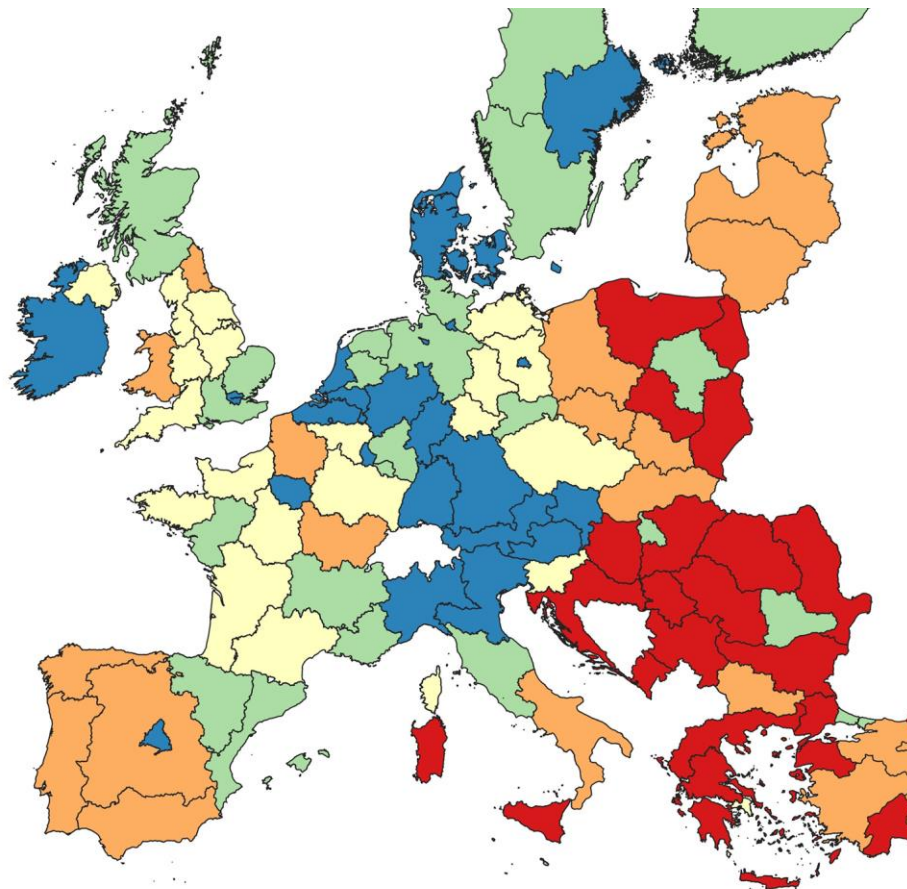


Tackling regional R&D imbalances

Richard Jones
University of Manchester



Most of the UK is below the North European average in economic strength.



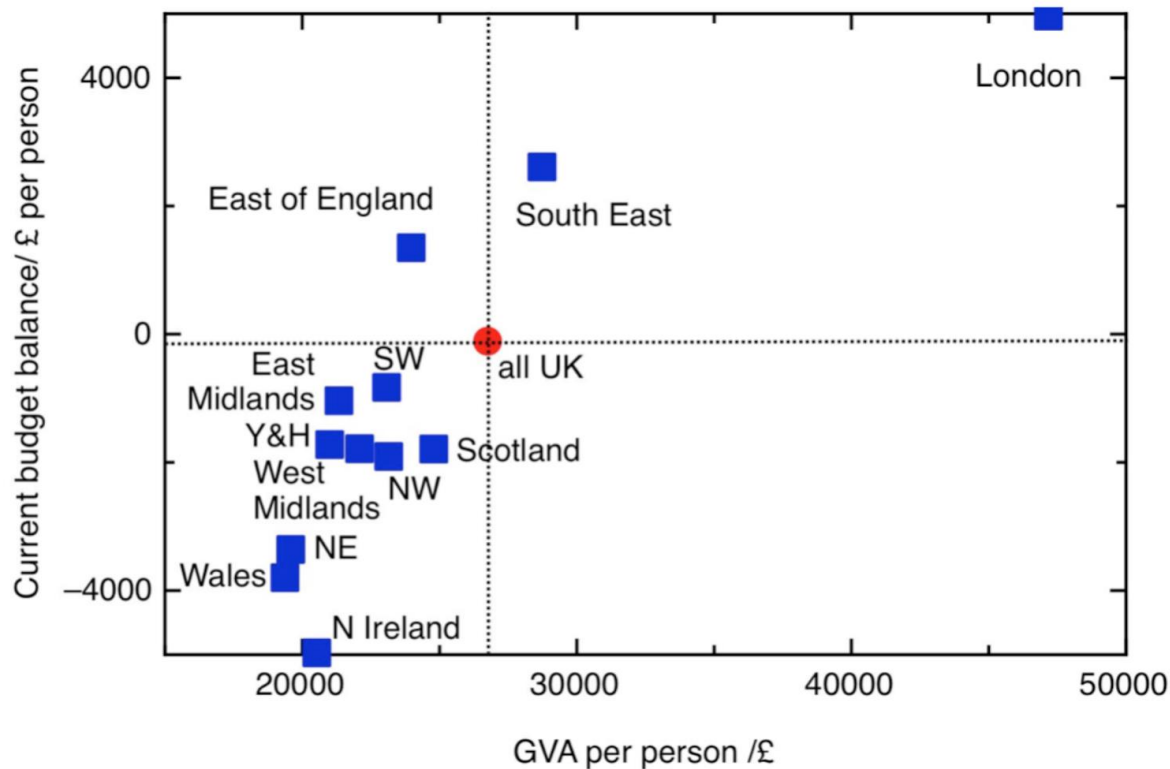
Outside the SE, productivity levels are comparable with E. Germany or S. Italy

GDP/capita at PPS, NUTS1 regions of the EU in 2017.

(Republic of Ireland figures are not comparable)

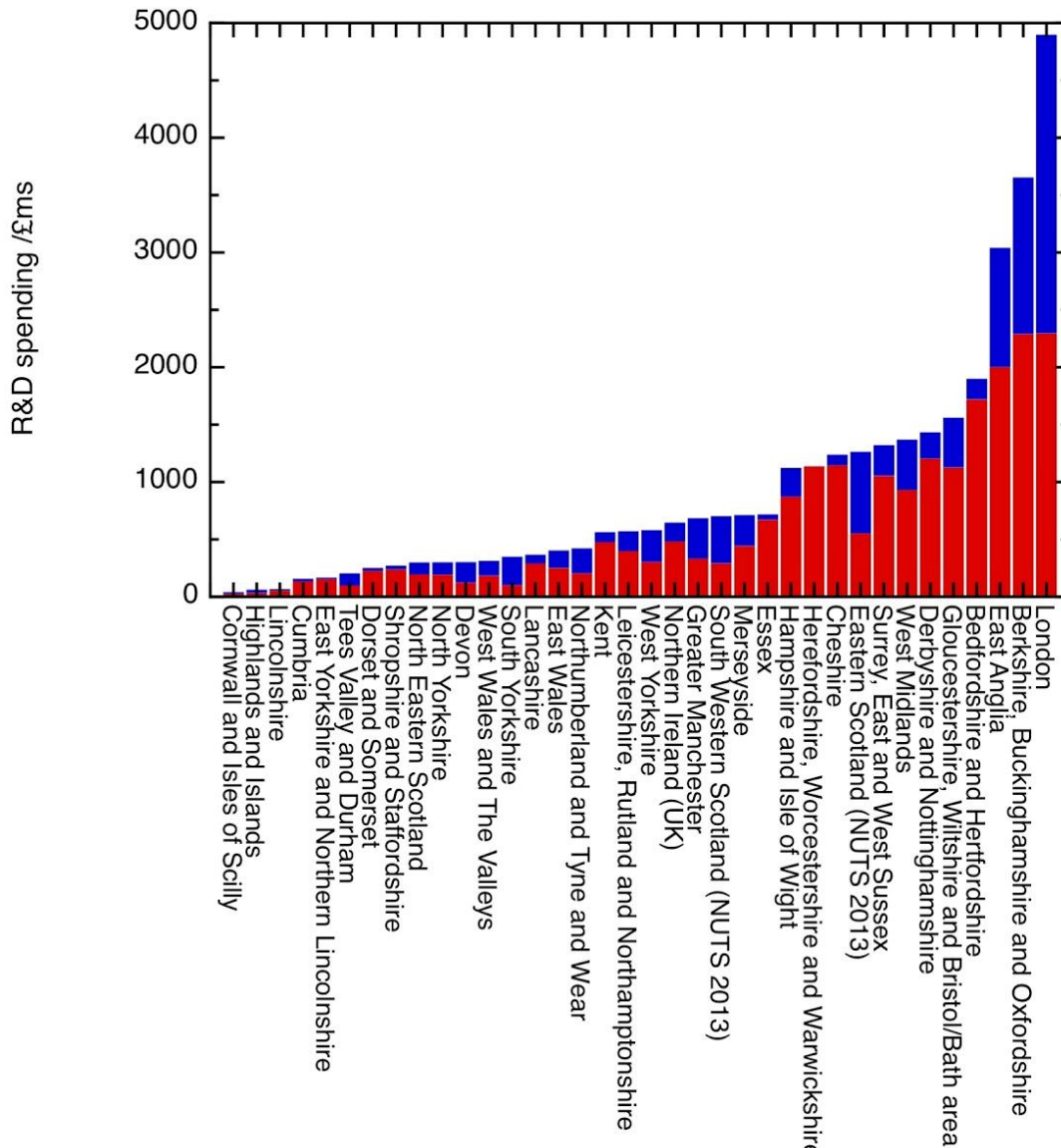
Tom Forth

Only three regions of the UK contribute to government more than they receive.



The difference between government revenue and current expenditure for NUTS1 regions, plotted against their regional productivity (GVA per person), both expressed per head of population. ONS data.

R&D spending is highly concentrated in London, E & SE



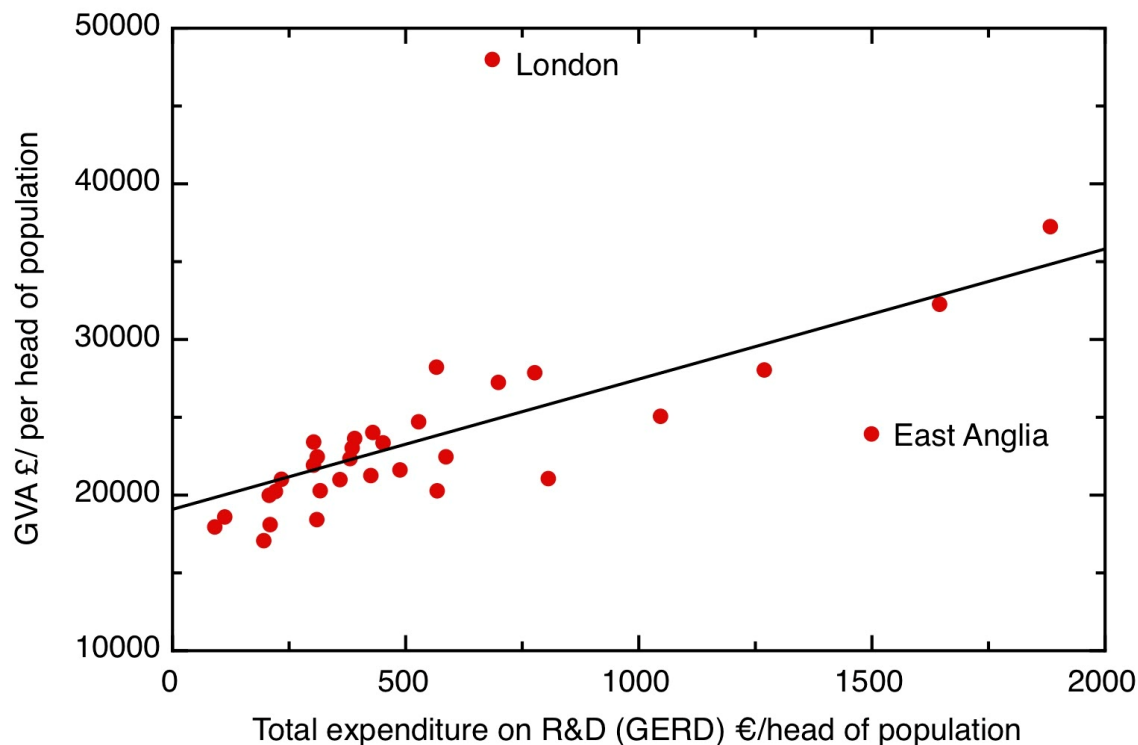
Business enterprise sector
Non-market sector

Public sector funding is more concentrated than private sector funding.

London, together with the two subregions containing Oxford and Cambridge, account for 46% of all public and charitable spending on R&D, with 21% of the UK's population.

Business and public sector R&D by NUTS2 region (except for London, presented at NUTS1 level). 2016 data, Eurostat.

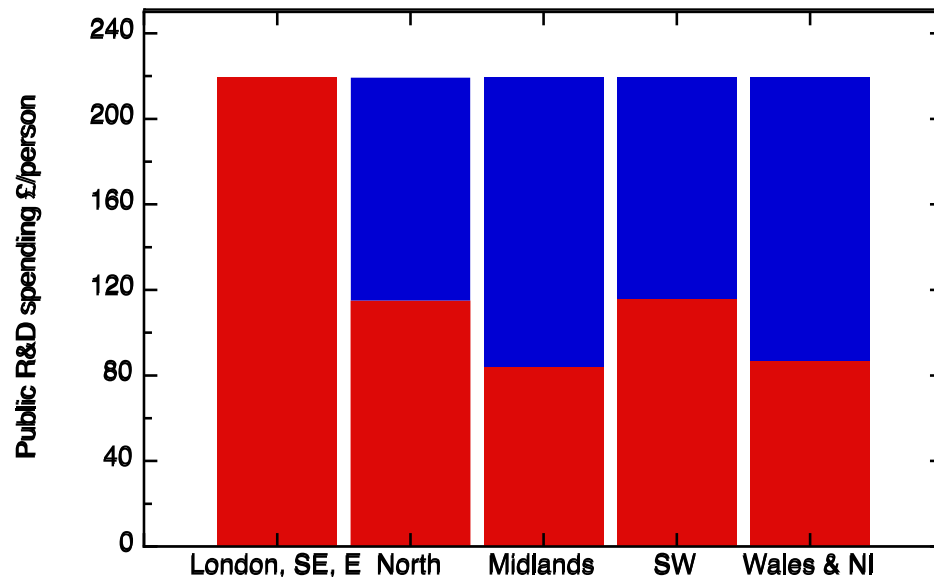
Poorer, less productive regions do less R&D



GVA per head plotted against total R&D spending per head, by NUTS2 region (except London and Scotland, represented at NUTS1 level). GERD data from Eurostat, GVA from ONS.

Levelling up – the scale of the problem

Extra annual revenue spending to “level up” per capita spending to London/SE/E average.



North - £1.6 billion /pa

Midlands - £1.4 billion /pa

Southwest - £570 million /pa

Wales and Northern Ireland
- £660 million /pa

Total: £4.2 billion

UKRI budget

£7 billion /pa

Total public spending on R&D by 2025 promised in March budget

£22 billion/pa

Total spending on innovation by the English RDAs 2005-2008:

£323 million

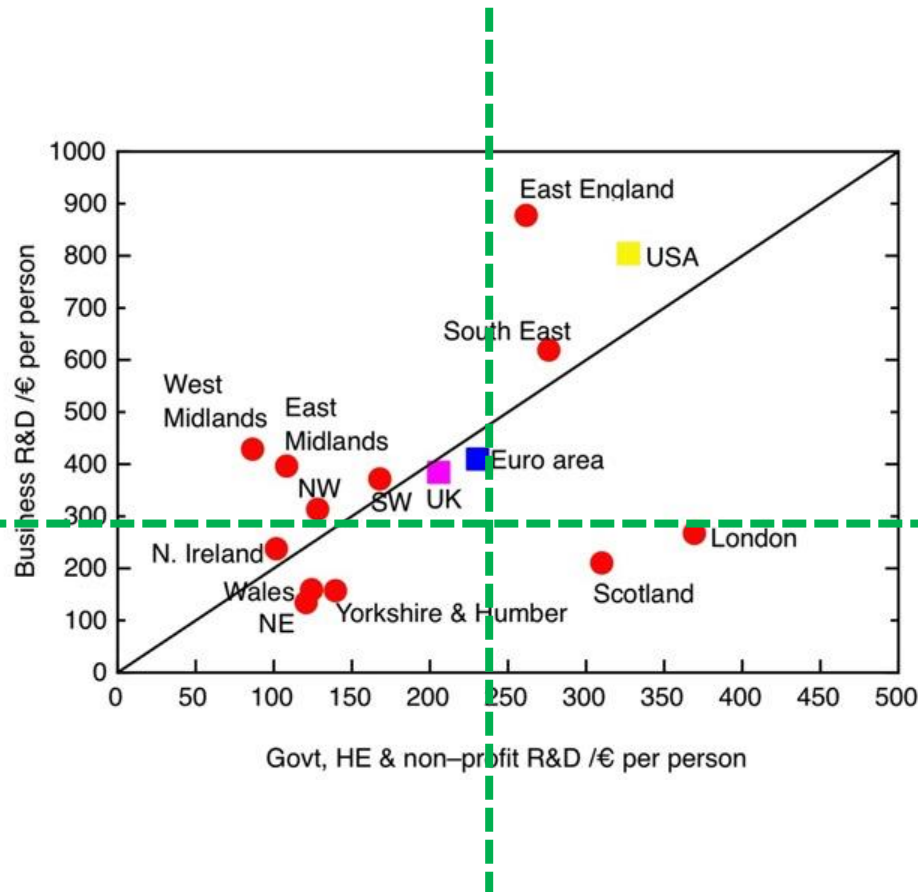
Different places, different approaches

Low public R&D,
high business
R&D:

*Strong case for
further public
investment to
capture R&D
spillovers in
existing sectors*

Low public R&D,
low business
R&D:

*Need to build up
capacity from
low base*



High public R&D,
high business
R&D:

*Knowledge
intensive
economies to be
emulated*

High public R&D,
low business
R&D:

*Focus on driving
up BERD, vfm of
further public
investment*

What we should do about it

- Devolution of substantial R&D funding
 - Need to build analytical & institutional capacity to manage in cities and regions
- New R&D institutions outside London, E & SE
 - Initial focus on translational research
 - Innovation districts & manufacturing innovation parks
- Culture change at UKRI
 - Formal representation for nations & regions
 - Place based funding instruments

Thanks!

- For more:

“A Resurgence of the Regions: rebuilding innovation capacity across the UK”.

R.A.L. Jones, preprint (2019)

<http://www.softmachines.org/wordpress/?p=2340>

“The Missing Four Billion: Making R&D work for the whole UK”

Tom Forth & Richard Jones, NESTA (2020)

<https://www.nesta.org.uk/report/the-missing-4-billion/>

