td>4.8</td>
<td>Yes</td>
<td>West Midlands</td>
</tr>
<tr>
<td>Coventry Rapid - Preferred scheme</td>
<td>1.9</td>
<td>Yes</td>
<td>West Midlands</td>
</tr>
<tr>
<td>Doncaster QBC</td>
<td>1.7</td>
<td>Yes</td>
<td>Yorks &amp; Humber</td>
</tr>
<tr>
<td>Greater Bristol Bus Network</td>
<td>3.2</td>
<td>Yes</td>
<td>South West</td>
</tr>
<tr>
<td>Mansfield Interchange</td>
<td>4.4</td>
<td>Yes</td>
<td>East Midlands</td>
</tr>
<tr>
<td>Newcastle - Eldon Square Concourse</td>
<td>1.2</td>
<td>Yes</td>
<td>North East</td>
</tr>
<tr>
<td>North West Taunton Package</td>
<td>1.8</td>
<td>Yes</td>
<td>North West</td>
</tr>
<tr>
<td>Nottingham Express Transit Extension</td>
<td>2</td>
<td>Yes</td>
<td>East Midlands</td>
</tr>
<tr>
<td>Warrington Interchange</td>
<td>2</td>
<td>Yes</td>
<td>North West</td>
</tr>
<tr>
<td>MyBus, West Yorkshire</td>
<td>4</td>
<td>Yes</td>
<td>Yorks &amp; Humber</td>
</tr>
<tr>
<td>Crossrail Hybrid Scheme</td>
<td>1.6 to 2.6</td>
<td>Yes</td>
<td>South East/London</td>
</tr>
<tr>
<td>Thameslink Upgrade</td>
<td>2.1 to 3.0</td>
<td>Yes</td>
<td>South East/London</td>
</tr>
<tr>
<td>DLR London City Airport</td>
<td>1.7</td>
<td>Yes</td>
<td>London</td>
</tr>
<tr>
<td>DLR Woolwich Extension</td>
<td>1.1</td>
<td>Yes</td>
<td>London</td>
</tr>
<tr>
<td>High Speed Line London-Glasgow</td>
<td>1.9</td>
<td>Yes</td>
<td>Scotland</td>
</tr>
<tr>
<td>High Speed Line London-Manchester</td>
<td>1.9</td>
<td>Yes</td>
<td>North West/London</td>
</tr>
<tr>
<td>High Speed Line London-West Midlands</td>
<td>1.9</td>
<td>Yes</td>
<td>West Mids/London</td>
</tr>
<tr>
<td>Jubilee Line Extension</td>
<td>1.7</td>
<td>Yes</td>
<td>London</td>
</tr>
<tr>
<td>Haxby Station</td>
<td>3</td>
<td>No</td>
<td>Yorks &amp; Humber</td>
</tr>
<tr>
<td>Leeds Supertram</td>
<td>2.3</td>
<td>No</td>
<td>Yorks &amp; Humber</td>
</tr>
<tr>
<td>South Hampshire Rapid Transit</td>
<td>3.6</td>
<td>No</td>
<td>South East</td>
</tr>
<tr>
<td>SPARK Leamington Spa and Warwick Integrated public transport Improvement</td>
<td>2.8</td>
<td>No</td>
<td>West Midlands</td>
</tr>
<tr>
<td>Glasgow Airport Rail System</td>
<td>1.1</td>
<td>No</td>
<td>Scotland</td>
</tr>
<tr>
<td>HU-Intra Leeds Bus Fare Reduction (30%) and Frequency Increase (20%)</td>
<td>2.6</td>
<td>No</td>
<td>Yorks &amp; Humber</td>
</tr>
<tr>
<td>IF-West Yorkshire County Bus Fares Reduction (30%) and Frequency Increase (20%)</td>
<td>3</td>
<td>No</td>
<td>Yorks &amp; Humber</td>
</tr>
</tbody>
</table>

*Source: Department for Transport*
Box 2: Case Study - Crossrail

- Crossrail was originally commissioned with the assumption that benefits would be roughly double the cost - as indicated by a BCR of 1.97, although if wider social benefits are accounted for this would increase to 3.1.\(^{45}\)

- According to the UK economic models for transport, this suggests that the value for money of the project would be medium-to-high when compared to DfT criteria.\(^{46}\)

- As costs rise, naturally, the BCR of the project will in turn fall. In 2010 capital costs for Crossrail were set at £14.5bn, later upgraded to £14.8bn due to additional funding in 2012. However, since then cost overruns have increased the total funding of the project to £17.6bn.\(^{47}\)

- Assuming the benefits have remained broadly constant, even a relatively small increase would reduce value-for-money to 1.5 or below, making Crossrail a ‘low’ value investment, and some commentators have even suggested that by the point of completion the BCR will be closer to 1 than 2.\(^{48}\)

- This is not driven by any one item, but rather increased costs across the board. Looking further at specific examples of poor cost estimation, work at Whitechapel station was originally scheduled to cost £110m. By December 2018, this had risen to £659m. Similarly, civil works at Eleanor Street and Mile End shafts increased in costs from an initial target of £46m to £255m by 2018.\(^{49}\)

- Across the board, increases of up to six times the initial estimated costs suggests that the initial inputs into the figures used for the businesses cases, and therefore the Benefit Cost Ratios, were likely flawed.

- In essence, regardless of the relative strengths or weaknesses of the Green Book’s appraisal methodology, the lack of consistency in approving or rejecting projects on the basis of their BCR means that political favouritism could play a strong part in the approval of major infrastructure projects.

- Historically this has favoured London due to its proximity to decision-making and strong local political leadership. If productivity in the UK’s regions is to be truly improved, this will require political leadership to address this imbalance in the decision-making process. The Chancellor’s promise to deliver on “levelling up and unleashing the country’s potential,”\(^{50}\) is a promising start, but will need to be sustained across this Parliament, and future ones.
4.1.2 We use excessively narrow measures of benefit which are skewed to richer areas. There is too little dynamic analysis in practice.

Measuring the full economic impact of a government investment is not simple. For transport investments, the simplest thing to do is to work out how many people will save how much time, and put a value on that. But larger projects might have further dynamic impacts, by connecting people, ideas, enhancing competition, unlocking agglomeration gains and so on.

Historically, static analysis has tended to dominate, because it is simpler and seen as more certain. Dynamic analysis is more complicated, speculative, and may be inappropriately expensive to carry out on small individual projects.

Currently the Treasury Green Book, the government’s guidance on how to carry out project appraisal, and generate benefit cost ratios (BCRs), favours the use of current market prices to assess the costs and benefits of projects. This static approach means that benefits follow existing levels of value and makes investments in prosperous areas more attractive.51

There are also deeper questions about the use of “minutes saved” as the dominant methodology for transport evaluation. As Diane Coyle & Marianne Sensier note in a 2018 paper (our italics):

“The Green Book approach to valuing benefits based on current productivity has been strongly criticized by Metz (2016). Pointing to evidence from the National Travel Survey, he notes that daily travel time has stayed roughly constant at about an hour since 1970, which suggests that transport investment does not save time at all, but rather increases opportunities. In other words, in practice there is little travel time saved from transport projects. He concludes: “You cannot build your way out of congestion.” The Eddington rationale of aiming to ease congestion in high productivity, over-heating places (London) as a means of removing bottlenecks on still more productivity growth is therefore set to fail. Metz advocates considering instead that land and property values are often increased by transport projects, and would be a more direct sign of successful economic development in a specific location than the projected value of time saved by travellers.”

There is also a certain circularity at work. Transport appraisals start from assumptions made in the DFT Road Traffic Forecasts. But these reflect the past and assumptions about growth which might be wrong. For example, if the Government’s “levelling up” strategy were to succeed it would generate higher levels of activity and traffic, justifying investment. But investments in transport, which may be individually marginal but collectively not, are unlikely to be made as they are not justified on the basis of current forecasts - a sort of Catch-22 situation.

As it happens, in its 2018 review of 2015 road traffic forecasts, the DFT noted that that forecasts for road use in London were 6% too high52. These differences in assumptions, over even short periods highlight the way that future investment reflects past growth and assumptions based on it. As the Government’s Industrial Strategy White Paper noted:

“An approach based solely on static analysis can favour investment in places where development has already happened, and overlook long-term benefits that infrastructure can bring to a place.”
Whilst agglomeration benefits and increased productivity can in theory be included in measurements, the requirement for benefits to be “objectively demonstrated,” suggests a certain scepticism about this approach.

Yet failure to look at wider gains limits the extent to which potential productivity gains can be included in areas where there is not already significant connectivity or agglomeration, or an existing evidence base demonstrating the impact that improved infrastructure has had.

Infrastructure projects intended to have transformative effects on a local economy will find it very difficult to fully meet this standard of evidence as metrics such as willingness to pay for transport services can only be accurately provided after projects have been completed. Investments are assumed to have no effect on relevant relative prices, or the growth rate of consumption. This creates a dynamic which permits higher market prices in already prosperous areas make investments in those areas more attractive. In turn, this inevitably prioritises spending in such places.

Insufficient tools mean that projects are frequently approved only for it to become apparent at a later date that evaluations were overly optimistic about the benefits delivered. Some are more forthright in their criticism of the implications of this: in their study of budget allocation, Jones and Euske have attacked the “planned, systematic distortion or misstatement of fact - lying - in response to incentives in the budget process.”

Nonetheless, the Green Book itself in theory allows for and indeed provides guidance on all kinds of non-market impacts, social impacts, regional analysis and so on. However, it is not clear how often this sort of analysis is actually applied.

The issue is less that the Green Book forbids wider analysis, and more about the implementation in practice of cost benefit analysis. Given that wider economic analysis may not always be appropriate, but that narrow analysis skews funding to richer areas, the answer may be to have a simpler weighting put on benefits in lower productivity areas.
4.1.3 There are macro-economic and social advantages of more balanced growth which individual project analysis might not capture

It may be that there are some macro advantages from more balanced growth at the national level that may not be captured by individual project appraisals - even if they are dynamic.

There appears to be a correlation between more balanced levels of GDP and higher overall levels of GDP.\(^{57}\)

It’s striking that there are no major economies that are richer per head than Britain and have a more unbalanced economy. There may also be wellbeing gains from more balanced growth that would not be captured even by more dynamic analysis of individual projects.

Amendments to the Green Book in 2011, included the addition of “valuing non-market impacts” for utility, welfare and well-being\(^ {58}\). These changes ensure the impacts of health, education and other non-market factors to be quantified in cost benefit analysis. However, despite changes, the remit remains restrictive. CBAs rely on a clear and pre-existing evidence base existing for benefits and the Green Book’s supplementary guidance on regeneration and regional development was authored in 2004.\(^ {59}\)

We also need to go further than valuing economic or income growth more in poorer areas if there are greater welfare gains which are not captured by improvements in GDP or incomes per head.

The growing body of government data on wellbeing suggests that being employed or unemployed has a much more dramatic effect on wellbeing than marginal changes in income - changes to wellbeing comparable to experience divorce or bereavement.

Controlling for other factors, ONS researchers\(^ {60}\) found a gap between the wellbeing of those in the bottom fifth of incomes, and everyone else’s. But moving up to higher income groups beyond the bottom 20% didn’t seem to result in very large increases in wellbeing. Such diminishing marginal returns are not surprising from a welfare economic point of view.

In contrast, being unemployed has a very large negative impact – in fact being unemployed had a similar impact on wellbeing to being divorced. Being long-term unemployed (over 18 months) had a 50% more negative impact even than being widowed.

This suggests that investments which reduce unemployment are likely to have much larger impacts on welfare and wellbeing than we might expect simply by looking at their impact on incomes or GDP.

Yet it is not clear how often project appraisals take these kinds of factors into account, or indeed how often it would be appropriate to carry out expensive and wider analysis which might look at this. Rather than making appraisal of individual projects more complex and costly, it might be simpler to simply upweight BCRs for projects in areas which have higher unemployment.
4.1.4 Some areas are in a stronger position to develop good bids

Devolution across the UK is very uneven. Scotland, Wales and Northern Ireland have devolved Parliaments and assemblies, with devolved funding and generally higher levels of funding through the Barnett Formula.

Since 1998 London has had an elected mayor, and the Greater London assembly, and also a powerful and well-resourced transport authority, Transport for London (TFL). London has control over the tube network, DLR and overground, and has always had control over buses through the franchising system, rather than the deregulation seen in the rest of England. The GLA has devolved budgets and TFL benefits from control over passenger revenues, which provide around half its budget.

In contrast, in most of England the only devolved authority is the local authority or Local Enterprise Partnership (LEP). LEPs, Unitary and County Councils tend to have very limited capacity to develop schemes and bids, because of their funding and their scale. Bids for transport, research funding or culture come either from a local authority or individual institutions like universities or Housing Associations. LEPs are not elected, and have limited budgets. This leaves most of England with no kind of government with the scale or powers of a State of the US or a German Länder. Local authorities have also seen a substantial reduction in their powers and discretion over recent decades.

Between 1974 and 1986 six of England’s larger conurbations had Metropolitan County Councils. These built on pan-conurbation transport authorities which had been created in the 1960s. The Transport Act 1985 forced them to privatise their municipal bus companies, but unlike in London, also stripped them of their powers to regulate the fares and timetables of private bus operators.

The Metropolitan County Councils were fully abolished in 1986, with residual county-wide activities held by non-elected bodies like Passenger Transport Authorities. Some large conurbations (Bristol, Teesside, Derby and Nottingham, Portsmouth and Southampton) were never included in this scheme.

The creation of Combined Authorities and then Devolution Deals has created a new form of economic governance for Mayoral Combined Authorities (MCAs) in the West of England, Cambridgeshire and Peterborough, the West Midlands, Liverpool City Region, Greater Manchester, Sheffield City Region, Tees Valley and the North of Tyne.

MCAs have been devolved some powers over Transport (including bus franchising), Skills, Housing, some public services and given some devolved budgets. But powers are limited, and the eight MCAs only cover 20% of the population of England (12 million people). A devolution white paper is expected this year on deepening and widening devolution.
How to fix it - Transport

Recommendation 1: HMT should take into account relative as well as absolute returns to local economies within the project appraisal process.

While absolute gains should still be targeted, relative economic value should be considered as part of the appraisal methodology, to take better account for transformative spending in a specific local authority or region. For welfare reasons, we should value growth more in places where incomes are lower.

Recommendation 2: We should have a simple system to weight BCRs for the economic and social advantages of more balanced growth.

Because wider economic modelling is not always going to be appropriate, but narrow time saving measures skew funding to richer areas, we should develop a simpler system for upweighting BCRs for projects in poorer areas. This is needed on top of valuing growth more in lower income areas where there are additional social benefits (particularly reducing unemployment), and to capture the macroeconomic benefits of more balanced growth.

Recommendation 3: Central government should publish the business cases for all proposed infrastructure projects, including comparable BCRs. DFT and HMT should publish both rejected and approved projects at each funding round.

At present it is impossible to judge the relative merits of different projects because only those that are approved have their business cases and BCRs published. We cannot compare BCRs or see how well or how often wider economic or welfare analysis is being used. Transparency would drive competition between areas, improve the quality of business cases, and ensure analysis could be conducted on which projects could deliver outsized benefits if approved in combination rather than in isolation.

Recommendation 4: Government should devolve transport powers to more places in England.

This could mean to more mayoral combined authorities, or to other combined authorities, or to other types of areas which wish to work together across an area that makes sense for transport planning and have a clear decision-making process.
4.2 Science, technology and innovation spending

Innovation funding in the UK is heavily weighted to research rather than industrial development, compared to the US or countries in Asia. Of the money that government spends on R&D in Britain, just 13% goes on later phase development. In the US the equivalent figure is 45%, in Japan 42%, and in China 56%.\(^\text{62}\)

Money is also very heavily weighted towards universities. Of the money government spends on R&D in the UK, around 55% is carried out in universities. In the US, the equivalent figure is 32%, in Japan 43%, and in China just 22%.

And within this university funding, a large proportion of the budget flows to a relatively small number of institutions in the golden triangle.

These factors explain why more of the private sector’s investment in research occurs in lower productivity areas than the government’s does.

The most fundamental problem is that putting so much of our innovation budget into universities and a system focused on excellent primary research inevitably skews funding into a small number of cities with large numbers of universities or highly prestigious universities.

Government has created a small fund “Expanding Excellence in England” to encourage the growth of departments which are up and coming, but this is extremely small (£25m a year).

Part of the solution is to spend innovation funding in fundamentally different ways, as other more industrially-focused countries do. Forms of funding which align with business spending are likely to promote a more even distribution, because business spending is more even than private. This is particularly relevant to the debate about towns and cities, as business R&D is far more likely to take place outside the centres of our cities than University R&D.

More research funding designed to complement business investment in R&D would particularly help areas where private investment in R&D is higher relative to government spending - places like the West Midlands, East Midlands, Northern Ireland and North West.
<table>
<thead>
<tr>
<th>Region</th>
<th>£ of business R&amp;D investment per £ of government and charity spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>0.97</td>
</tr>
<tr>
<td>London</td>
<td>1.02</td>
</tr>
<tr>
<td>North East</td>
<td>1.19</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>1.33</td>
</tr>
<tr>
<td>Wales</td>
<td>1.59</td>
</tr>
<tr>
<td>South West</td>
<td>2.42</td>
</tr>
<tr>
<td>North West</td>
<td>2.51</td>
</tr>
<tr>
<td>South East</td>
<td>2.60</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>2.80</td>
</tr>
<tr>
<td>East Midlands</td>
<td>3.65</td>
</tr>
<tr>
<td>East</td>
<td>3.71</td>
</tr>
<tr>
<td>West Midlands</td>
<td>4.95</td>
</tr>
</tbody>
</table>

*Source: Calculations based on data published alongside speech by Chris Skidmore, 24 January.*

However, this is not necessarily going to be enough on its own. As Professor Richard Jones has pointed out, places like Wales, Yorkshire & Humber, and the north east have relatively low private sector R&D, as well as low government spending, and for them a different solution is needed to build up an infrastructure of innovation. This could involve ring fencing some of the industrially focused funding discussed above, and also reshaping the way we allocate the core research budget.
How to fix it: Innovation

Recommendation 5: We should devote the growth in the innovation budget to funding streams which are more industrially focused.

Such spending could include using the growing innovation budget to ramp up funding streams including:

- Innovate U.K. funding for business R&D, including “Smart” grants.
- Creating a budget for innovating procurement, enabling the growth of the Small Business Research Initiative, as recommended in the Connell Review.
- Building up translational research institutions like Sheffield’s Advanced Manufacturing Centre and Warwick Manufacturing Group, or growing the “Catapult” network.
- Building up industry-specific and technology-specific institutes like the Aerospace Technology Institute, Advanced Propulsion Centre and Faraday Institution.

Recommendation 6: Government should ringfence funding for regions that combine low public and private R&D investment.

As government grows funding for things like Smart grants it should also ringfence certain proportions of such budgets for regions where innovation is weak overall. And when it comes to creating new institutions, government should aim to ensure that a sensible proportion are in regions that are currently lower funded.

Recommendation 7: We should reform the spending which does flow through universities in ways that would make for a more even spread, as well as a greater economic impact.

We should move money from core QR to the Higher Education Innovation Fund (HEIF) which promotes business-university collaboration, and has a more even spread across the country than “core” QR. Once complete, we should tie increasing proportions of research and higher education funding council funding to the new Knowledge Exchange Framework (KEF) rather than REF. The KEF aims to measure universities commercial and public impact.

4.3. Housing

The argument for the heavy focus on spending in more prosperous areas is that affordability, as defined by the ratio rents to incomes is worst in places like London. But there are counter arguments.

First, there are different ways of regarding high housing costs in the private sector. On the one
hand, these reflect a cost of living which is unavoidable for residents of more prosperous areas. On the other hand, higher housing costs are not only a deadweight cost, but also reflect the amenity value of the housing. It costs more to live in central London partly because this gives residents a wide selection of jobs all kinds of cultural amenities. So to what extent should government bear the cost to individuals of this?

In the case of both affordable housing and housing infrastructure we should think more about the second-round effects of this spending. For example, in the case of affordable and social housing we are pumping nearly £6 billion of what is essentially a construction subsidy (with a high multiplier effect) into London alone.

It seems that it is likely to further boost growth, incomes and rents - and this second-round effect is likely to worsen affordability relative to the rest of the country.

For both affordable housing and housing infrastructure, it’s not clear to what extent this might cancel out some of the positive first round effects. In London, where supply of developable land is particularly constrained, it might also be that more of the subsidy is capitalised into land prices than in other less constrained areas.

Then there are specific arguments about affordable housing. The most important is about fairness and whether London receiving half the budget is proportionate. After all, there is no shortage of people who need affordable housing elsewhere.

London had around 21% of those on waiting lists for social housing in 2019 - more than the national average but far from having half of those waiting. This was the same proportion as in 2002, despite London’s faster population growth than the rest of the country.64

It is worth noting that London starts from having a larger social housing stock than the rest of the country - 22.6% of homes in London were council or housing association in 2018, compared to just 17.1% in the rest of England.65

Funding might also go further in other less expensive areas - the money that might fund one affordable property in London might find more than one in a cheaper region. For social rented homes this certainly seems to be true: according to a February 2020 update from Homes England66, the cost in grant per social rented home was £62,141 in the south east and £36,901 in the North East, Yorkshire & Humber.

However, the cost for Affordable rented homes was similar - perhaps reflecting a greater share of the cost coming from local contributions. Shared Ownership homes were actually cheaper to deliver in the South East - perhaps reflecting higher sales values and greater profitability of development there.
How to fix it: housing

Recommendation 8: Government should review the rationale for the regional distribution of its housing spending.

At present half the affordable housing Budget is spent in London without government presenting any value for money argument for this. Government should re-evaluate simplistic arguments that suggest funding should “obviously” flow to areas with high housing cost to income ratios, and evaluate whether such dramatic imbalances in funding are fair. Government should study the second-round effects of its housing policies on growth, land prices and the levelling up agenda.

Recommendation 9: Homes England should start publishing data in a more timely and transparent way, including spending per head per standard region.

The use of geographic areas that cannot be directly compared to other statistical releases make comparison and accountability around regional impacts difficult, and should be addressed.

Recommendation 10: The Government should immediately drop the 80:20 rule for Housing Infrastructure Funding and affordability rules which effectively limit social housing spending to the south of England.

For future affordable housing spending we should be more directive about the balance of funding between different areas to ensure a fairer outcome. In future no allocation to London’s devolved authority should be made without a value for money assessment.
4.4. How to fix it - Culture

On culture spending, unlike the other fields discussed here, it is not the case that there are strong value for money or cost-benefit arguments being made for the current distribution of spending.

Indeed, there is a lack of evaluation. A report by the Arts and Humanities Research Council (AHRC) found there was much more to be done to improve evaluation in the culture sector: the sector had been good at making the case for investment, but lacked robust methodologies to show how public funding contributes to wider social and economic goals.\(^{67}\)

There has long been some sense that culture spending is important for the attraction and retention of skilled people to an area. The seminal 1965 white paper, *A Policy For The Arts* argued rather quaintly that: "If the eager and gifted, to whom we must look for leadership in every field, are to feel as much at home in the north and west as in and near London, each region will require high points of artistic excellence. Of course, no provincial centre can hope to rival the full wealth and diversity of London’s art treasures, but each can have something of its own that is supreme in some particular field."\(^{68}\)

The current pattern seems to primarily reflect historical patterns of spending. There have been a large number of reports criticising the imbalance of funding between London and other regions. A 2013 report by Peter Stark, Christopher Gordon and David Powell, *Rebalancing Our Cultural Capital*, argued that “The record of the Arts Council since 1946 reveals both a consistent pattern in London’s favour and a trend to increase that differential – contrary to stated policy.”

The report noted that between 1980/81 and 2012/13 funding per head outside London had declined from 19.6% of the London level to 17.8%.

However, Arts Council England argue that compared over a longer time period, more is spent outside London. In written evidence to the Commons DCMS Committee ACE stated that, “In 2014/15, 42% Arts Council Grant in Aid funding went to the capital, significant progress from the 1950s, when it was 70%.”\(^{69}\)

This remains a dramatic weighting towards the capital.

These imbalances to some extent reflect what funding bodies choose to support. For example, a 2018 report by trade body UK Music pointed out that while pop music gets just 8% of Arts Council England music funding, while 62 per cent of ACE’s National Portfolio for music goes to opera.\(^{70}\)

Over the last decade there is some clear evidence of rebalancing out of London by ACE. And it is true that spending in London benefits people who live elsewhere: ACE has stated that 37% of the Royal Opera House theatre audience live outside London, and 46% of the National Theatre’s total UK audience. But this still means a far higher level of subsidy for those living in the capital.

While there has been government encouragement for national institutions to become more self-funding, and the budget for such institutions has declined, there is scope for this to go further, releasing funds to spend elsewhere. This could involve a mix of changing activity levels, prices where there are charges.
Another possibility is for the national institutions to move more of their activity to areas where funding and activity are much lower, with new branches of existing national institutions or new national institutions.

Turning to Arts Council England, ACE is making progress and taking steps to rebalance its own spending, but there is still a long way to go.

**How to fix it: culture**

**Recommendation 11: The Government should redirect money away from the national institutions and encourage them to move further towards self-funding.**

It should reinvest the savings in growing cultural provision outside London.

**Recommendation 12: The Government should encourage and build up new institutions in areas where there is a clearer link across to economic development and regeneration.**

This could involve encouraging wholly new institutions using existing assets like government and British Council art collections; or encouraging existing national institutions to set up new organisations outside London.
Conclusion
We can summarise the different types of funding we have discussed in this paper by ranking how much each region received per head. In some ways this is of course misleading - on several measures we have looked at the difference in funding between regions is an order of magnitude. The table below ranks how much is spent per region, and compares this to two measures of economic performance - income per inhabitant and productivity per hour worked.

We can see that the richest region, London, was one of the top recipients across the board. Scotland, followed by the East of England, came next, both with productivity close to the national average.

At the bottom of the table, regions like the East Midlands received less of the kind of spending we have been looking at, despite lower than average productivity. Yorkshire and the West Midlands were in a similar position. The same may be true for Northern Ireland but it did not have some of the programmes we have looked at. The South West didn’t receive much of the spending we looked at, and although its income level is close to the national average, its productivity is somewhat below.

Table 5: Growth-enhancing spending by region, ranking

<table>
<thead>
<tr>
<th>Economic performance</th>
<th>Growth enhancing spending per capita, ranked (1=highest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>143</td>
</tr>
<tr>
<td>Scotland</td>
<td>93</td>
</tr>
<tr>
<td>East</td>
<td>103</td>
</tr>
<tr>
<td>North West</td>
<td>86</td>
</tr>
<tr>
<td>Wales</td>
<td>81</td>
</tr>
<tr>
<td>North East</td>
<td>81</td>
</tr>
<tr>
<td>South East</td>
<td>116</td>
</tr>
<tr>
<td>West Midlands</td>
<td>87</td>
</tr>
<tr>
<td>Yorks &amp; Humber</td>
<td>83</td>
</tr>
<tr>
<td>South West</td>
<td>97</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>81</td>
</tr>
<tr>
<td>East Midlands</td>
<td>87</td>
</tr>
</tbody>
</table>

Source: Onward analysis, ONS data

It is striking that two of the lower income areas which see the lowest levels of growth enhancing spending are the East Midlands and Yorkshire and the Humber. The North West and West Midlands, both have bigger cities and have more devolved power. There may be some connection. London, Scotland and Wales all have powerful devolved governments.
To “level up” the performance of areas where growth and incomes are lower will not be easy. In some cases negative trends have been underway for many decades. Making progress will require the government to use every tool at its disposal.

While rebalancing growth enhancing spending is only one such tool, the historic pattern for such spending has had the effect of further *unbalancing* the economy. Even a more equal distribution would represent progress.

The new Government must rethink an approach which has - for decades - meant that growth enhancing spending is skewed to the most the areas which are already the most productive and richest.

In some cases public bodies are not even collecting key bits of information on where they are spending their budgets: a sure sign that the effect of their actions on levelling up has not been high on their agenda historically.

In many cases decisions many years ago have come to be seen as the norm, despite lacking a clear rationale.

In other cases there are reasonable arguments for the current pattern of spending. But there are also stronger counter-arguments for a more balanced approach.

If we are to level up, it is time to rethink assumptions which have gone unchallenged for too long.
Endnotes
1. Excluding Historic England (around 8% total culture spend), for which earlier regional data is not available.
7. Fenton. T (2019), Regional gross value added (balanced) by industry: all NUTS level regions, Office for National Statistics.
8. ibid.
12. Excluding Historic England (around 8% total culture spend), for which earlier regional data is not available. A few of the DCMS directly funded institutions have sites outside London or are based outside London, but no regional breakdown is produced, so we have apportioned their spend. Science Museums Group is apportioned according to the same ratio between London and Manchester as when the data was last published separately. The IWM and Tate spending is apportioned according to visitor numbers. For Royal Armories we assume 80% spending is in the central museum in Leeds.
13. For details see https://obr.uk/box/fiscal-multipliers/
15. Mean of population-weighted per-head figures for each region.
17. Defined as an LSOA containing 499-5000 jobs
18. DBIS, Geographic breakdown of public research and innovation expenditure, June 2015
19. The golden triangle share may have been higher in 1997 - but there seems to be an error in the published figures for that year, as published totals and percentages are contradictory.
22. Homes and Communities Agency (2016), Shared Ownership and Affordable Homes Programme 2016 to 2021, Addendum to the Prospectus. UK Government.
25. Department for Communities and Local Government (2017), An introduction to the Housing Infrastructure Fund, DCLG.
26. Branson. A (2019), The lessons to be learned from the areas that have secured Housing Infrastructure Fund cash, Planning Resource.
27. As of July 2019 for the MVF, though the last time the list of Forward Fund projects was last updated in March 2018.
28. Onward analysis, House of Commons Library, MHCLG, Housing Infrastructure Fund landing page and Approved Marginal Viability Fund projects spreadsheet; ONS, Mid-2018 population estimates.
29. Onward analysis, House of Commons Library, MHCLG, Housing Infrastructure Fund landing page and Approved Marginal Viability Fund projects spreadsheet; ONS, Mid-2018 population estimates
30. Department for Communities and Local Government (2017), Housing Infrastructure Fund - Supporting Document for Forward Funding, DCLG.
31. Onward analysis, House of Commons Library, MHCLG, Housing Infrastructure Fund landing page and Approved Marginal Viability Fund projects spreadsheet; ONS, Mid-2018 population estimates
32. The Housing Infrastructure Fund (Forward Fund), the Estates Regeneration Fund, the short term Home Building Fund, the Small Sites Fund and the Land Assembly Fund.
33. Ministry of Housing, Communities and Local Government (2018), Geographical targeting across 5 housing programme funds, MHCLG.
34. Wilson, W, Murphy, C & Baron, C (2017), The New Homes Bonus (England), House of Commons Library.
36. Onward analysis, Ministry of Housing, Communities and Local Government (2019), New Homes Bonus final allocation 2019 to 2020, MHCLG.
38. Excluding Historic England (around 8% total culture spend), for which earlier regional data is not available.
40. Centre for Economics and Business Research (2017), Contribution of the arts and culture industry to the UK economy - an updated assessment of the macroeconomic contributions of the arts and culture industry to the national and regional economies of the UK, CEBR.
41. Bakhshi, H, & Mateos-Garcia, J (2014), Capital of Culture: What is the impact of arts and cultural clustering on local productivity?, NESTA.
42. Coyle, D, & Sensier, M (2018), The Imperial Treasury: Appraisal methodology and regional economic performance in the UK, Bennett Institute for Public Policy.
43. National Audit Office (2013), Over-optimism in government projects, NAO.
44. Department for Transport (2006), The Eddington Transport Study, DfT.
45. National Audit Office (2014), Department for Transport - Crossrail, NAO.
46. Department for Transport (2013), Value for Money Assessment: Advice Note for Local Transport Decision Makers, DfT.
47. National Audit Office (2019), Completing Crossrail, NAO.
48. See, for example, comments by Professor Iain Docherty, accessed at: https://twitter.com/iaindocherty/status/1121487667122851840
49. National Audit Office (2019), Completing Crossrail, NAO.
50. Quote from Rishi Sunak’s twitter, accessed at: https://twitter.com/RishiSunak/status/1229704973950291969?s=20
51. Coyle, D, & Sensier, M (2018), The Imperial Treasury: Appraisal methodology and regional economic performance in the UK, Bennett Institute for Public Policy.
52. Department for Transport (2018), Road Traffic Forecasts - Moving Britain Ahead, DfT.
53. HM Treasury (2018), The Green Book - Central government guidance on appraisal and evaluation, HMT.
54. Crafts, N., & Leunig, T. (2005), The historical significance of transport for economic growth and productivity, LSE.
56. It is striking that no central database of project appraisals exists.
58. HM Treasury (2018), The Green Book - Central government guidance on appraisal and evaluation, HMT.
59. Office of the Deputy Prime Minister (2004), Assessing the impacts of spatial interventions: Regeneration, renewal and regional development, Office of the DPM.
61. See for example, Jenkins, S. (1995), Accountable to None, Hamish Hamilton.
64. MHCLG: Live Tables, Table 600: numbers of households on local authorities' housing waiting lists.
65. MHCLG: Live Tables, Table 100: number of dwellings by tenure and district, England.
67. Crossick, G., & Kaszynska, P. (2016), Understanding the value of arts and culture; the AHRC cultural value project, AHRC.
69. Written evidence submitted by Arts Council England (COC0115).
70. UK Music Press Release and Consultation Submission, April 2018.
Support Onward

Onward is an independent, not-for-profit thinktank. We rely on the generous support of individuals and trusts, as well as partnerships with charities and businesses, to support our leading programme of research and events.

**Individual and Trust donations**

Onward’s core programme of research is funded by individual and trust donations. If you are an individual or represent a philanthropic trust and would like to support our ongoing research agenda, we would love to hear from you. We do not accept corporate funding for research reports.

Please contact us on office@ukonward.com if you would like to donate by cheque or you can donate electronically using Onward’s account details below.

**UK Onward Thinktank Ltd**

Not-for-profit company no. 11326052

Bank: Natwest  
Account number: 21328412  
Sort code: 50–10–05

Please note that Onward retains copyright and full editorial control over any written research it produces, irrespective of funding.

**Partnerships with companies and charities**

Alongside our research, we want to work closely with charities, trusts and businesses, large and small, to further the political debate and bring the expertise and ideas from outside government to bear on the policymaking process.

If you would like to partner with Onward as a sponsor of one of our roundtable events or conferences, or to join our Business Leaders Network to engage further with our work, please get in touch at office@ukonward.com.

**A commitment to transparency**

Onward is committed to transparency and will publish the names of individuals and organisations who give us more than £5,000 of support each year. This will be published on our website twice a year.
About the authors

Neil O’Brien OBE MP

Neil O’Brien is a former economic advisor to Chancellor George Osborne (2012–2016) and Prime Minister Theresa May (2016–17). He is the MP for Harborough (2017–). He grew up in Huddersfield and is a member of Onward’s Advisory Board of MPs. He is the former Director of Policy Exchange and Open Europe. He is Parliamentary Private Secretary (PPS) to the Ministry of Justice and was formerly PPS at the Department for Business, Energy & Industrial Strategy.

Guy Miscampbell

Guy is a Senior Research Fellow with Onward. He has previously worked for WPI economics, the Ontario Public Service, Policy Exchange, the Institute on Municipal Finance and Governance, and in the U.S. House of Representatives. He has a Masters of Public Policy from the University of Toronto, where he was a Cadario scholar.