2017-8 Lecture Series:

Blueprint for Brexit Britain:

Industrial and Infrastructure Policies

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The First Industrial Nation (Mathias, 1969)

"Industrialisation in Britain, from at least the mid-eighteenth century onwards is taken...as the classical case of spontaneous growth, responsive primarily to market influences and under underlying social, institutional forms, not organised consciously by government design in the interests of promoting industrial growth."

"[it] was not the result of deliberate government policy sponsoring industrial progress. The state did very little...to promote industrial innovation as an act of policy, to stimulate productive investment, to mobilise capital for productive investment, whether directly by way of tax revenues or indirectly by guaranteeing the return on capital raised by the market or offsetting risks...it did not conduct enterprise...did no set out to attract foreign capital or skills...it was reluctant to accept responsibility for social investment...[or] with establishing...the usual infrastructure."



The Economic Landscape of the UK

"The major fluctuations in the rate of growth of demand and output in the years after 1952 were thus chiefly due to government policy. This was not the intended effect; in each phase, it must be supposed, policy went further than intended, as in turn did the correction of those effects. As far as internal conditions are concerned then, budgetary and monetary policy failed to be stabilising, and must on the contrary be regarded as having been positively destabilising."

J. C. R. Dow, The Management of the British Economy 1945-1960, (1964).

To what extent has short-term demand management led to supply-side failures?



National Institute Economic Review

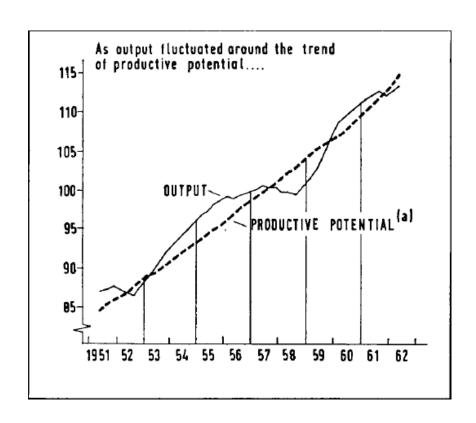
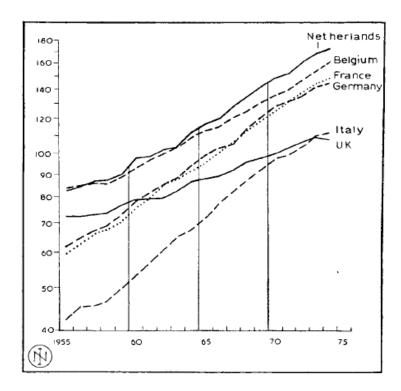


Chart 1. Gross value added per person employed, in GDP, $1955-74^{(a)}$

UK 1970=100; Semi-log scale

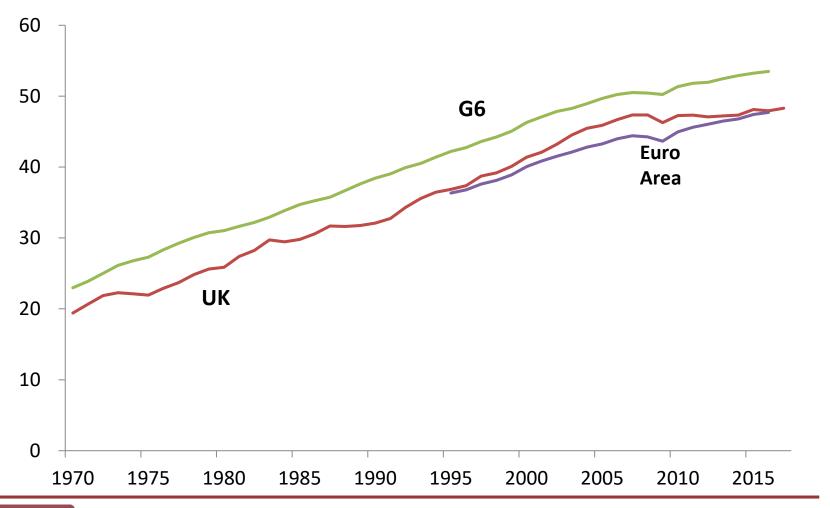


Godley and Shepherd, 1964

D. T. Jones, 1976



GDP per hour worked (USD constant prices 2010 PPP)





Investment to GDP in G7

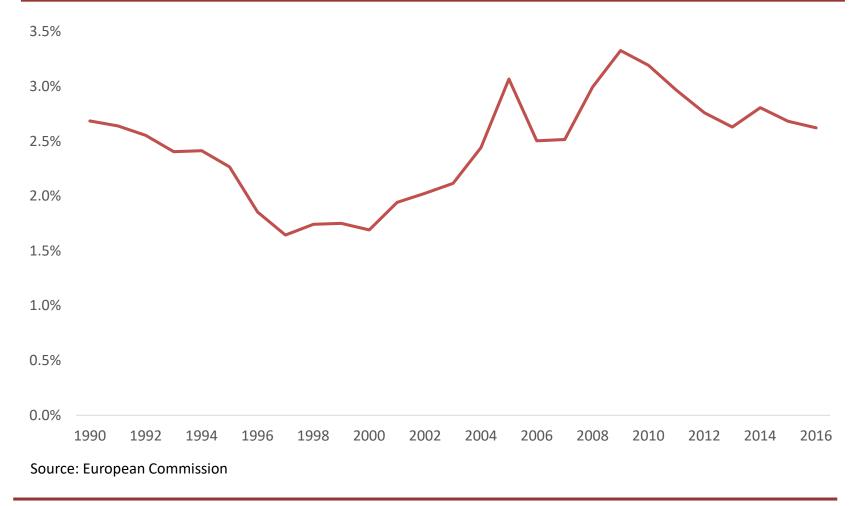
33 31 29 27 Per cent (%) 25 21 19 17 15 — — Germany — — Italy — — Canada — → • Japan — △ France

Figure 3: Gross fixed capital formation to GDP ratio

Source: Source: NiGEM database

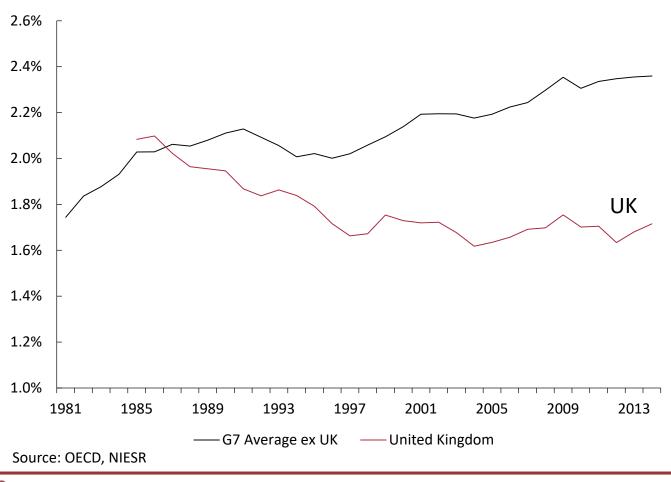


Public investment (as % of GDP), 1990 - 2016





R&D expenditure to GDP: UK and rest of G7, 1981-2014





Post-War Errors (Crafts, 2018)

- Supply-side policies matter with appropriate incentives to invest and innovate
- Short run (stabilisation) policy pursued full employment with incomes policies (and trade-union cooperation)
- Contributory negligence in taxation, industrial relations, industrial policy, nationalisation, protectionism
- Adverse impact because of errors or interaction with institutional legacy



Problems of Industrial Policy

- Historically producers lobby better and more than consumers
- And producer lobbying likely to be skewed towards firms that have become 'losers' rather than those still 'winning'
- Subsidies slow down exit in declining industries and contribute to the zombie firm problem
- Political systems are slow to admit failure and move away from interventions that are failing

That 1970s Thing

- Bias towards providing subsidies to industries in decline, e.g., shipbuilding
- Tariff protection followed a similar pattern
- Subsidising hi–tech "national" champions tended to fail e.g. in civil aircraft, computers, nuclear power
- Subsidies for investment were probably a costly mistake –
 with little or no impact on investment or the capital stock
- But saving Rolls-Royce was eventually a 'success'



Mrs. T's Decade

- From selective to horizontal industrial policies i.e those that help many industries
- Strengthening of competition with increased emphasis on outcomes for consumers
- A number of Industrial Relations reforms
- Extensive privatisation programmes
- Taxation restructured with more emphasis on indirect taxation and simplification of income tax
- Benefit/wage ratios were reduced



Errors & Omissions Etc

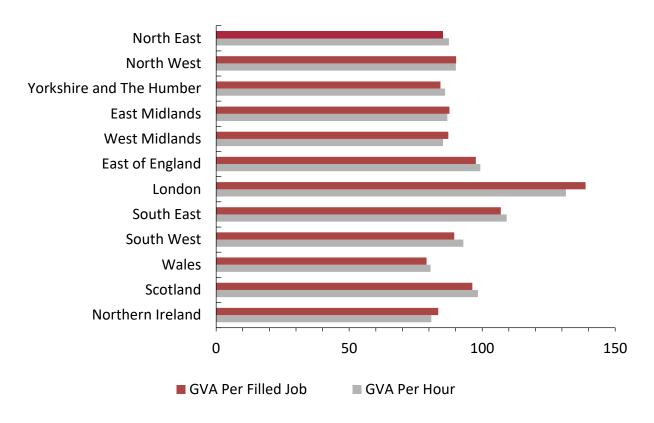
- But tax reform was incomplete e.g. wealth, property and local taxes
- A fundamental under-spend on infrastructure
- Quality of state, further and university education not well addressed
- Still suffering from lack of reform in land-use planning
- Did not address financial market or industry 'short-termism'



Pre-Crisis Growth

- Reasonable performance....in the Long Expansion: ICT revolution felt
- Supply-side policy in 'post-Thatcher mode' with flexible labour market at the fore
- Competition and regulation good, education and taxation need reform, innovation policy disappointing, infrastructure policy, land-use planning poor
- Large and under-regulated financial sector a key contributor to growth

GVA per job or per hour worked – 2015



Source: ONS and NIESR, UK=100. ONS and NIESR, UK=100.

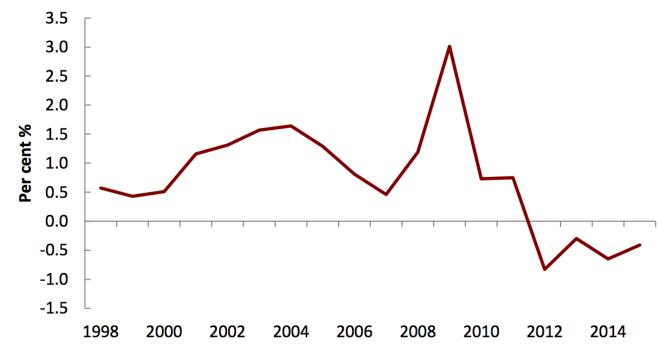


Gross Value Added (Selected regions)

Region	GVA per head [UK = 100]	Region	GVA per head	Region	GVA per head
Edinburgh, City of	146	Cambridgeshire CC	115	Peterborough	109
Aberdeen City and Aberdeenshire	145	Hertfordshire	115	Nottingham	109
Belfast	138	Greater Manchester South West	110	Leeds	108
Cheshire East	128			Derby	108
Glasgow City	127			Warwickshire	108
Manchester	127			Shetland Islands	107
Solihull	125			Cheshire West and Chester	106
Warrington	124			Bath, N Somerset and S Gloucestershire	106
Bristol, City of	122			Mid Lancashire	105
Swindon	121			Gloucestershire	102

Growth in Net Capital per Employee

Figure 4: Growth in net capital stock per employee, 1998 to 2015

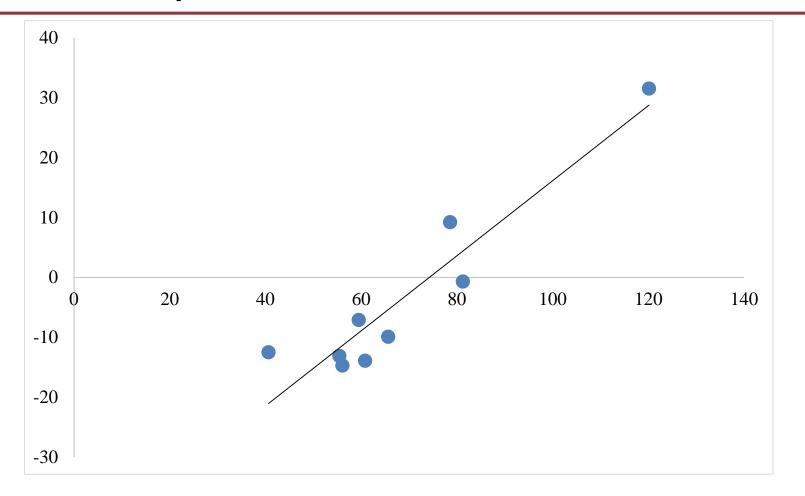


Source: ONS.

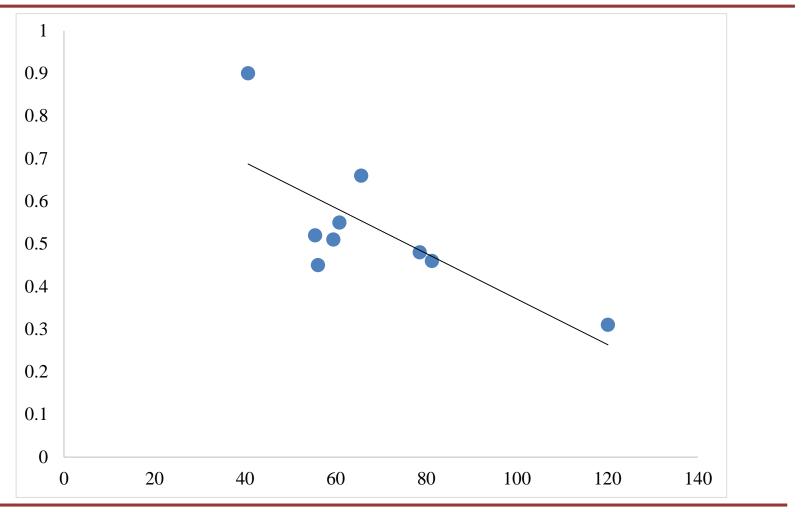
Note: Reference year: 2013



Regions: English House Price Rises versus Relative Productivity

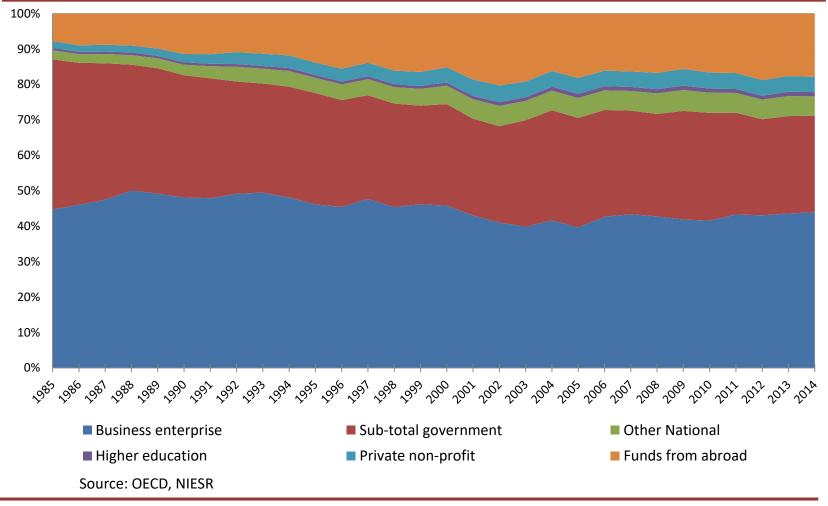


Regions: English House Price Rises versus Housing Completions/Population





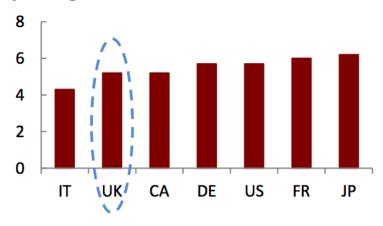
Decomposition of R&D expenditure in the UK, 1985-2014





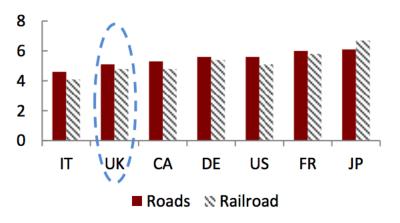
Quality of Infrastructure

Figure 1: Perceived quality of infrastructure spending



Source: The Global Competitiveness Report, 2016-2017 Notes: The scale ranges from 1 to 7, with 1 denoting the worst outcome and 7 the best.

Figure 2: Perceived quality of roads and railroad infrastructure



Source: The Global Competitiveness Report, 2016-2017 Notes: The scale ranges from 1 to 7, with 1 denoting the worst outcome and 7 the best.

Government Investment Impact

0.20 Percentage difference from baseline (%) 0.15 0.10 0.05 0.00 -0.05 Year 1 Year 2 Year 3 Year 10+ Year 4 Year 5 ■ GC: non-accomodative ■ GI: non-accomodative ■ GC: accomodative ■ GI: accomodative

Figure 5: Response of UK output to a fiscal expansionary shock

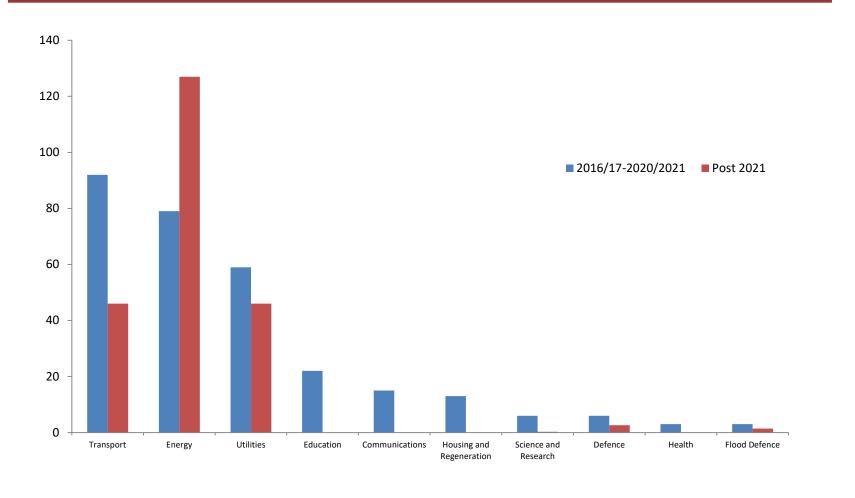
Source: NiGEM simulations.

Note: GC denotes government consumption; GI denotes government investment. Accommodative denotes that the central bank does not change interest rates for the first five years of the simulation, while non-accommodative denotes that the central bank reacts immediately to developments in the economy.



Infrastructure and Construction Pipeline 2016, planned investment by sector

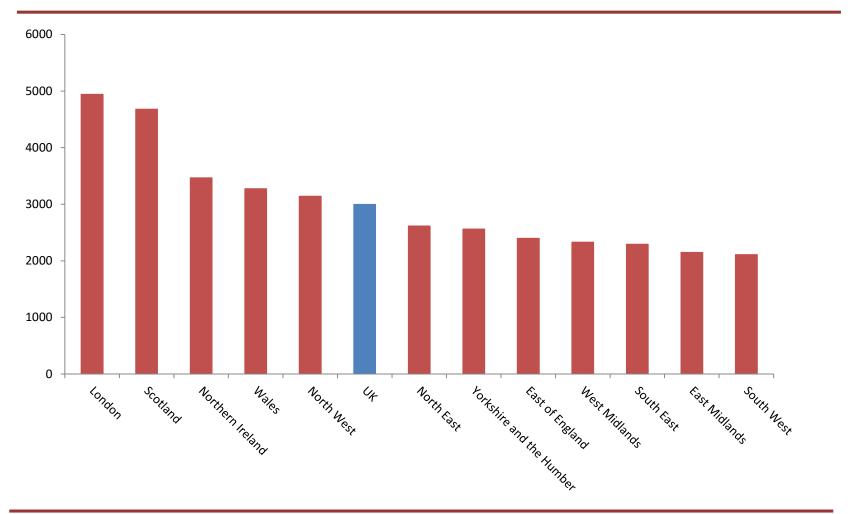
£ billions, real terms (15/16 prices)





Public Spending on Infrastructure by Country and Region

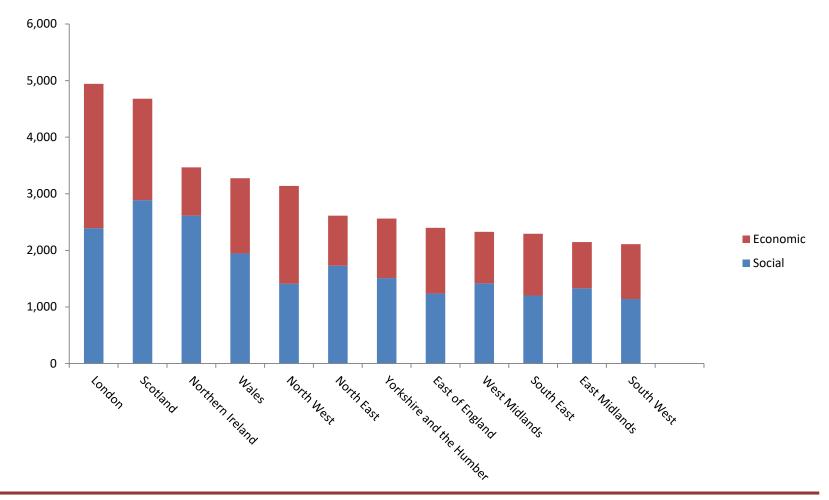
£ per head, 2011-12 to 2015-16, excludes spending incurred for UK as a whole





Public Spending on Infrastructure by Country and Region

£ per head, 2011-12 to 2015-16, excludes spending incurred for UK as a whole





Policy Conclusions

- Persistent and chronic productivity (supply-sides) failures regional and national
- Although recessions might act to re-allocate factors to new more productive industries credit markets and low levels of demand may have hampered reallocation
- But there are also substantial differences across firms, regions and sectors with factors such as FDI, house prices seeming to be associated with infrastructure failures
- Indeed. many high growth industries 1998-2007 are no longer supporting aggregate productivity growth, in particular financial services, telecommunications and some manufacturing industries – suggesting infrastructure shortfalls
- The interaction of subdued demand and the banking system in a period of retrenchment and reform may be creating hard constraints on credit availability that limit firm-level dynamism.



Things Fall Apart

Turning and turning in the widening gyre

The falcon cannot hear the falconer;

Things fall apart; the centre cannot hold;

Mere anarchy is loosed upon the world.

W. B. Yeats, 1920, The Second Coming

