

Britain's Spatially Unbalanced Economy, the National Productivity Problem and the Predicament of Northern Cities

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**'Structural Transformation, Adaptability and City Economic Evolution'
An ESRC-Funded Project (ES/N0006135/1), University of Cambridge, UK**

The Spatially Unbalanced Economy

“Our economy has become more and more unbalanced... Today our economy is heavily reliant on just a few industries and a few regions – particularly London and the South East. An economy with such a narrow foundation for growth is fundamentally unstable and wasteful” (David Cameron, 2010).

“For years, our prosperity has been pinned on financial wizardry in London’s Square Mile, with other sectors and other regions left behind. That imbalance left us hugely exposed when the banking crisis hit. It is time to correct that imbalance. We need to spread growth across the whole country and across all sectors” (Nick Clegg, 2010).

The National Productivity Problem

“Productivity is the challenge of our time...The UK has a long-term productivity problem, which has been made worse by the financial crisis... The gap in labour productivity between the UK’s two largest city economies, London and Manchester, is larger than in any other G7 country and more than double that in both Germany and Japan. A dynamic economy needs thriving cities”. (**UK Treasury, 2015**)

“Productivity isn't everything, but in the long run it is almost everything”. (**Paul Krugman, 1994**).

A City Perspective

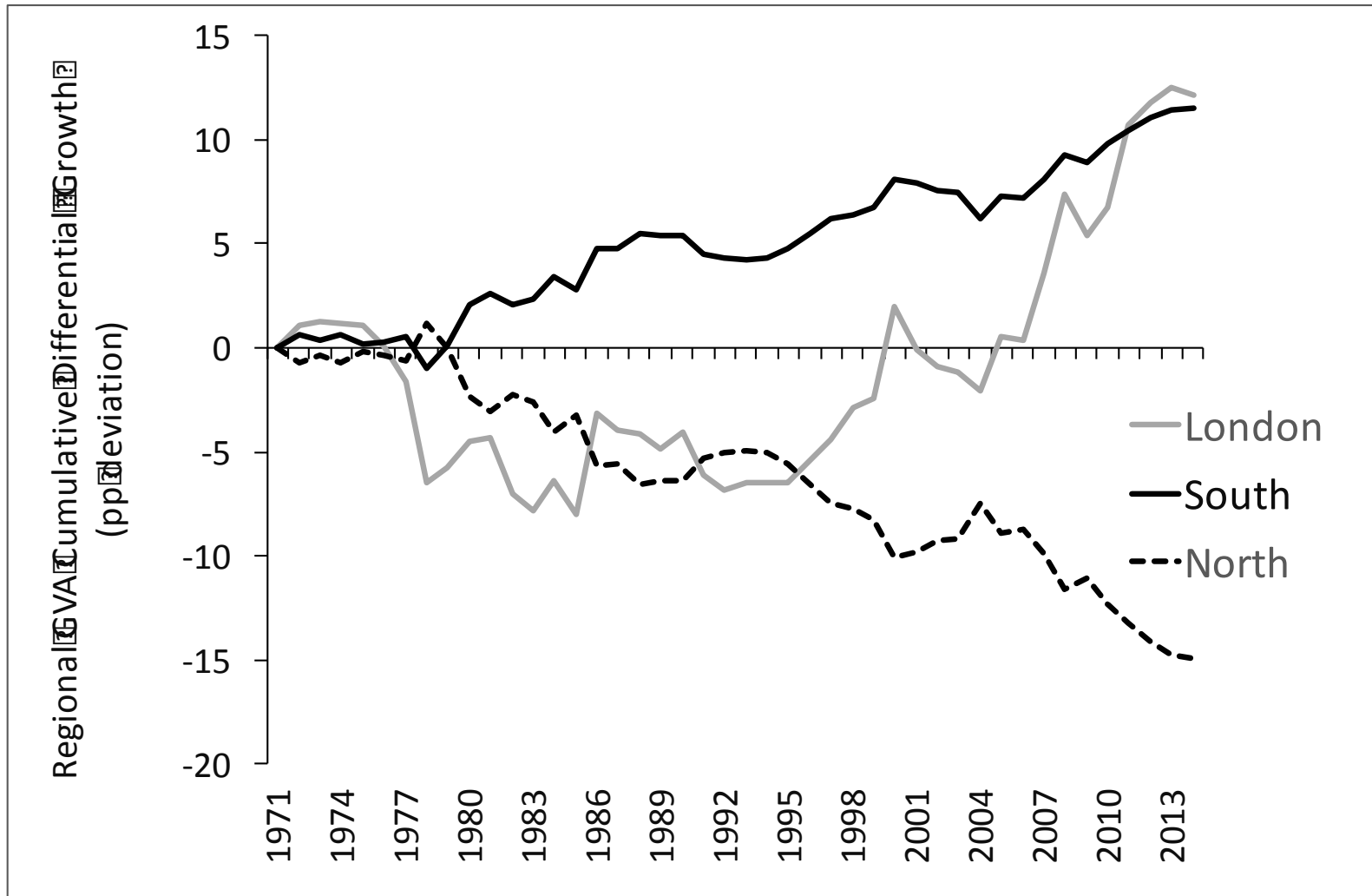
- No officially produced regular data on city economies in UK, despite key significance now assigned to cities in Government policy
- Our ESRC project - constructed new unique yearly data set on 85 British cities over 1971-2014
- Employment, gross value added (GVA), and GVA per employed worker (labour productivity)
- For 45, 82 and 249 (from 1981) sectors for each city
- Cities defined as travel-to-work areas (2011 boundaries)
- Also data series for each city on 25 occupations, patents, and firm demographics

The Spatially Unbalanced Economy, 1861-2014

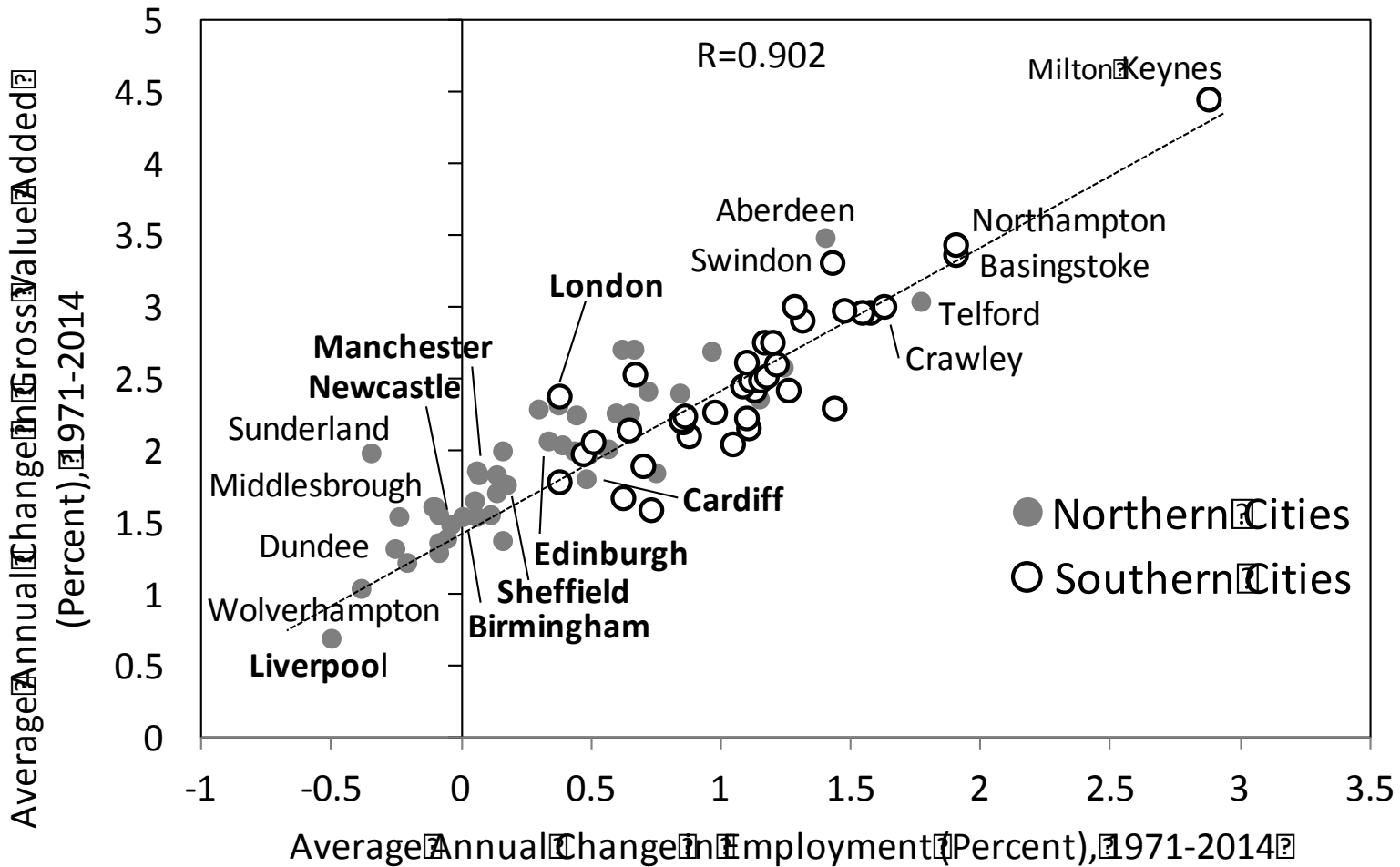
	1861	1901	1931	1971	1991	2014
	GDP per hd, GB=100			GVA per hd, UK=100		
London	157.0	134.2	144.3	153.3	163.0	174.3
South East	124.8	107.0	114.0	105.7	107.1	109.4
East Anglia/East of England	89.7	83.7	82.7	103.8	98.1	92.9
South West	102.5	91.7	92.3	90.9	92.0	89.3
East Midlands	93.6	92.4	86.6	80.7	84.7	82.3
West Midlands	103.6	86.0	95.7	96.4	90.0	83.4
Yorks-Humberside	104.5	88.3	86.4	80.8	84.6	80.2
North West	109.0	103.7	88.6	93.9	85.0	85.3
North/North East	87.6	85.8	81.1	75.3	75.8	73.5
Wales	94.7	80.3	81.1	78.5	75.3	72.0
Scotland	97.6	90.5	94.3	92.2	103.1	94.6
Northern Ireland				80.1	77.8	76.3
<i>Coefficient of Variation, (%)</i>	<i>19.2</i>	<i>16.9</i>	<i>22.6</i>	<i>21.0</i>	<i>23.8</i>	<i>27.7</i>

Source: Geary and Stark (2015, 2016), ONS

The Cumulative Output Growth Gap between the South and North of the UK, 1971-2014



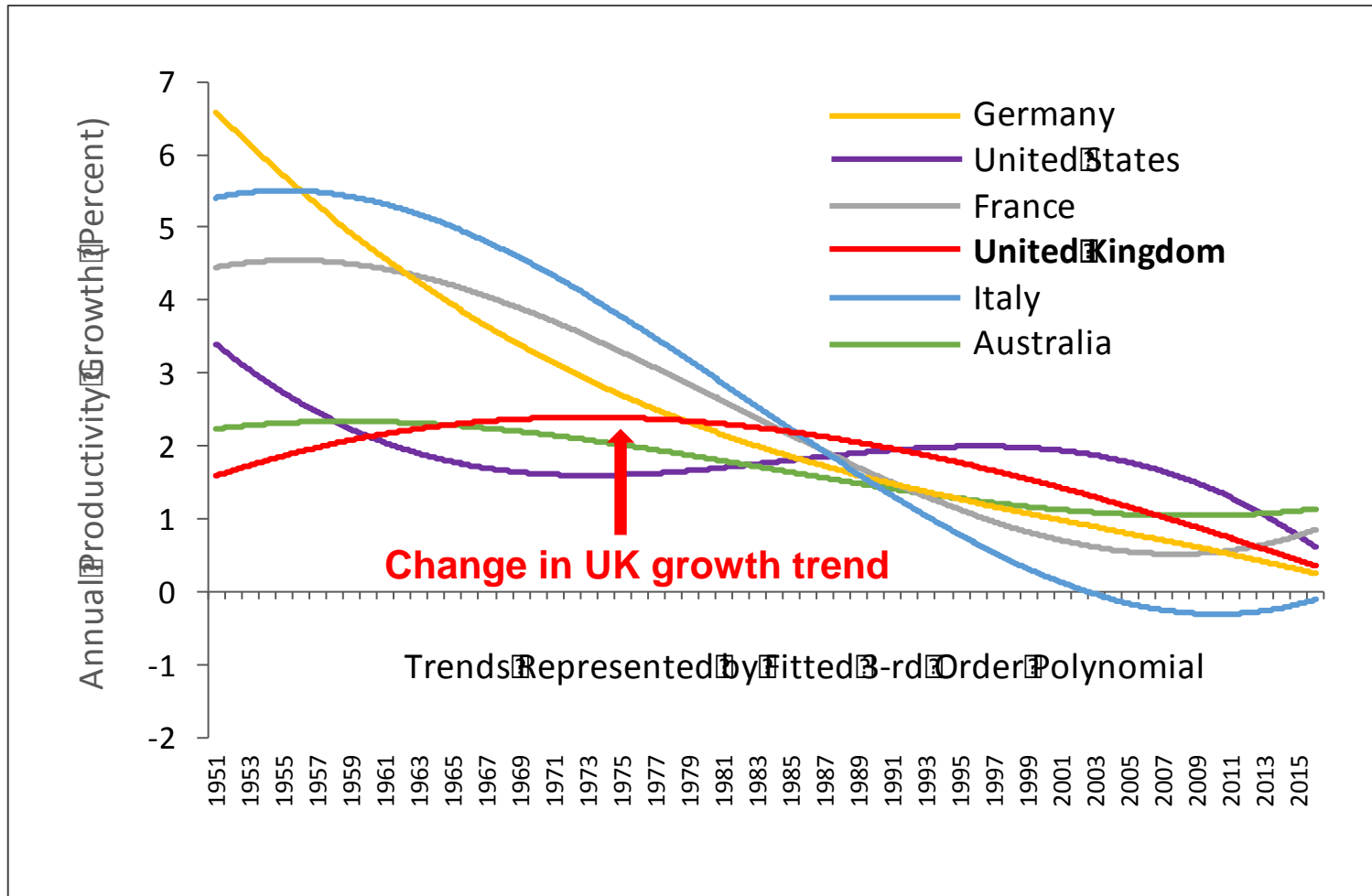
The North-South Gap in City Growth, (Employment and GVA) 1971-2014



Source of data: Martin et al (2016, 2017)

The Productivity Problem

Annual Growth Rate of Labour Productivity: UK and other OECD Economies, 1951-2016

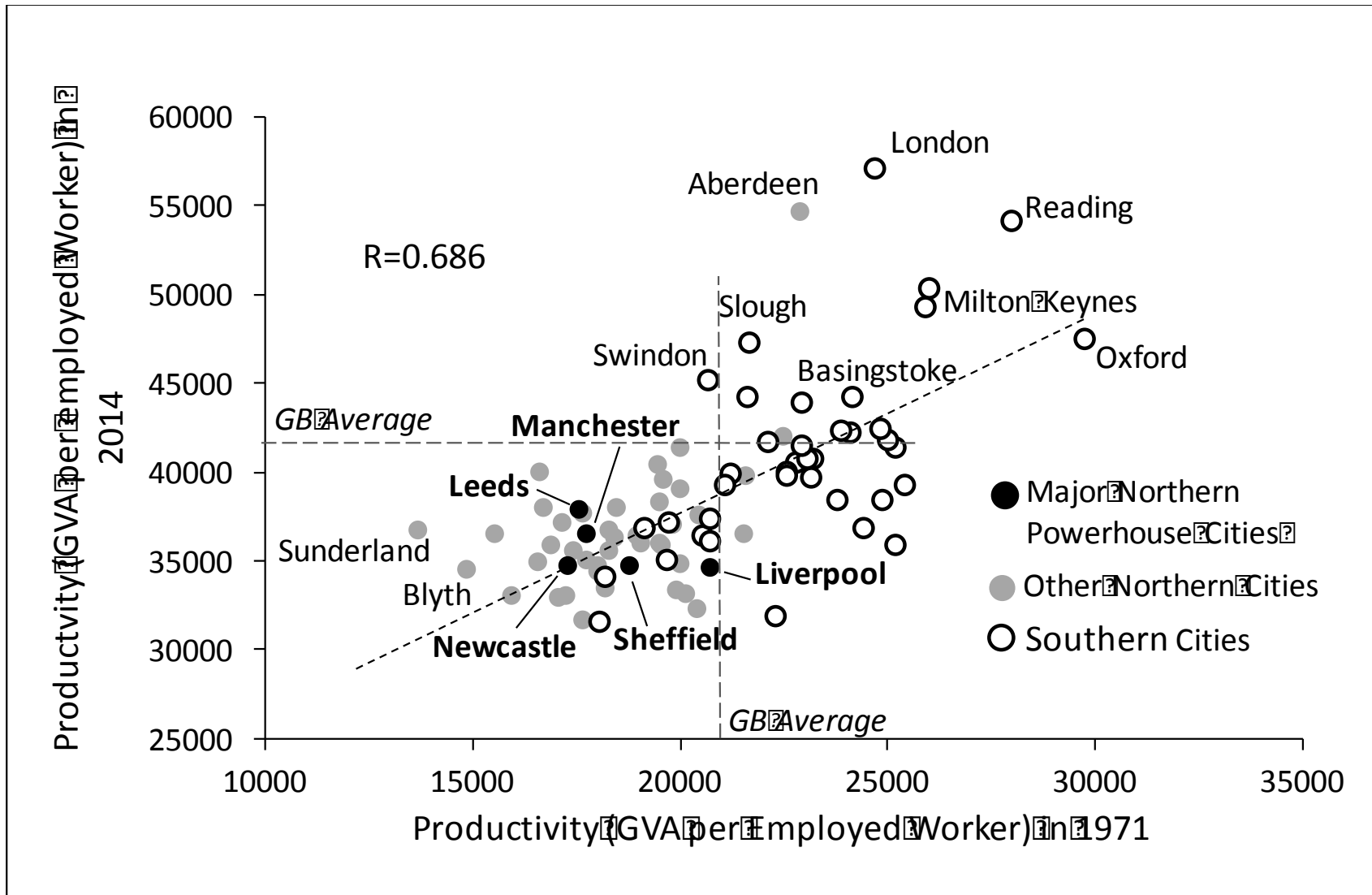


Source: Conference Board Total Data Base (Productivity converted to 2015 US\$, 2011 PPP)
(See also Carmody, 2013)

The National Productivity Problem

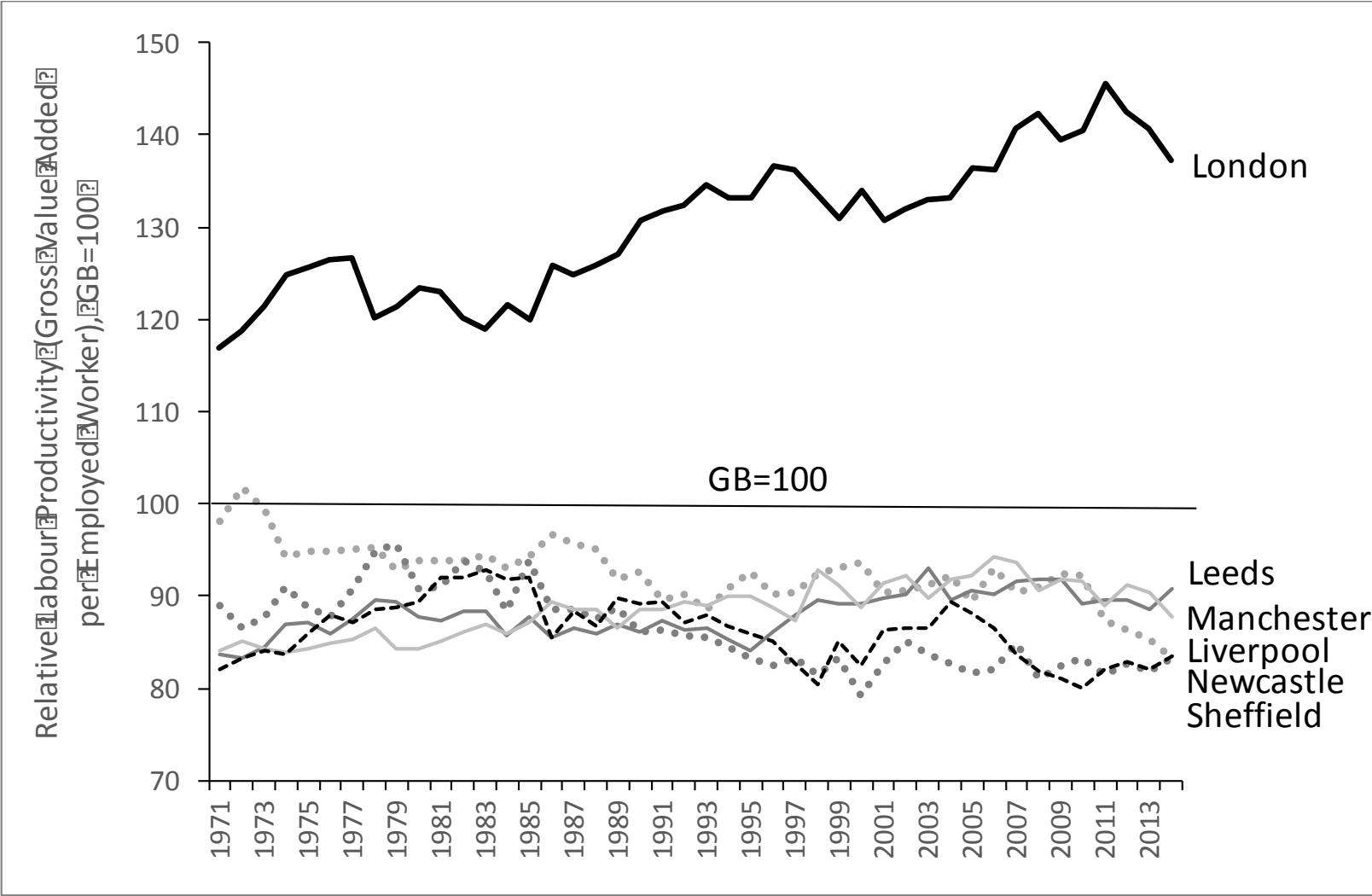
- Debate over causes:
 - Technological advances don't show up in measures of productivity (the 'Solow Paradox' – Triplett, 1999; Crafts, 2002)
 - Innovation has stalled (Cowen ,2016; Gordon, 2016)
 - Fall in business dynamism (European Central Bank, 2016)
 - Over-regulation of product and labour markets (Conway and Nicoletti, 2017)
 - Shift to services-based post-industrial economy (Baumol et al 1985; Williamson, 1991, Kim, 2006)
 - Slowness in modernising infrastructures
- But in UK, also a strong urban/regional dimension – low productivity a particular problem of northern cities

Labour Productivity across 85 British Cities, 1971 and 2014



Source of data: (Martin et al, 2016, 2017)

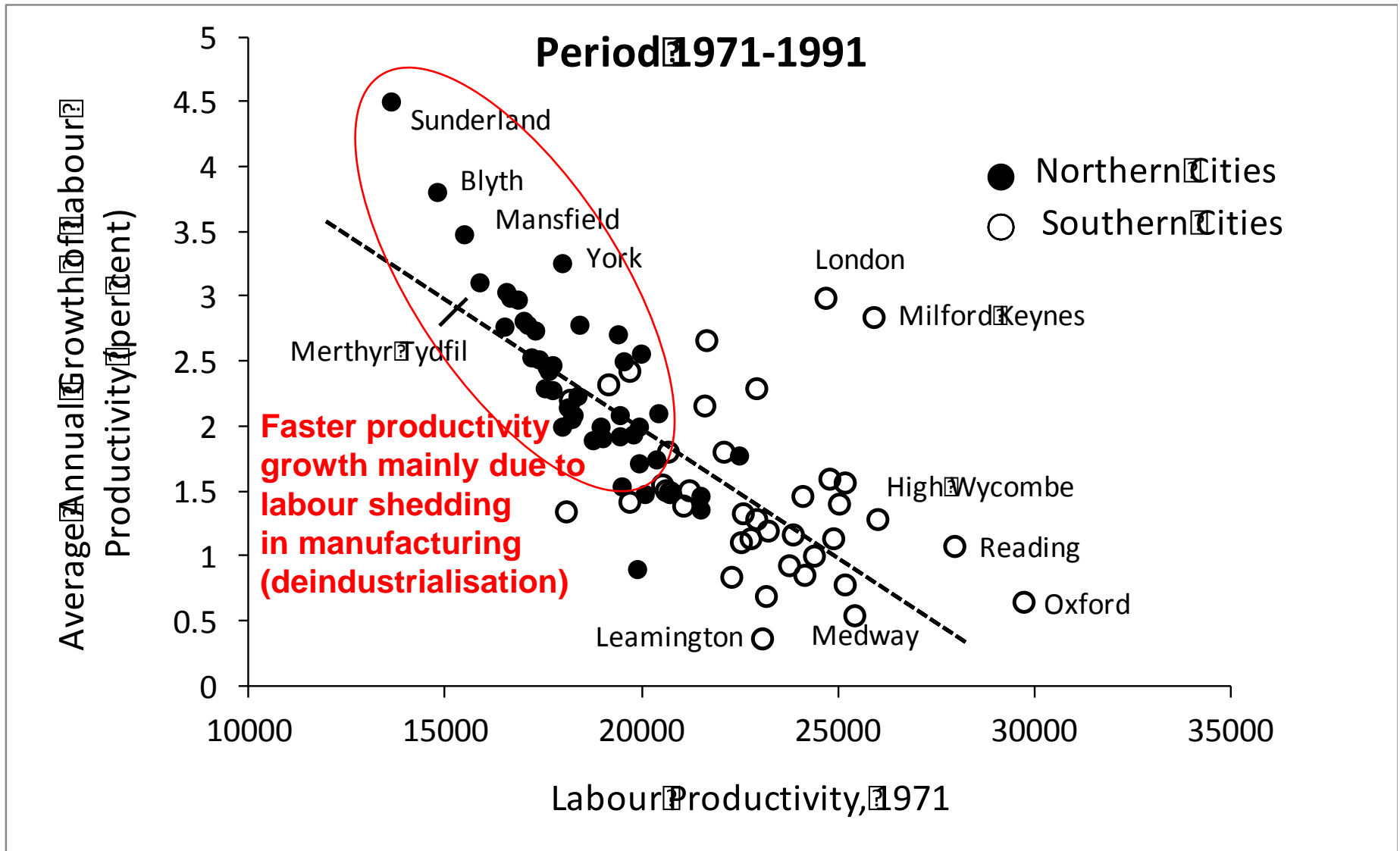
Labour Productivity in London and Major Northern Powerhouse Cities, 1971-2014 (GB=100)



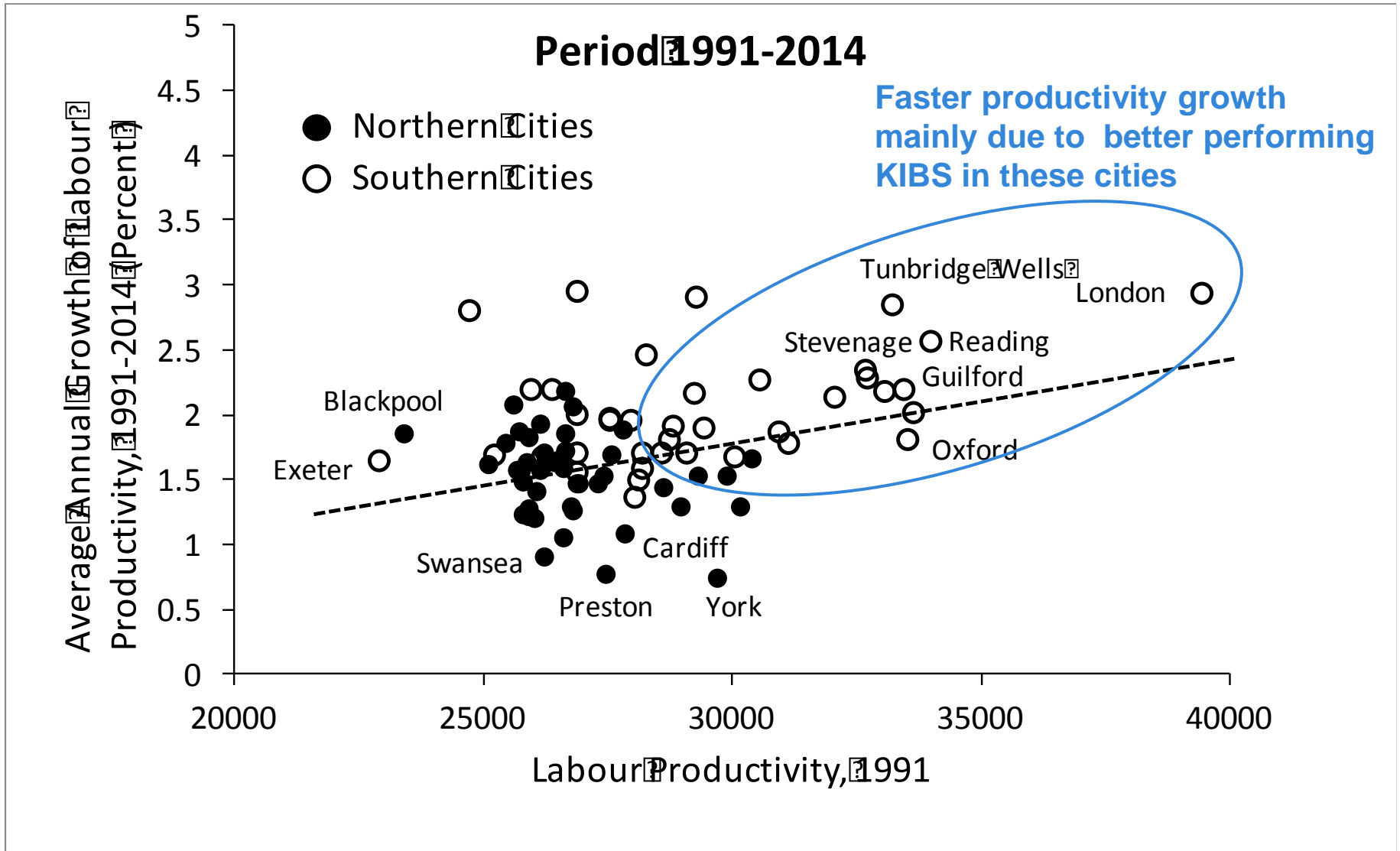
The Productivity of British Cities

- Although persistence of city disparities in productivity over time (correlation between 1971 and 2014 of $R=0.686$),
- Growth over two subperiods, 1971-1991 and 1991-2014 suggests a change in dynamics occurred around 1990
- Convergence over 1971-1991 (Higher productivity growth rates in Northern cities – productivity catching up with Southern cities)
- But divergence over 1991-2014 (Southern cities grew faster – productivity pulling ahead of Northern cities)

Northern Cities grow faster in Productivity, 1971-1991



Southern Cities grow faster in Productivity, 1991-2014



The Geographical Switch in Productivity Growth across British Cities

Labour Productivity Growth in Northern and Southern Cities (Average Annual Growth, percent per annum)
1971-1991 and 1991-2014

	1971-1991	1991-2014
Southern Cities	1.84	2.05
Northern Cities	2.28	1.51
London	2.99	1.95
Manchester	2.45	1.63
Great Britain	2.08	1.69

Why have Northern Cities and Regions Lagged in Growth and Productivity?

- Various explanations advanced:
- **Economic Structure** - northern cities have lost former specialisations or export base and failed to develop new ones
- **Agglomeration** - northern cities lack sufficient 'mass' to generate positive externalities and increasing returns effects that raise productivity
- **Intra-regional Connectivity** – poor transport infrastructure between northern cities prevents them functioning as a large, regionally-integrated labour and product market system

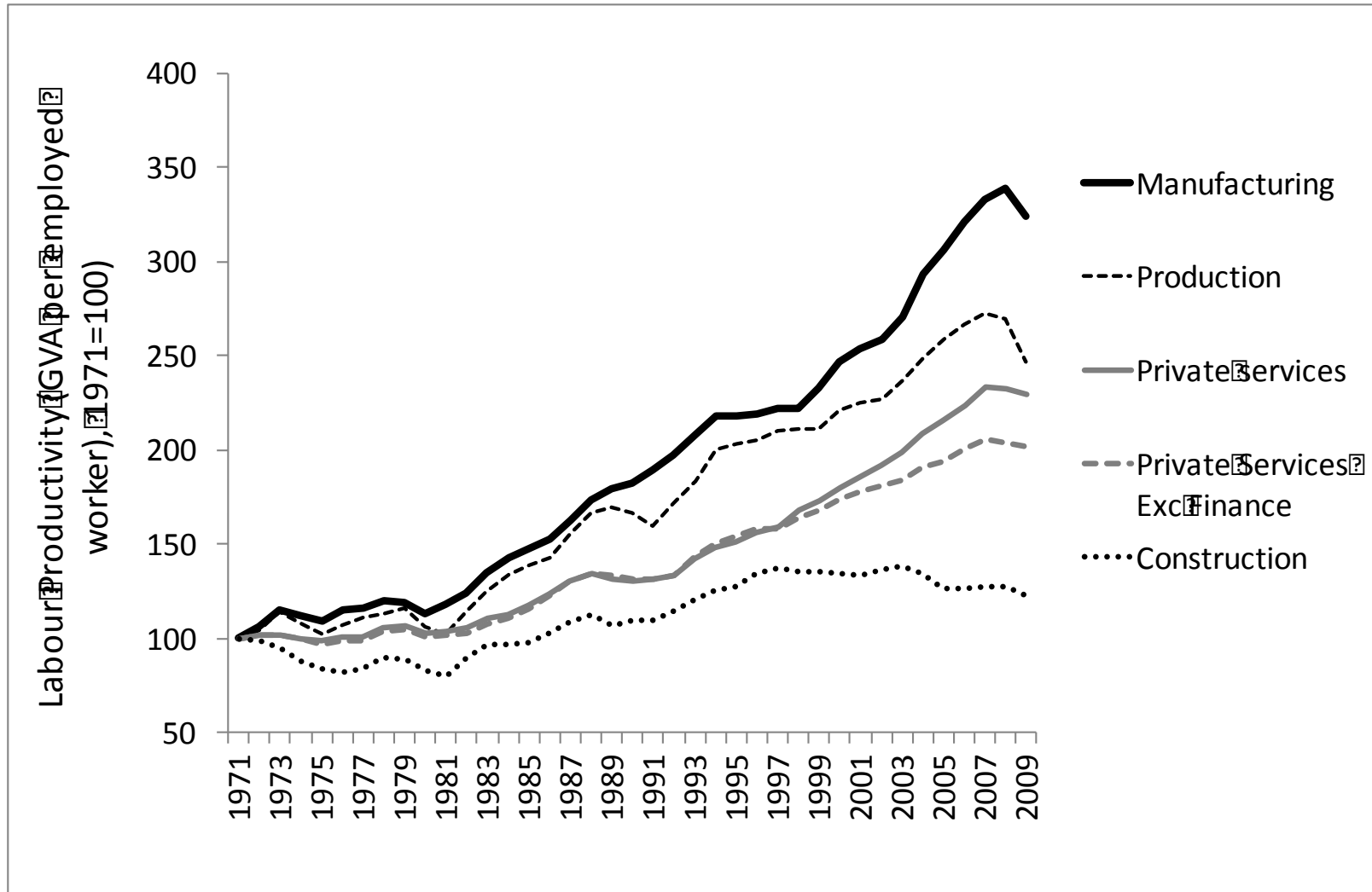
Why have Northern Cities and Regions Lagged in Growth and Productivity?

- **Innovation** – northern cities tend to have lower patenting and innovation rates than southern cities
- **Human Capital** - northern cities lack large pools of higher educated and skilled labour, which has tended to migrate to South and London (especially graduates)
- **Governance** – northern cities and regions have suffered from **an overly centralised state and economic governance system based in London**, which has skewed public spending and macro-economic policy toward London and South

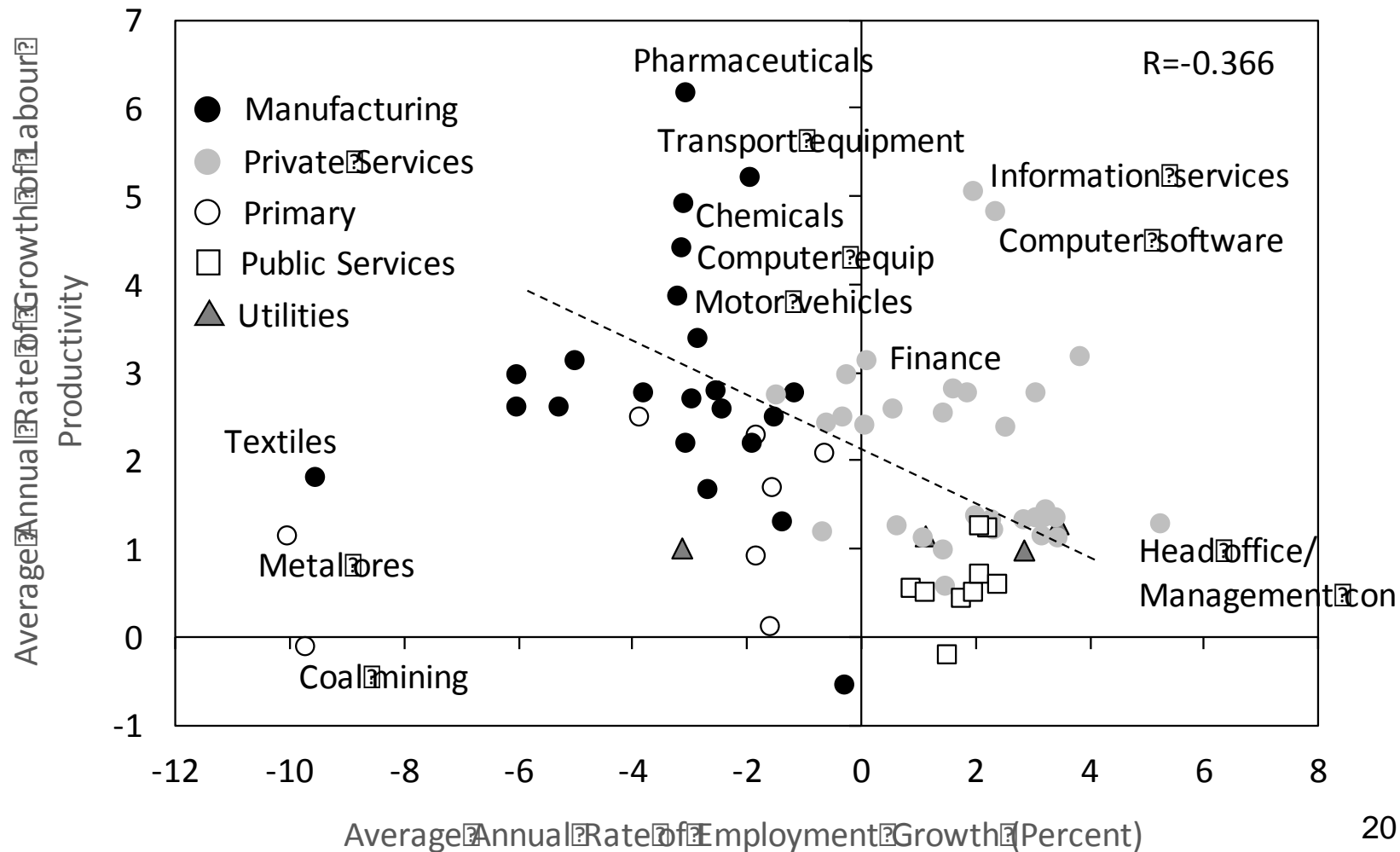
What about Structure?

- Much is made in regional studies literature about key role of economic structure
- Most cities have become **less** specialised over past 40 years – convergence of economic structures
- Manufacturing generally has highest productivity growth, but Northern cities have lost their former manufacturing tradable (export) specialisms
- So has London, but...
- London has replaced it with high-value professional, business and technology related KIBS, while northern cities have lagged in this respect (and have more lower-value services)

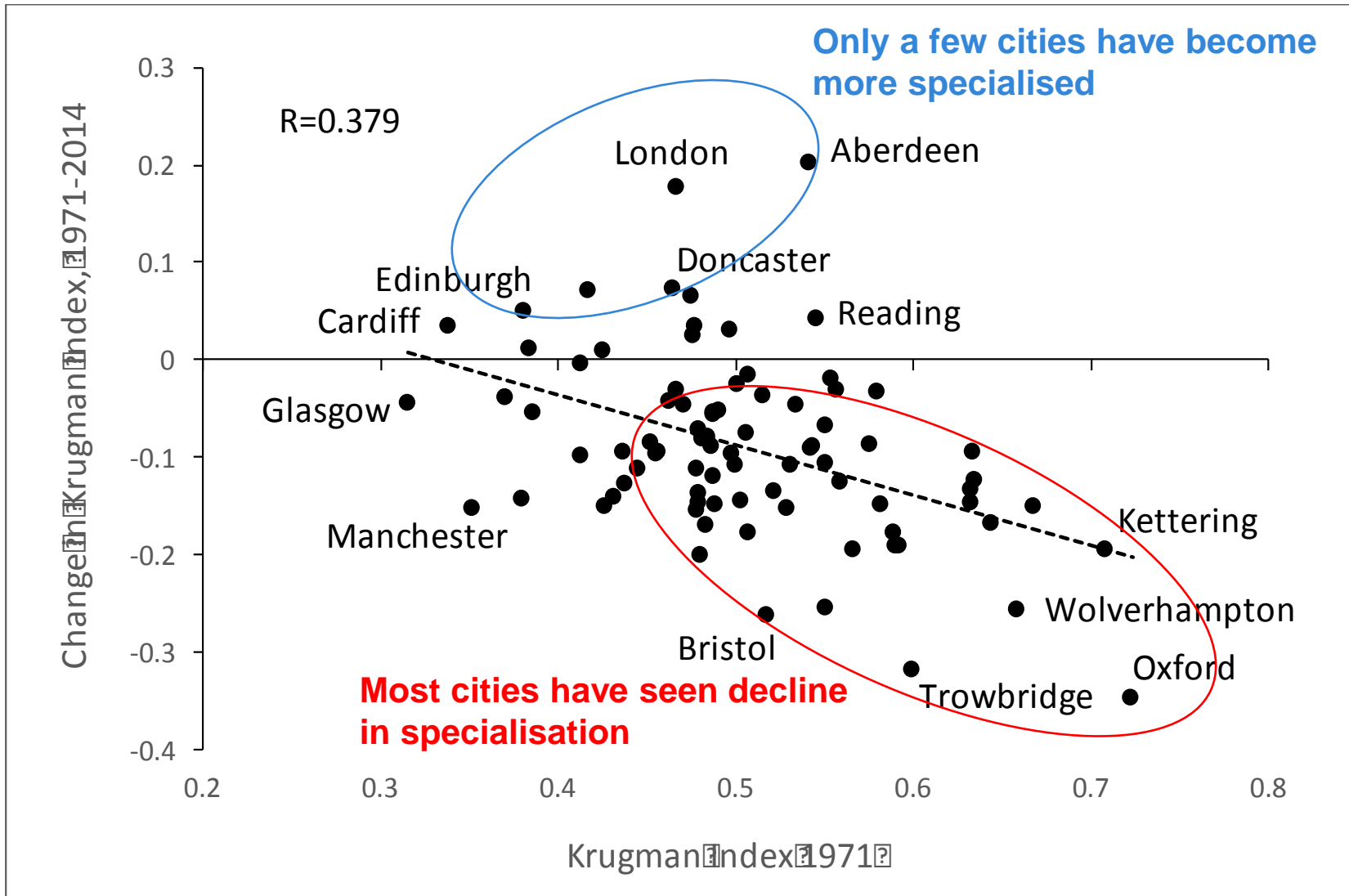
Labour Productivity in Selected Sectors of UK Economy, 1971-2009



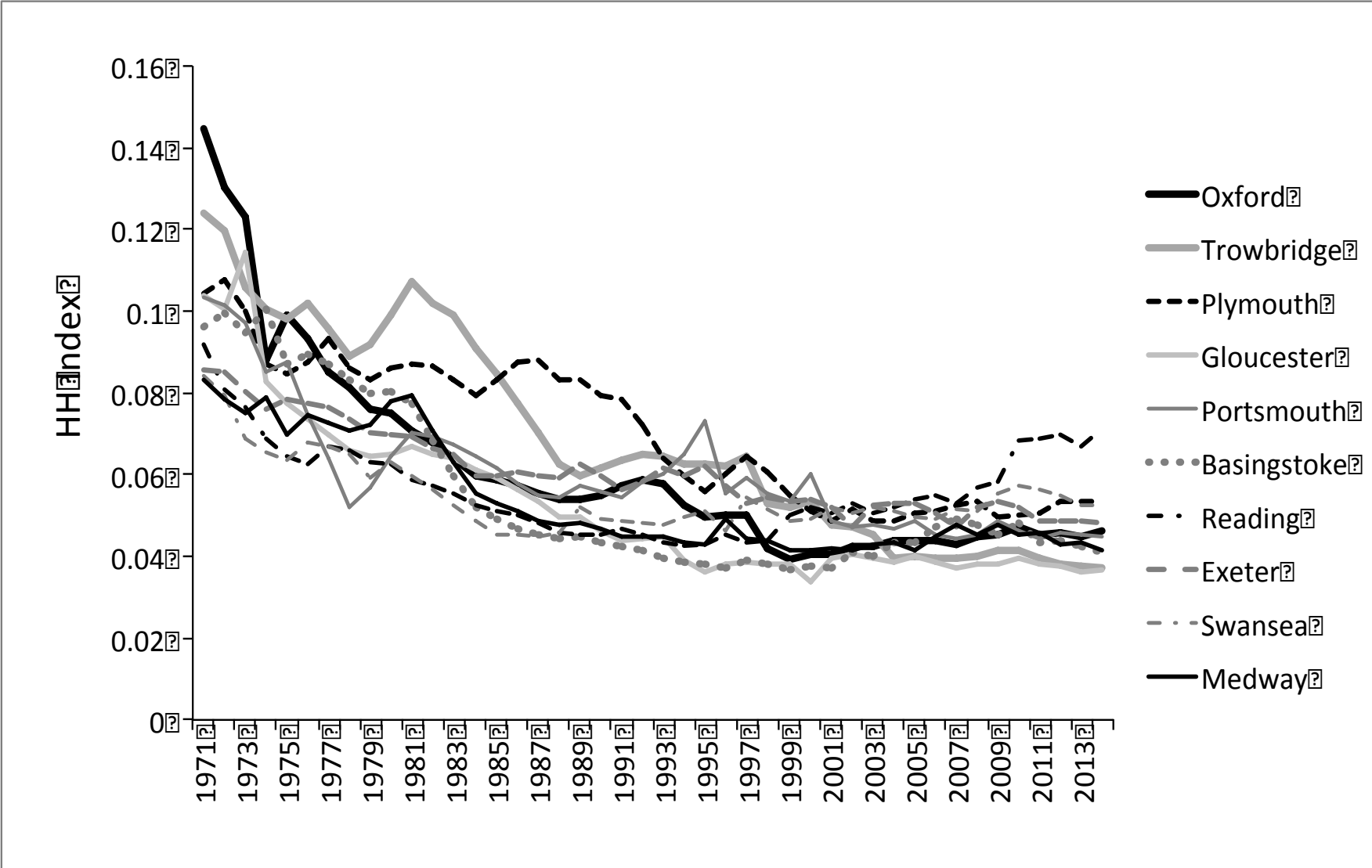
Much Employment Growth has been in Low Productivity Services, 1971-2014



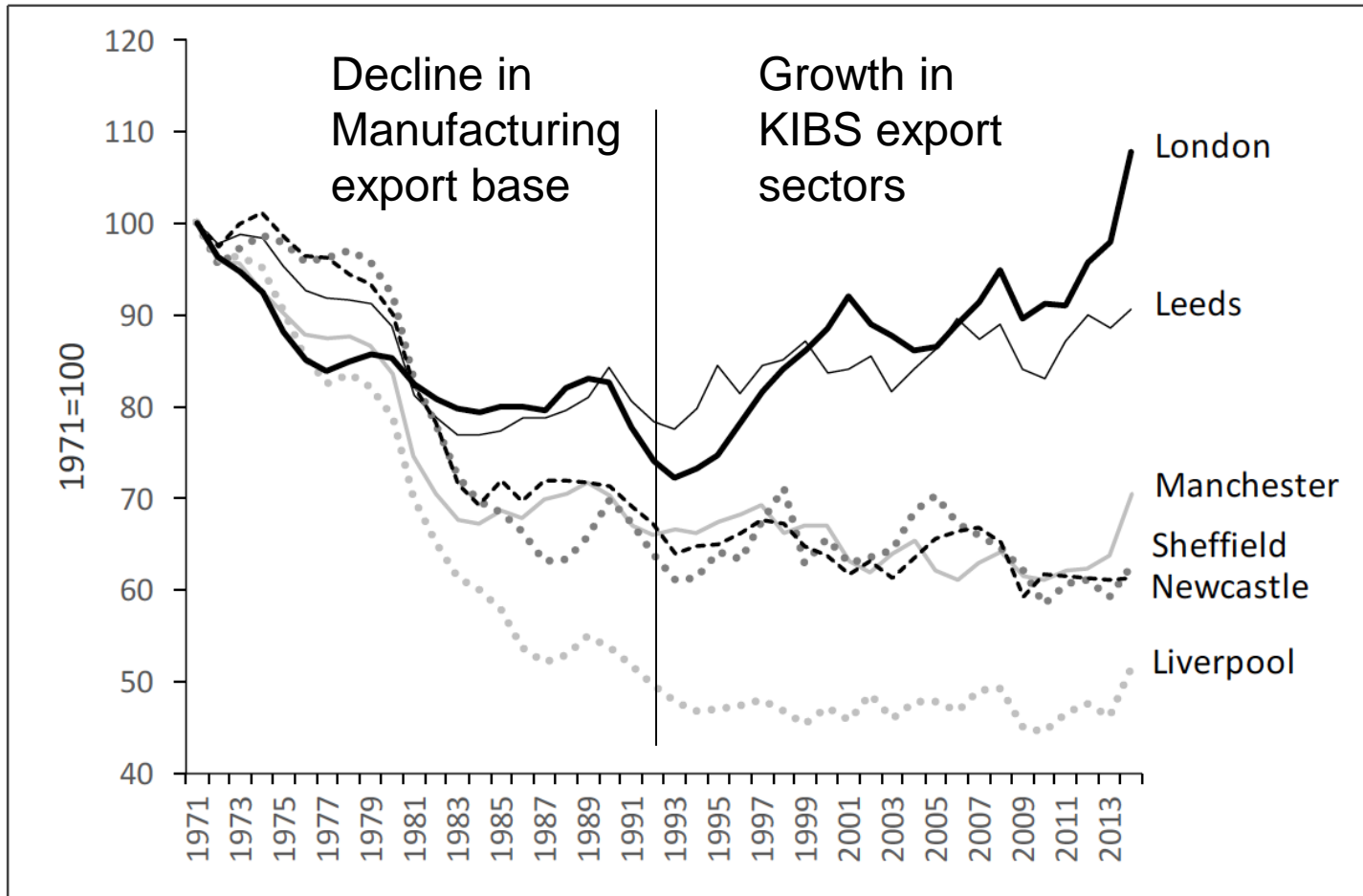
Sectoral Convergence in Output Structures across Cities, Krugman Index, 1971-2014



Decline in Output Specialisation (Herfindahl-Hirschman Index): Selected Cities, 1971-2014



Export Base Employment in London and Major Northern Cities, 1971-2014 (1971=100)

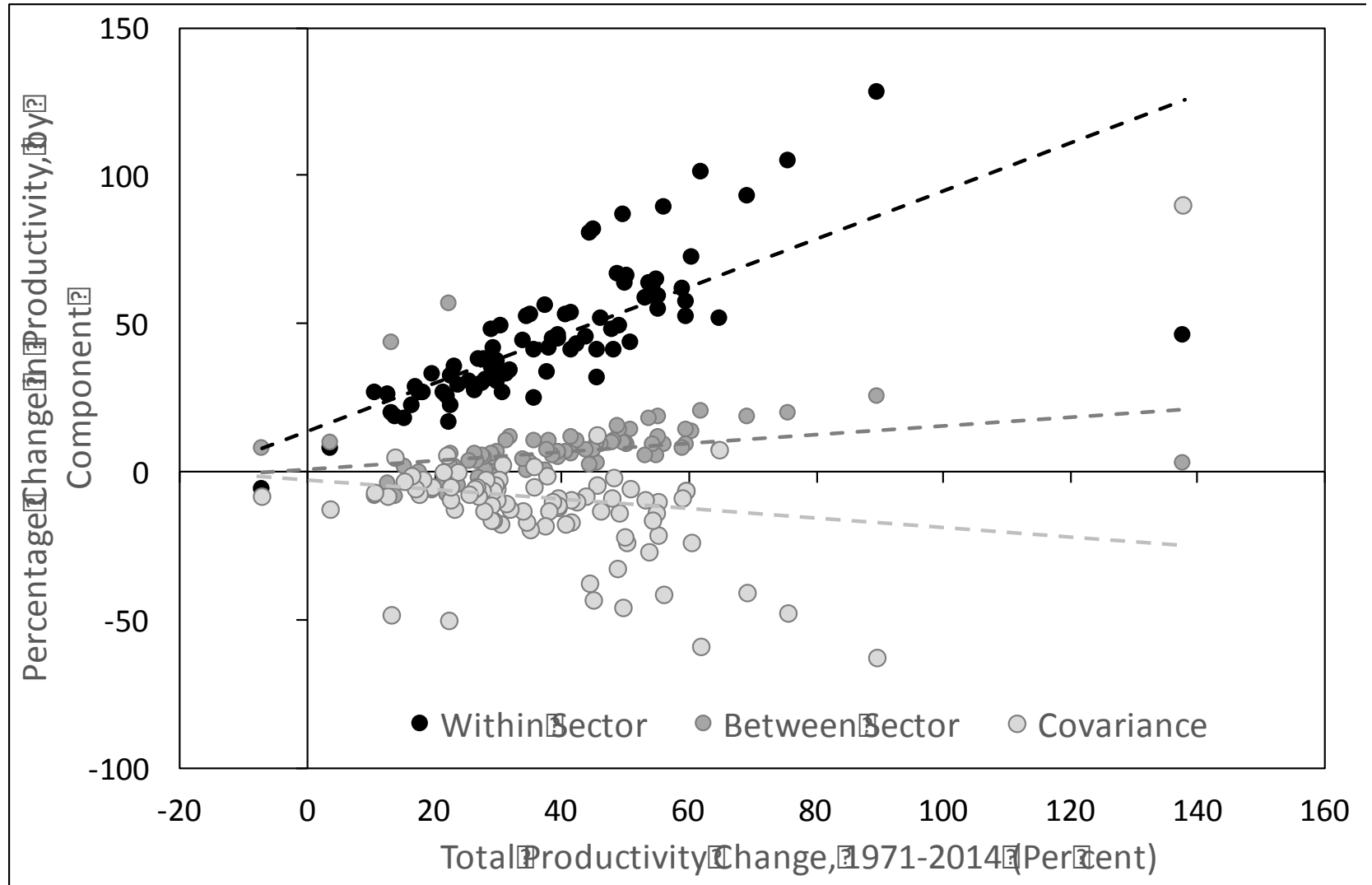


Source of data: Martin et al (2016, 2017)

Structural Change and City Productivity Growth

- City productivity growth can be decomposed into three components:
 - **Within-sector** growth (firm dynamics)
 - **Between-sector** growth (shifts into higher or lower productivity sectors)
 - **Interaction** (covariance) of Within and Between effects
- Results indicate that **within-sector effects have dominated** –
- Same sector performs differently across cities: suggests city ‘competitiveness’ factors important

Decomposition of City Labour Productivity 1971-2014



Agglomeration and Connectivity

- Agglomeration per se not a key determinant: apart from London, largest cities do **not** have highest productivity
- Also, it has been smaller cities that have experienced fastest growth
- Estimates of elasticity of productivity levels with agglomeration (size and density) are small (doubling size of city only raises productivity 4-8%)
- What is more relevant is connectivity between cities – helps to create a region-wide polycentric travel to work system, enhances region-wide inter-firm supply-demand chains, knowledge spillovers, etc

Human Capital

- Initial analysis suggests skill and occupational mix do explain some of differences in productivity and productivity growth across cities (similar findings in US – eg Moretti, 2013)
- Occupational ‘bundles’ (related occupations) appear important (more so than sectoral structure)
- Partly inherited from previous development path, influence scope for upgrading economy and branching into new activities
- Cities with favourable skill mix tend to attract other high skilled labour
- Local retention and attraction of highly qualified workers a key driver of city productivity growth

The Policy Challenge

- Spatial economic imbalance in UK is a deeply entrenched and multi-faceted problem – not been fixed by 90 years of regional policy
- Raising productivity and growth performance of northern cities not straightforward, with no easy quick fix
- Will require well-grounded evidence-based and properly-resourced strategies, and close collaboration between local policy bodies, local business community and national government
- Are current Government initiatives, including regional Devolution Deals and new Industrial Strategy up to the task? – unlikely

The Policy Challenge

- ‘Place’ relegated to ‘tenth pillar’ in the Industrial Strategy Green Paper, whereas should be the central foundation; ‘places’ are the arenas where policies should be integrated and harmonised
- City-Regional Devolution Deals add yet another layer to an already chaotic spatial patchwork of local economic governance arrangements (LAs, LEPs, EZs, City Deals, etc)
- Simplified **nation-wide** (federated) system of regional economic-industrial development bodies, with large-scale devolved resources, needed

The Policy Challenge

- At same time macro-economic policy making needs to be spatialised
- Macro-economic policies (frequently biased by a London-centric view of the 'national' economy) often work against the regions
- Regional problems, priorities and potentials should explicitly inform formulation and implementation of central fiscal, monetary and other policies
- National policies should be designed to have maximum 'spatial rebalancing' impact
- All this requires an historic shift in economic policy-thinking and policy structures (and in economic theories that influence policy-making!)