



Ministry of Housing,  
Communities &  
Local Government

# The Economics of National and Local Growth

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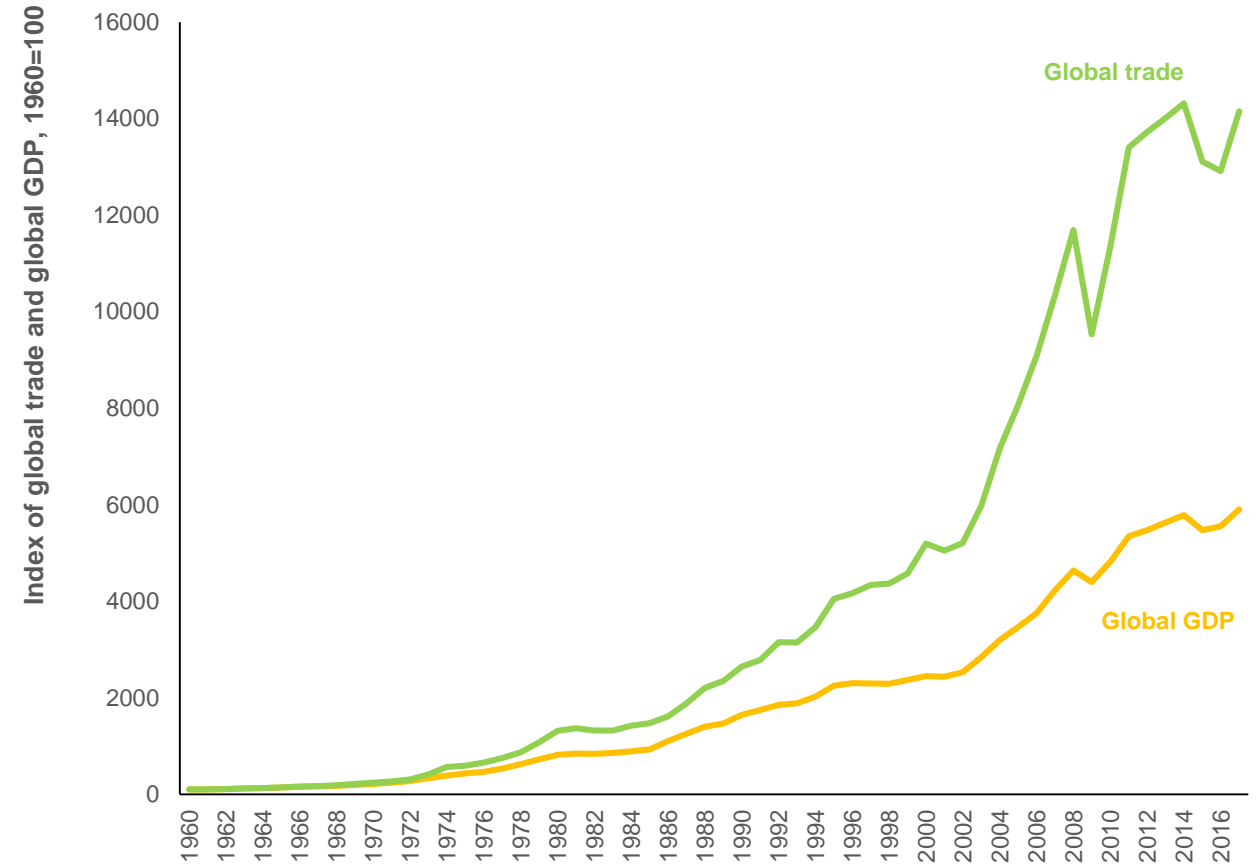
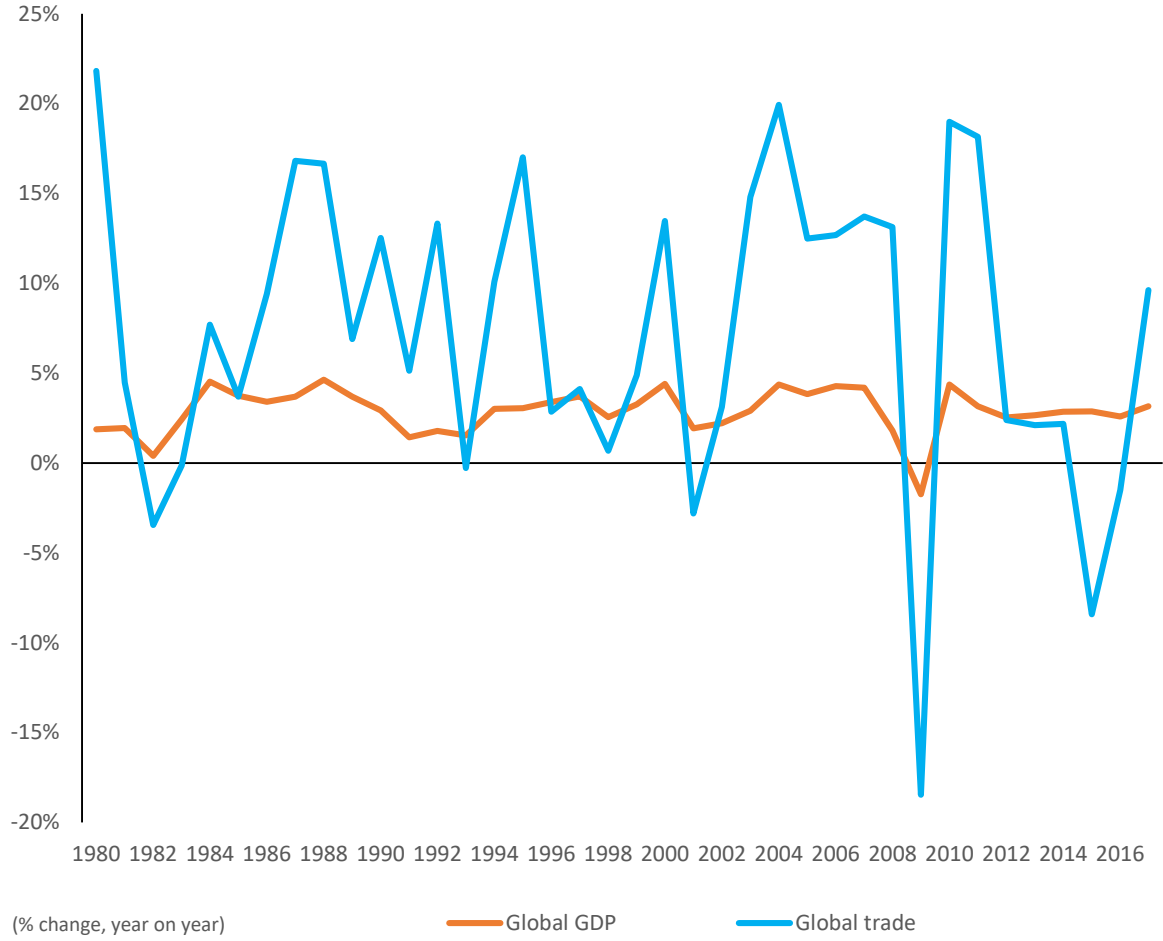


## The purpose of this presentation is...

- To review the current global and UK economic outlook.
- To set out the overriding importance of productivity as the key driver of economic prosperity.
- To review the trends in productivity performance in the UK, before and after the financial crash and in different parts of the country.
- To summarise the evidence on the key drivers of productivity performance.
- To draw out the implications for policy and those delivering local economic growth.



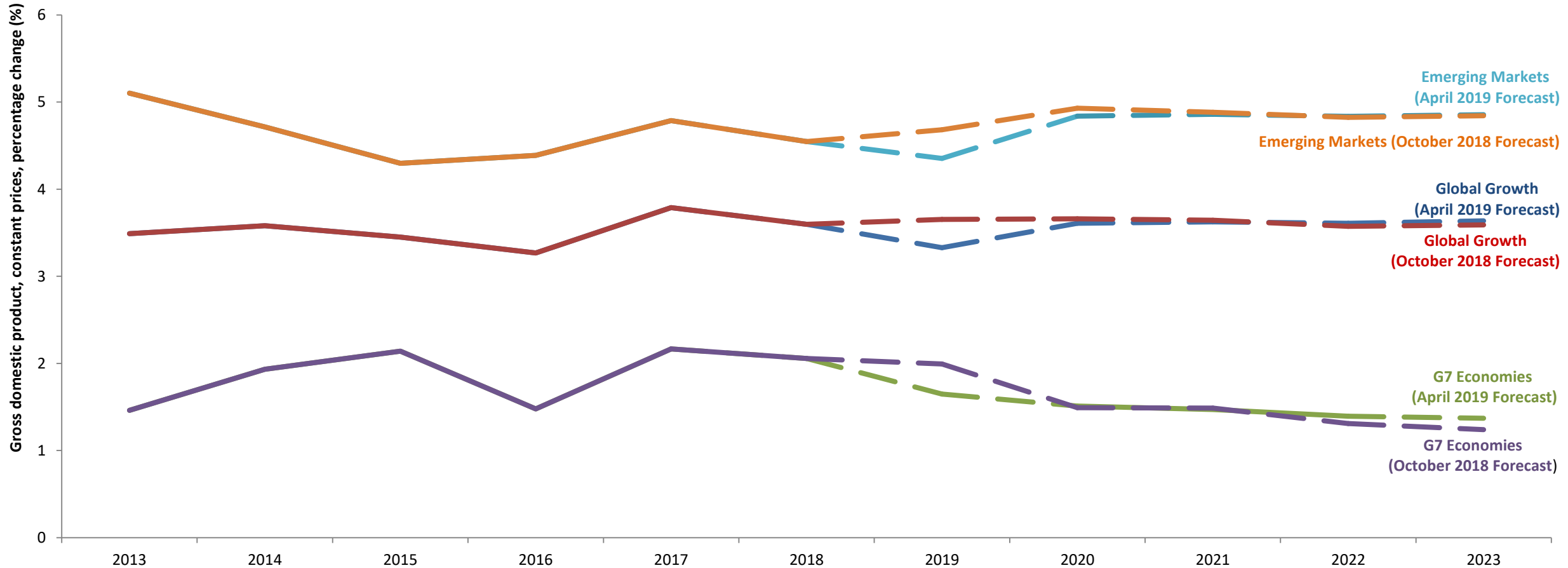
Over the 25 years to the financial crash, global GDP grew by a yearly average of 3.2% and global trade grew even faster – by around 9.3% per year in real terms



However, since the financial crash real global growth has slowed to a yearly average of 3.0%, whilst growth in global trade has slowed to 5.4% per year. As a share of global GDP, the value of world trade peaked at 60.8% in 2008 and has largely been declining since, with data for 2017 putting it at 57.9%.



# The International Monetary Fund's (IMF) latest forecasts suggest the economy will grow by 3.3% in 2019



The IMF expect that global growth will slow in 2019, following strong growth in 2017 and early 2018. It is expected that the weakness in the global economy experienced in the second half of 2018 will continue for the first half of 2019, before picking up modestly. The IMF base this upturn on increased fiscal stimulus in China, improved market sentiment and stabilising of conditions in stressed emerging markets such as Turkey and Argentina.

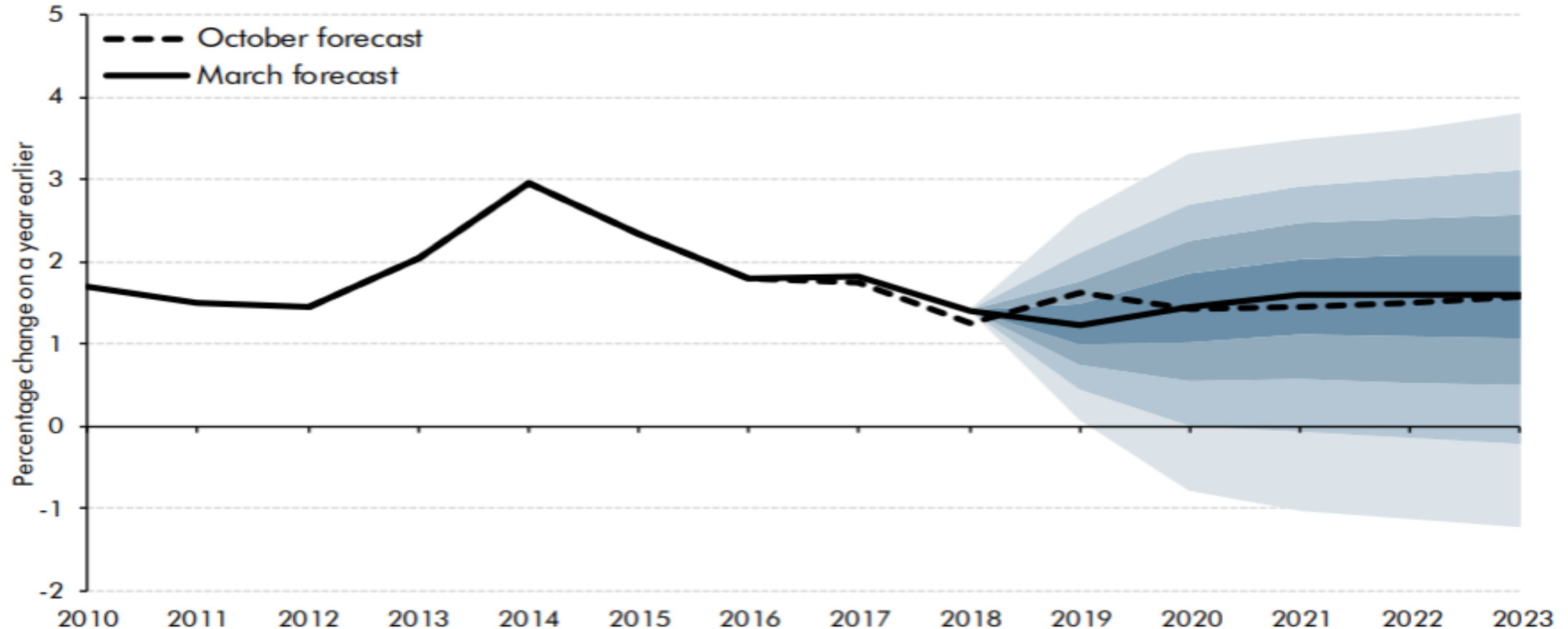


## There are a number of risks to the global economy that could further weaken global growth

- The latest IMF and other forecasts point to continued strong growth in the United States this year which is expected to slow in 2020. Weaker growth is also expected in the Euro Zone – particularly in Germany and Italy.
- There are a number of risks that could further weaken global growth:
  - An escalation of trade tensions between the US and China and protectionism more generally.
  - Uncertainty arising from economic imbalances within the Euro Zone, political and economic developments associated with the UK's exit from the EU and prolonged fiscal and possibly monetary uncertainty in Italy.
  - The continuing challenge for advanced economies created by weak productivity growth and ageing populations.
  - Over the medium term, climate change and social and political reactions to perceptions of rising inequalities.



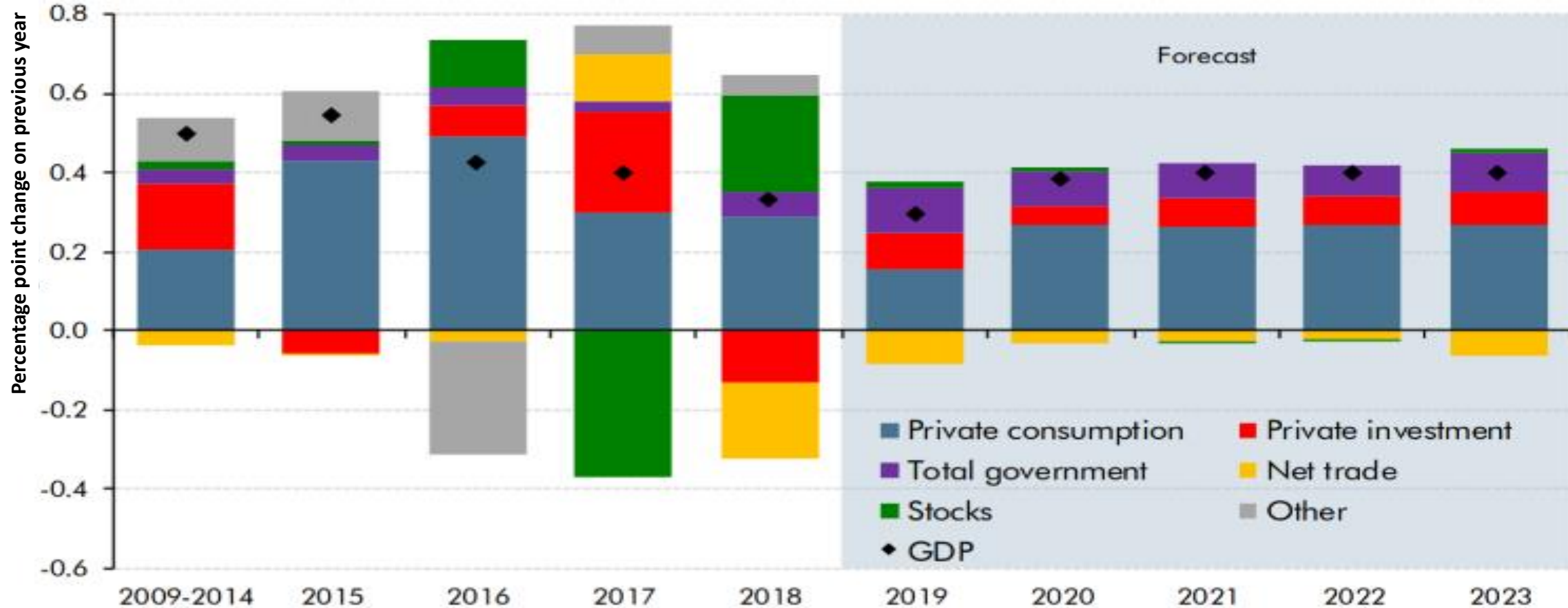
## Growth in the UK is expected to be subdued in the coming years, ranging from 1.2% per annum to 1.6% per annum up to 2023



The Office for Budget Responsibility (OBR) forecast a 20% chance that the economy will shrink in 2020 as well as a 20% chance that growth will exceed 2.5%, bringing it closer to its pre-crisis average. These forecasts (published in March 2019) assumed the UK would follow an orderly departure from the EU on 29<sup>th</sup> March in a transition period that would last until the end of 2020.



# Weak economic activity in 2019 is expected to result from reduced business investment and falling net trade



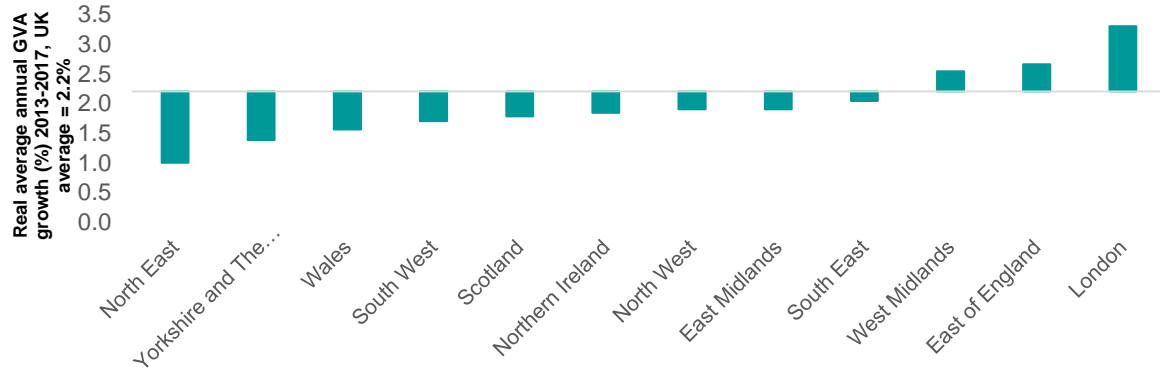
Note: 'Other' category includes the statistical discrepancy and the residual between GDP and the expenditure components prior to the base year (2016).

Business investment is expected to fall by 1.0% in 2019, a decline for a second successive year, the result of economic and political uncertainties. However the other component of private investment – residential investment – is expected to be positive.



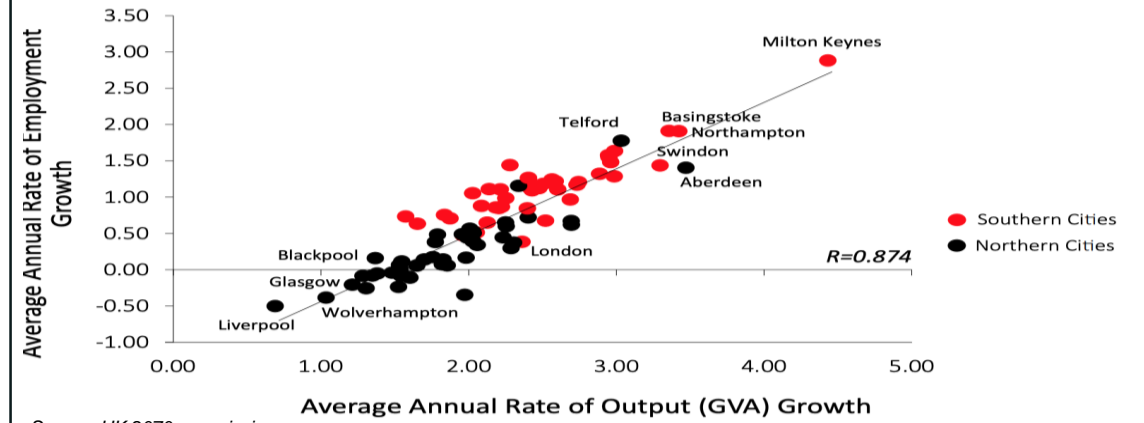
# Different parts of the UK are facing unique challenges

Whilst growth has been experienced across the UK over the past five years, it has been stronger in some regions



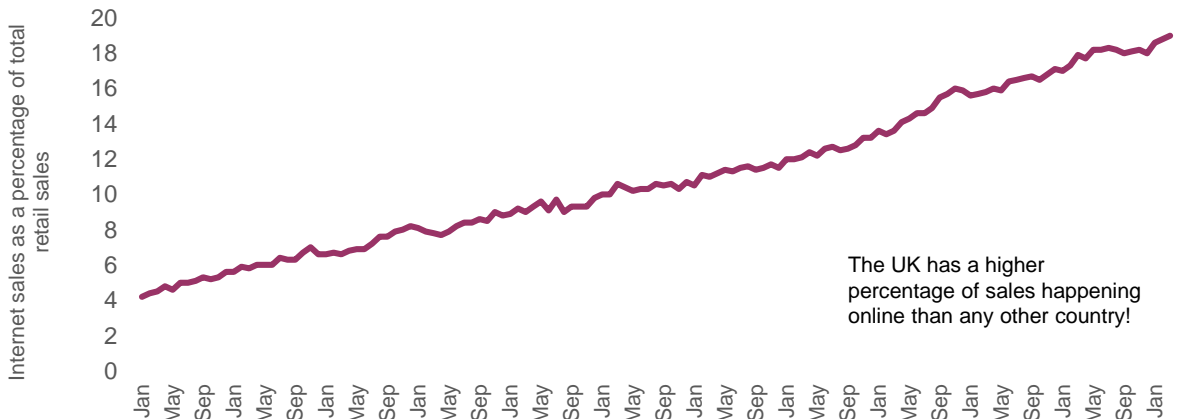
Source: ONS, 2018

Considering a longer period, 1971-2015, some UK cities have fallen behind the UK's employment and economic growth rate



Source: UK 2070 commission

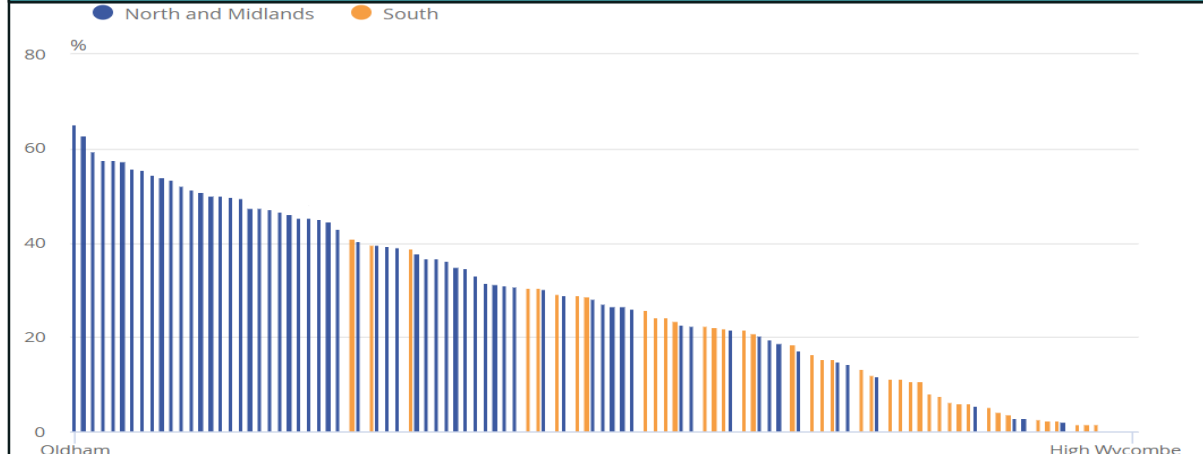
High streets in the UK are under pressure from changing patterns of shopping, with consumers increasingly choosing to shop online



The UK has a higher percentage of sales happening online than any other country!

Source: ONS

Towns and cities in northern England tend to have a greater share of local areas in the most deprived 20% nationally



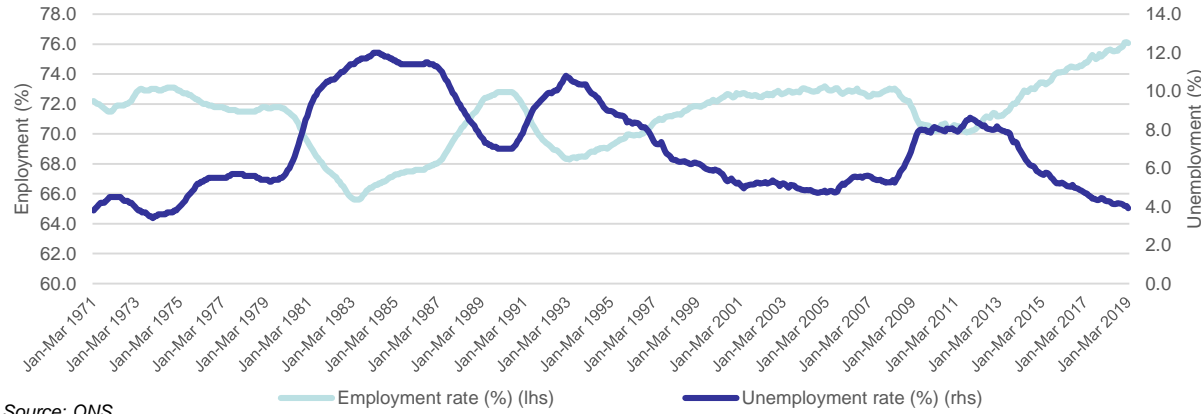
Source: MHCLG



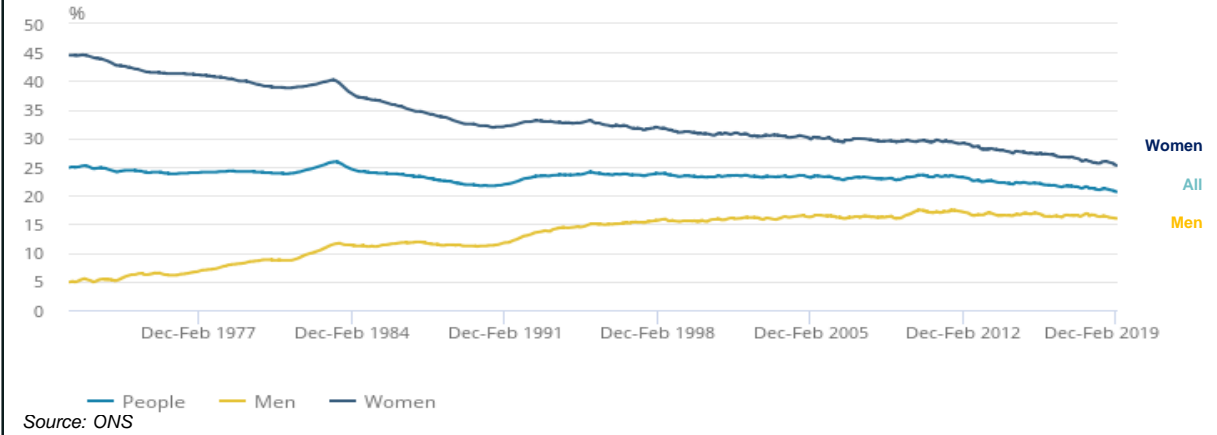


# However, the UK economy also has some considerable strengths – for example in creating jobs and getting people into work

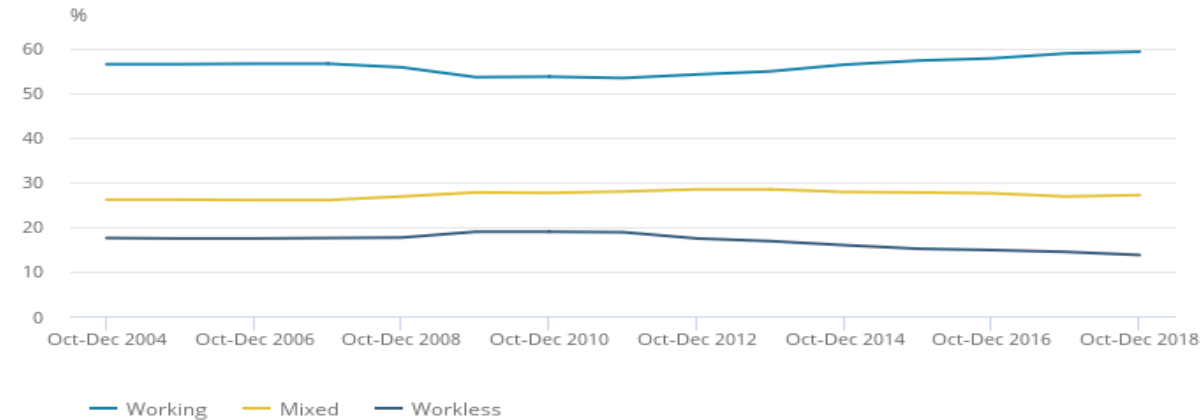
The labour market has shown considerable strength, with the employment rate reaching record levels



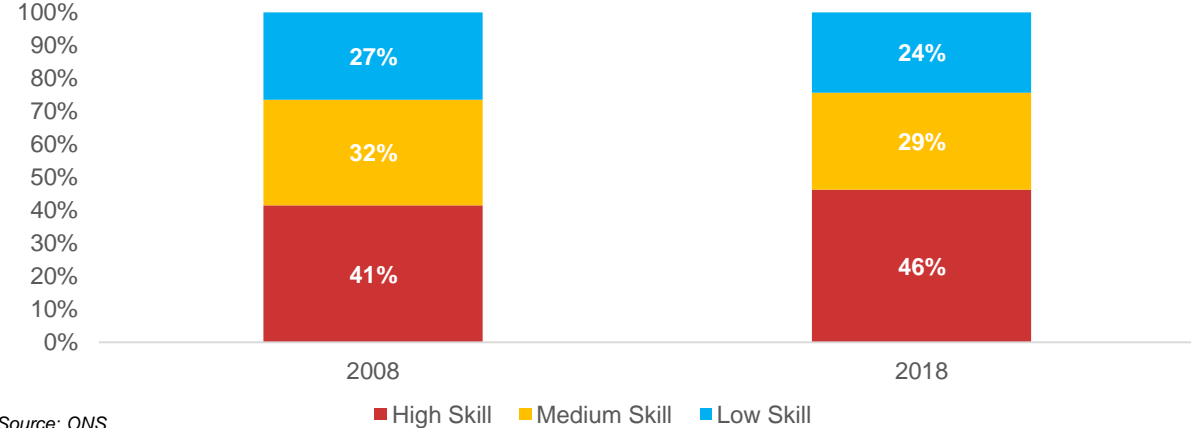
Economic inactivity in the UK is at record lows and economic inactivity in women has been falling since records began

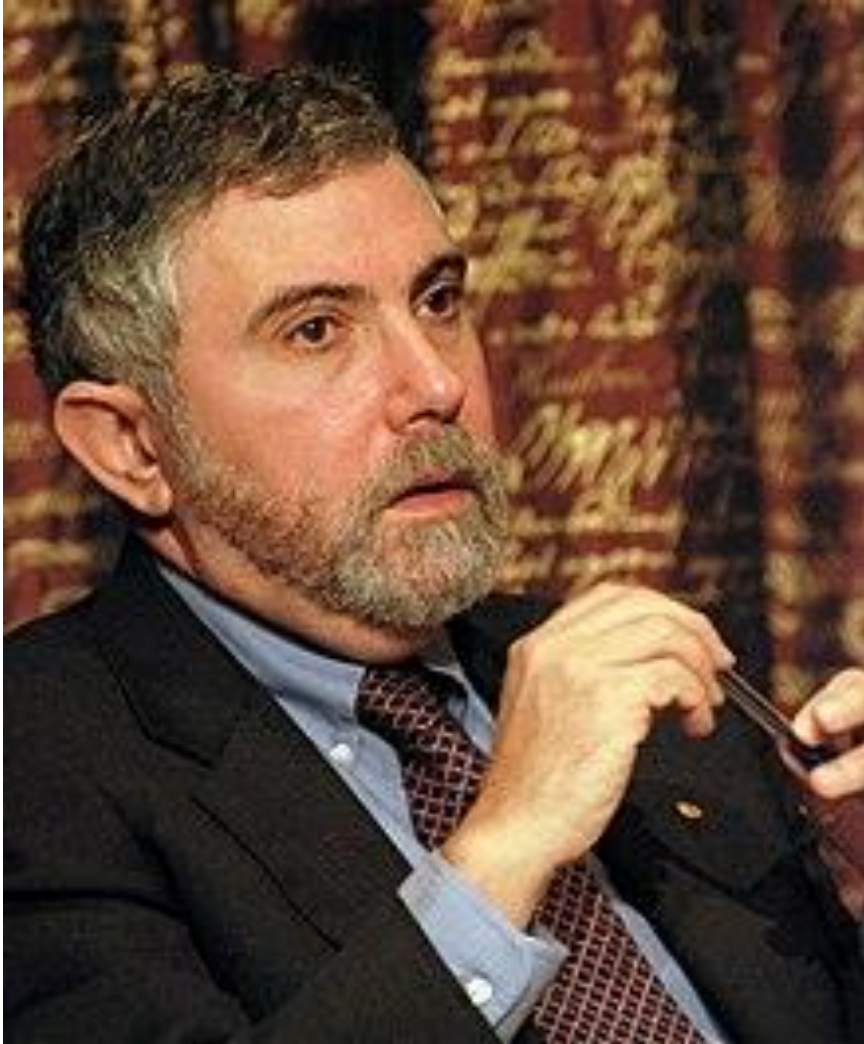


The proportion of workless households in the UK is also at its lowest level since comparable records began



The share of people working in high skilled jobs has increased by 5% since 2008, whilst the number in low skilled occupations has been falling



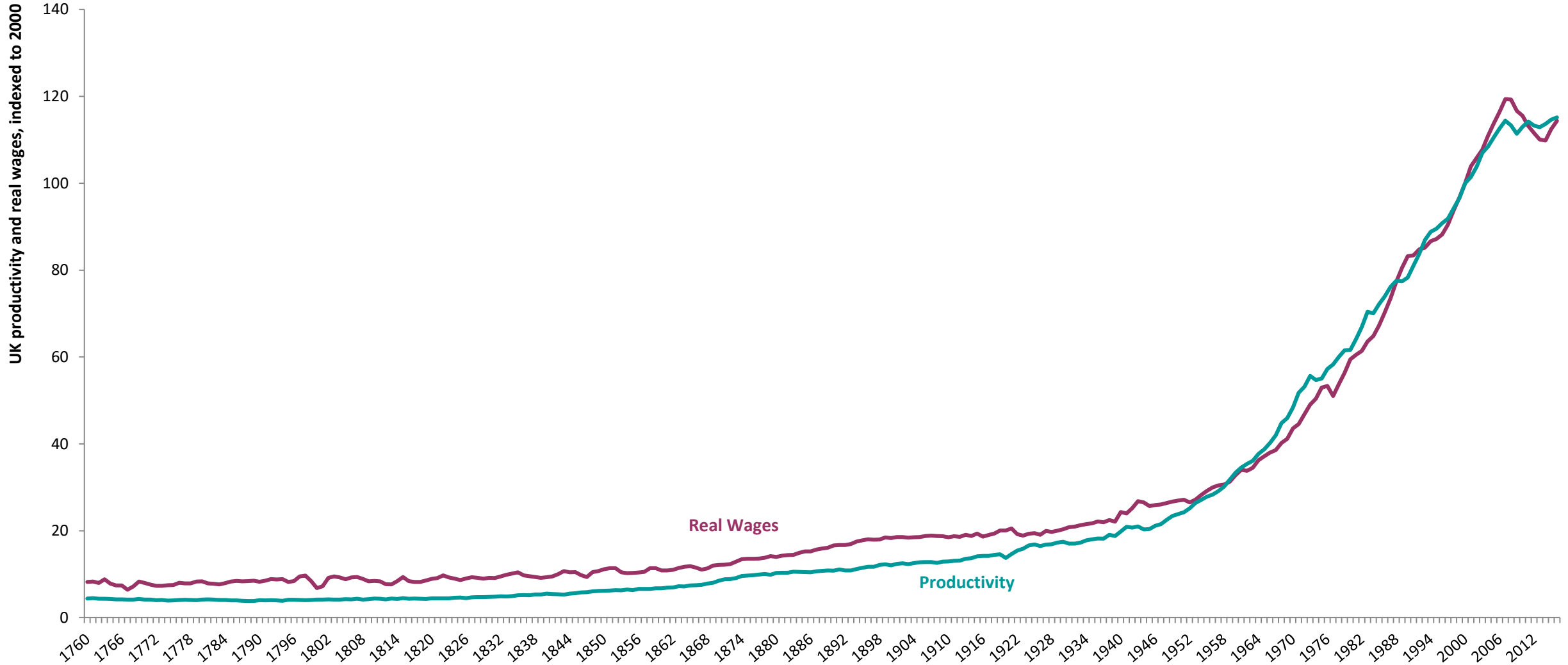


**“Productivity isn’t everything,  
but, in the long run, it is almost  
everything”**

***Paul Krugman, Nobel Prize Winner for Economics  
and Professor Emeritus at Princeton University***

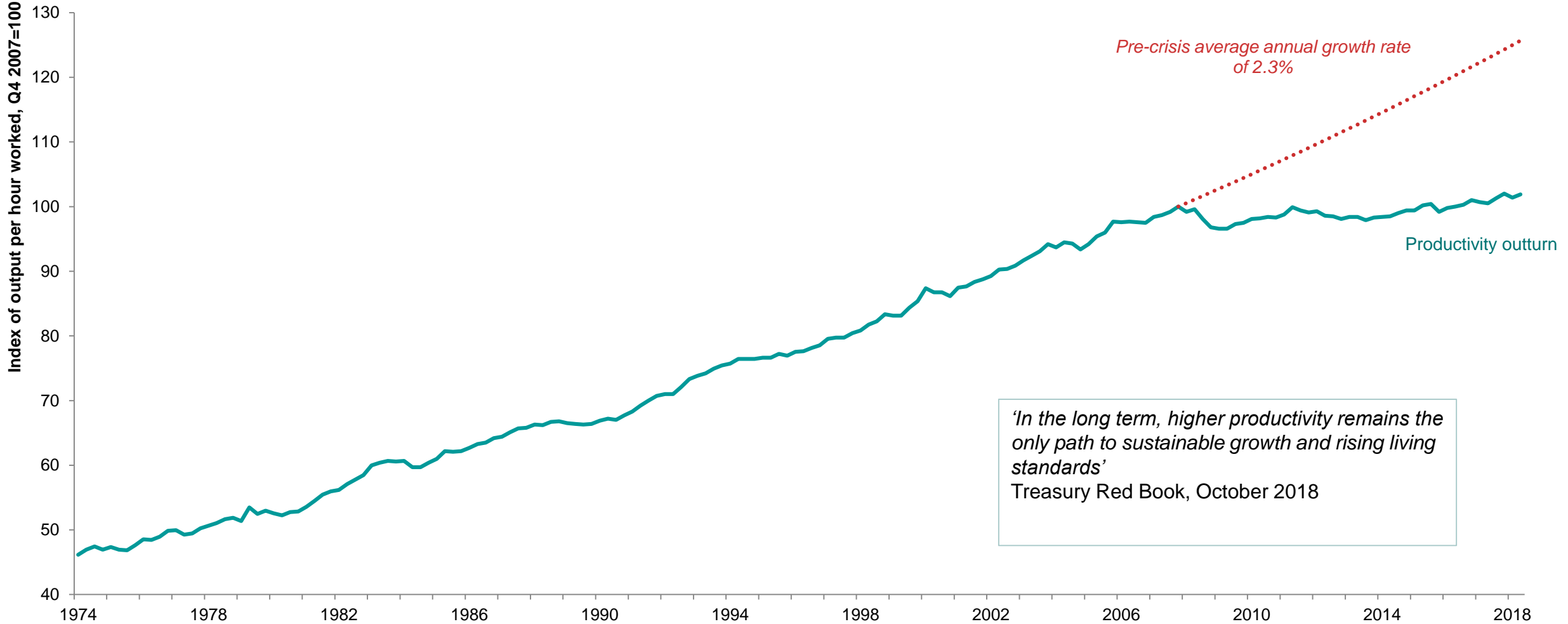


# Productivity and real wages are highly correlated, with recent poor productivity contributing to slow wage growth in the UK





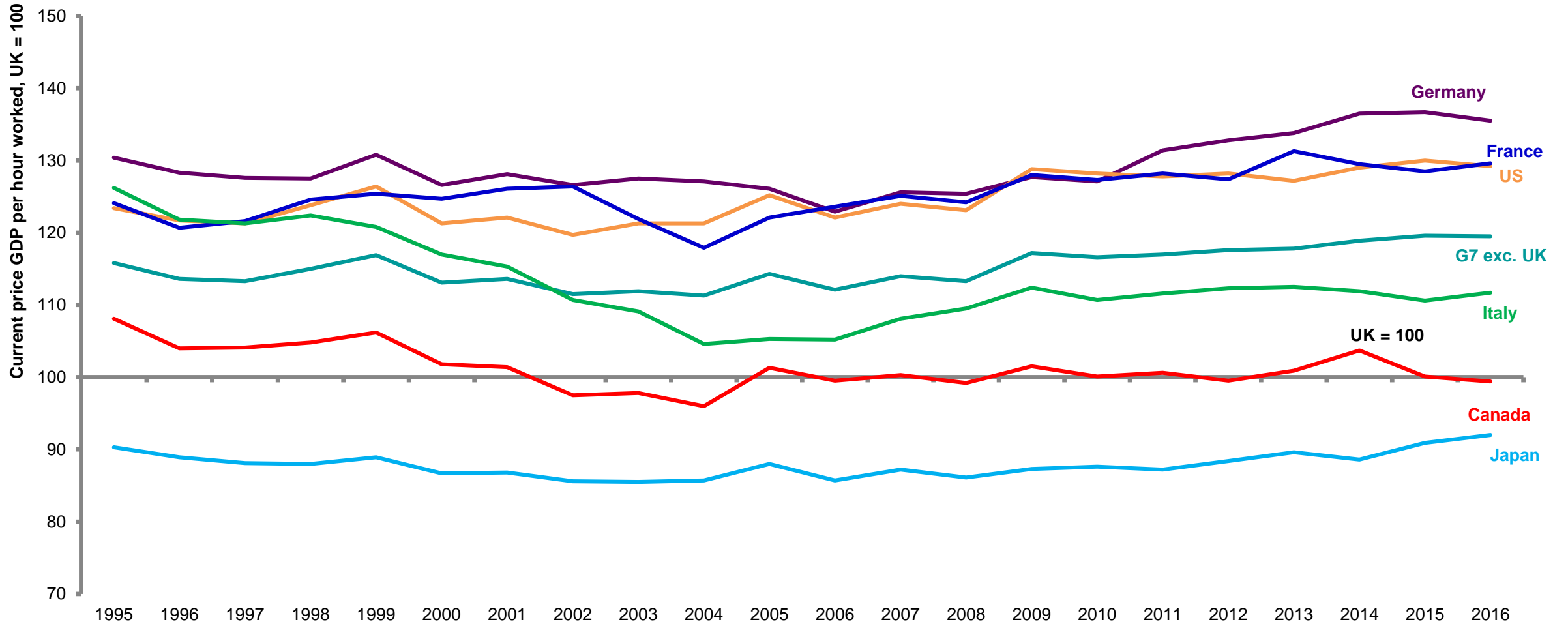
# UK productivity growth has flat-lined since the financial crash and is well below its pre-crisis trend rate



Productivity growth has flat-lined since the financial crash. Productivity is growing, but at a significantly lower rate than its pre-crisis trend rate. In Q1 2018, output per hour in the UK was 21.5%ppts below where it would have been had it's pre-crisis trend growth rate continued.



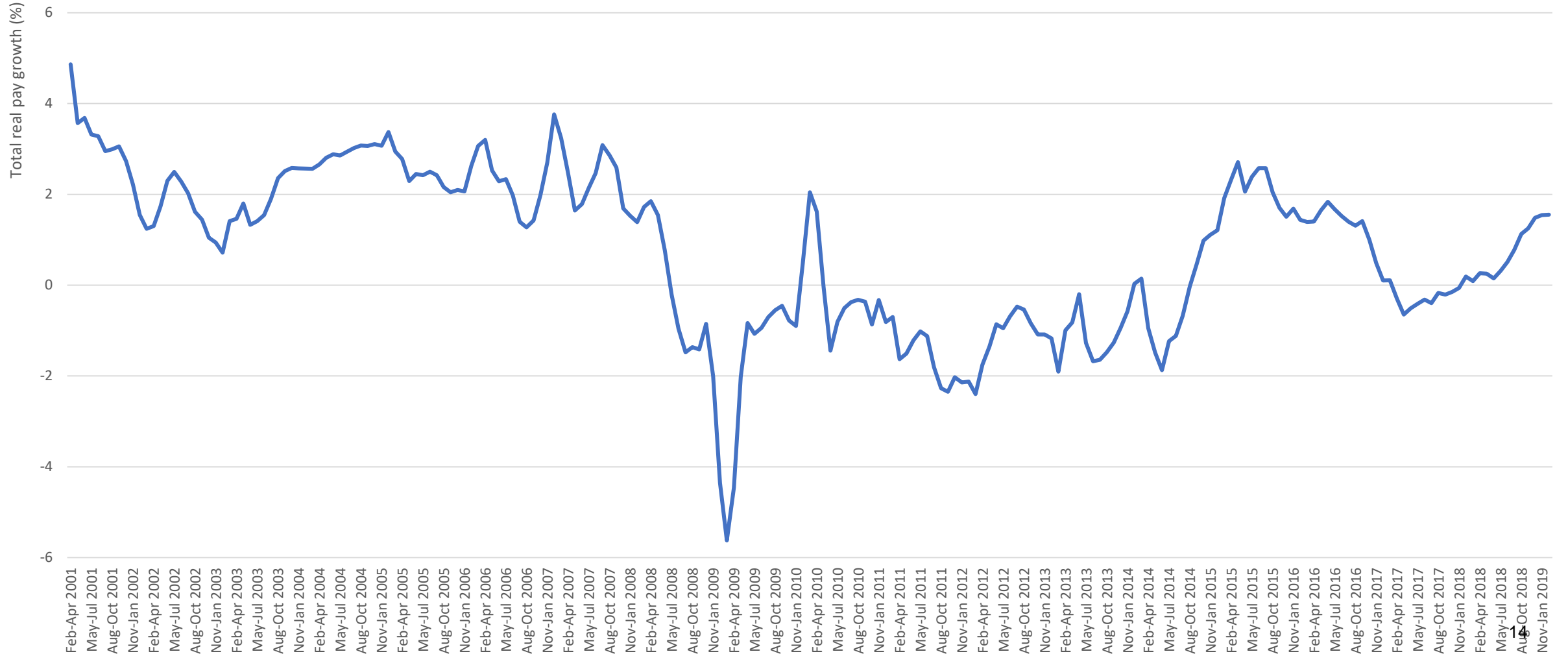
# UK productivity has historically been lower than other G7 economies, with the gap widening since the financial crash



GDP per hour worked in the UK was 19.5%pts below the average of the other major G7 advanced economies in 2016. GDP per hour worked in the UK has historically lagged behind Germany, France and the US. However this gap has widened by 8.6%pts since 2006.



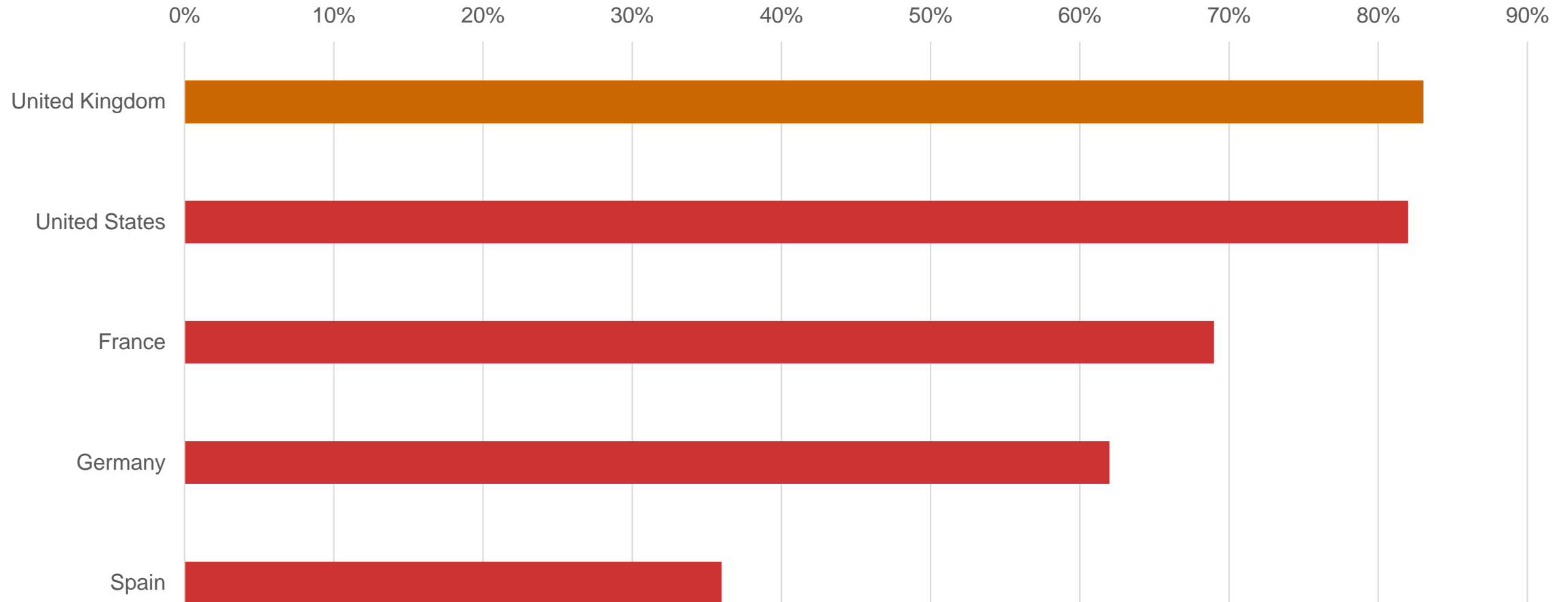
**As a consequence, growth in real wages has been fairly flat, and at times negative since the financial crisis**





# The productivity growth slowdown has been broad-based, affecting 83% of UK sectors

Proportion of sectors with lower productivity growth in 2010-2015 compared to 2000-2005



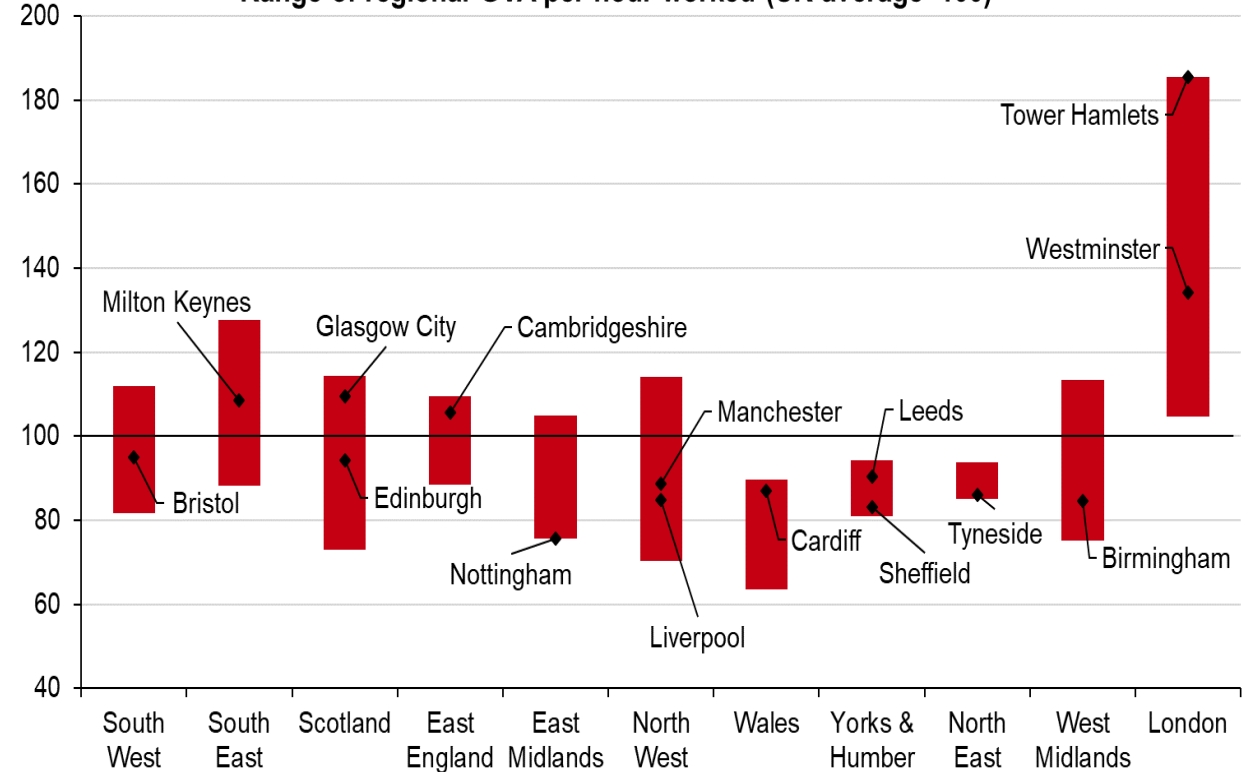


# Differences in productivity in the UK exist both between and within regions

Gross value added per hour index where UK=100, 2017



Range of regional GVA per hour worked (UK average=100)

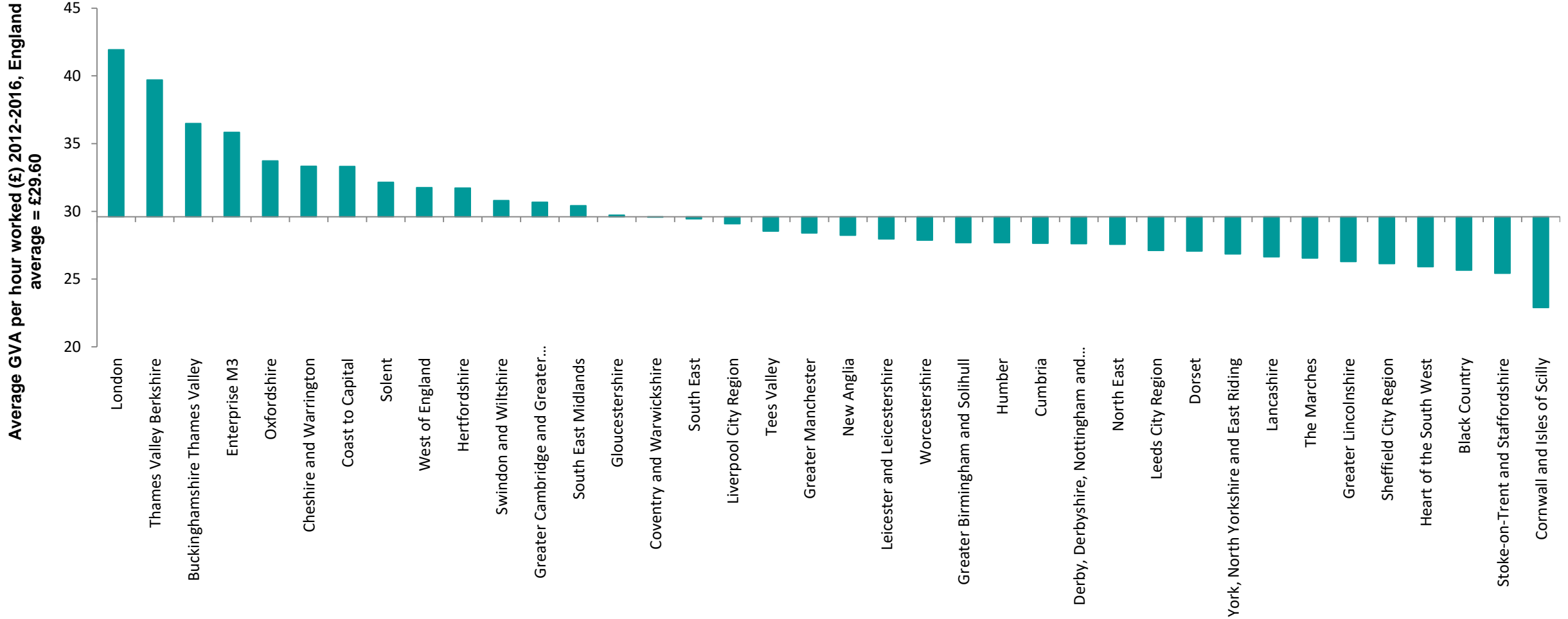


Productivity in Wales and Northern Ireland was 16% to 17% below the UK average in 2017, whilst London outperformed the UK average by 33%. However, this masks large variations within London. GVA per hour in the most productive area of London (Tower Hamlets) in 2016 was more than 73% higher than GVA in the least productive areas, Lewisham and Southwark, which fell below the national average.





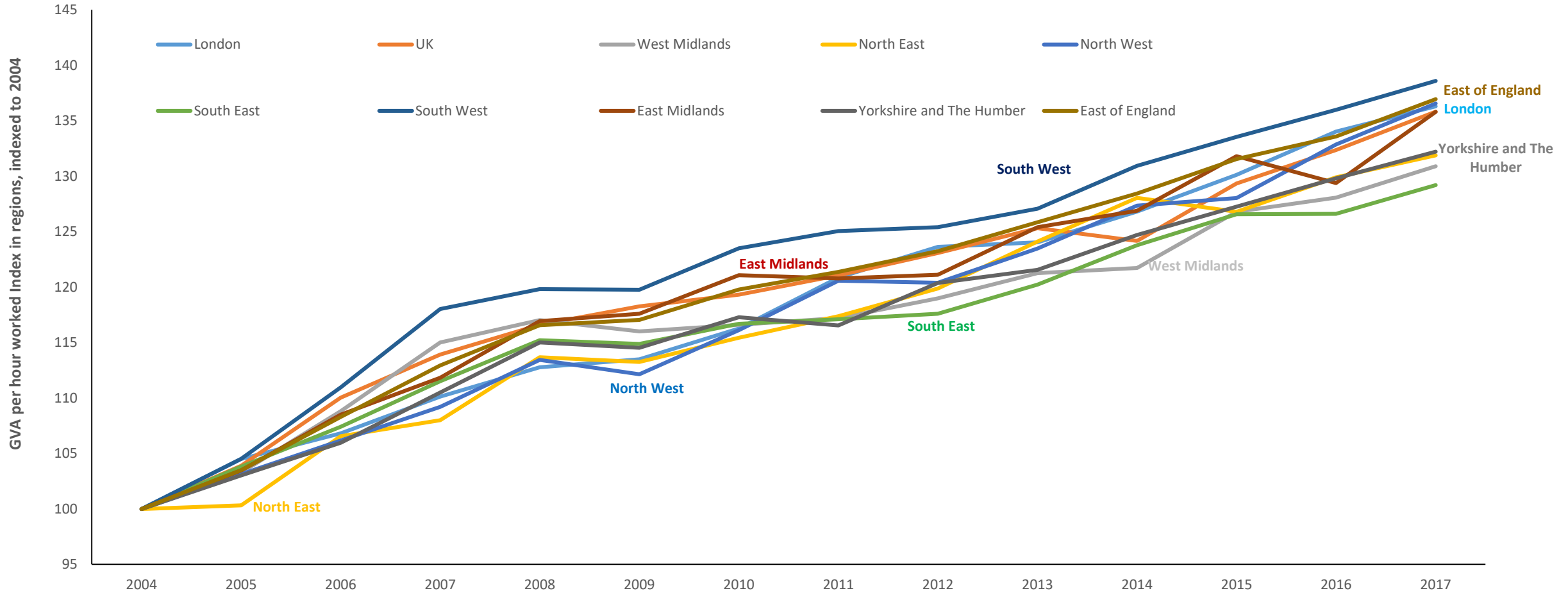
# GVA per hour worked is highest in Local Enterprise Partnerships in the South East



The areas where productivity is significantly higher than the national average are mostly in London and the South East, while places where productivity is significantly lower are spread across the UK but are mostly more isolated, rural areas. The difference between the highest performing LEP (London) and the lowest performing LEP (Cornwall and Isles of Scilly) is almost 60%.



# The productivity gap between regions in the UK has been widening since 2004



Average annual growth between 2004 and 2017 (in GVA per hour worked) was 2.1% in Yorkshire and the Humber, but 2.6% in London. The difference between GVA per hour worked between London and Yorkshire and the Humber was £10.40 in 2004, but increased to £16.10 in 2017 in real terms. There are not only disparities in productivity levels across different regions, but also disparities in productivity growth. Productivity growth in London is still amongst the highest – but both the North West and the South West also perform well. However this is partly due to their lower initial bases.



## There is no consensus on the causes of flat-lining productivity growth – which is an issue that goes beyond the UK alone

Possible causes of the puzzle	Importance
<b>Impact of the financial crash</b> – reduced access to capital and hurt firms’ risk appetite.	+++
<b>Low investment and labour-capital substitution</b> – investment lags other countries and has been weak since the crisis	+++
<b>Sector specific trends</b> – structural change in some sectors (finance, IT, mining) has reduced trend productivity growth	++
<b>Slower growth at the frontier</b> – growth among high productivity firms has stalled (distinct from the long-standing tail of low productivity firms)	++
<b>Measurement issues</b> – especially in the digital economy, but this is not specific to the UK	+ (+)
<b>Forbearance and monetary policy</b> – low interest rates keep ‘zombie’ firms alive	+
<b>Tax incentives for small business and investment</b> – e.g. high VAT threshold	+
<b>Secular stagnation</b> – the idea that we are experiencing permanently lower growth and innovation, with recent innovations more incremental and less transformative	+



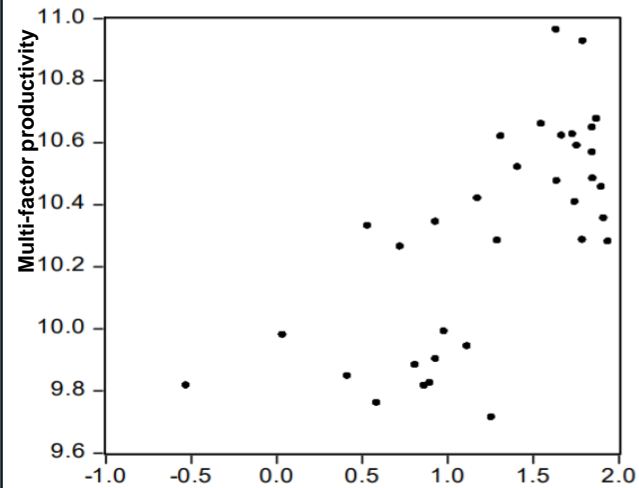
# The literature suggests there are a number of key drivers of productivity growth – there is no single silver bullet

Macro context	
Institutions, good governance and leadership	
Openness and trade	
People	Firms – what they do and the environment they operate within
Human capital and skills	Competitive intensity
	Innovation
Quality of management	The diffusion and adoption of innovations and new technologies
	Business investment
Place and social networks	
Infrastructure and housing	
Agglomeration economies	
Social capital/ healthy communities	



## Effective institutions can foster productivity growth

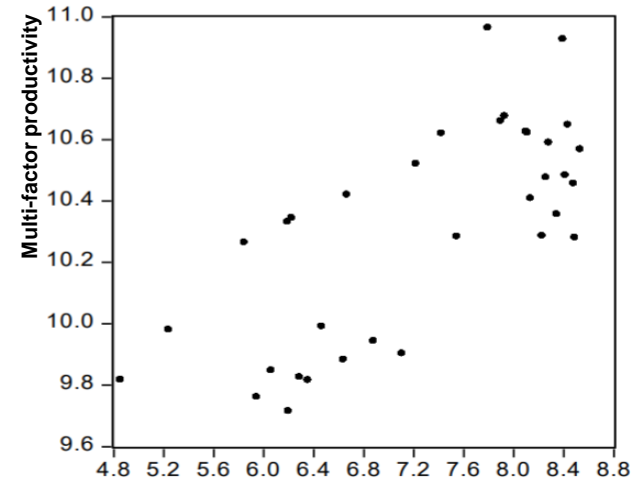
Rule of law & productivity in OECD countries



Rule of law, higher values= greater confidence in and abiding of the rules of society

Source: OECD calculations using data from the World Bank's Worldwide Governance Indicators, a composite index of individual indicators taken from a wide variety of existing data sources.

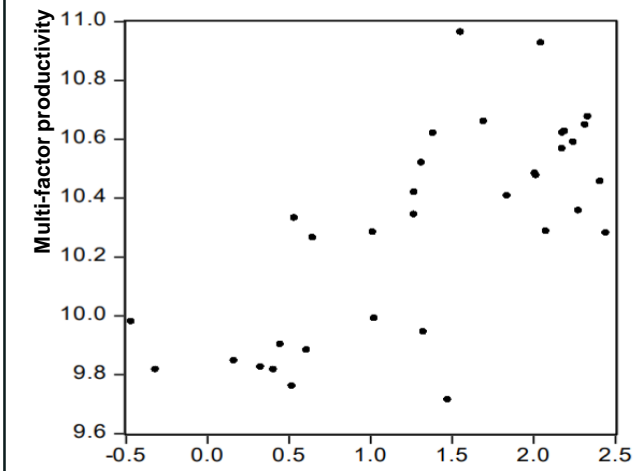
Legal system & productivity in OECD countries



Legal system, higher values= stronger legal system

Source: OECD calculations using data from Fraser Institute's Economic Freedom of the World indicators, a composite index of nine individual indicators such as the impartiality of courts and judicial independence.

Corruption & productivity in OECD countries



corruption (WB WGI) higher values= less corruption

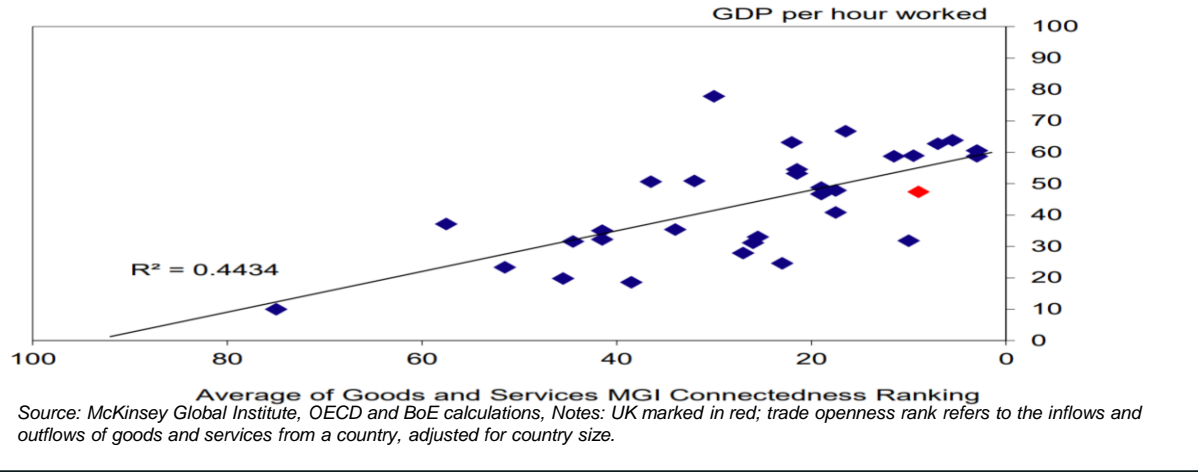
Source: Source: OECD calculations using data from the World Bank's Worldwide Governance Indicators, a composite index of individual indicators taken from a wide variety of existing data sources.

- A strong institutional environment at both the national and local level drives strong firm-level productivity performance.
- At the national level, political factors such as effective regulation and good governance which reduce uncertainty and promote efficiency contribute to higher productivity in firms, whereas negative factors such as corruption undermine productivity.
- A solid legal system contributes to higher productivity e.g. by providing certainty that innovations will be protected through law.
- At a local level, institutional factors such as administrative fragmentation have been found to have a negative effect on productivity often leading to less efficient transport systems or sub-optimal land use for example.
- Strong educational institutions such as universities also create the conditions for higher productivity.
- Good governance, in particular governance which produces clarity in decision making and sets strategic direction has been found to encourage business investment and long term commitment to local areas.

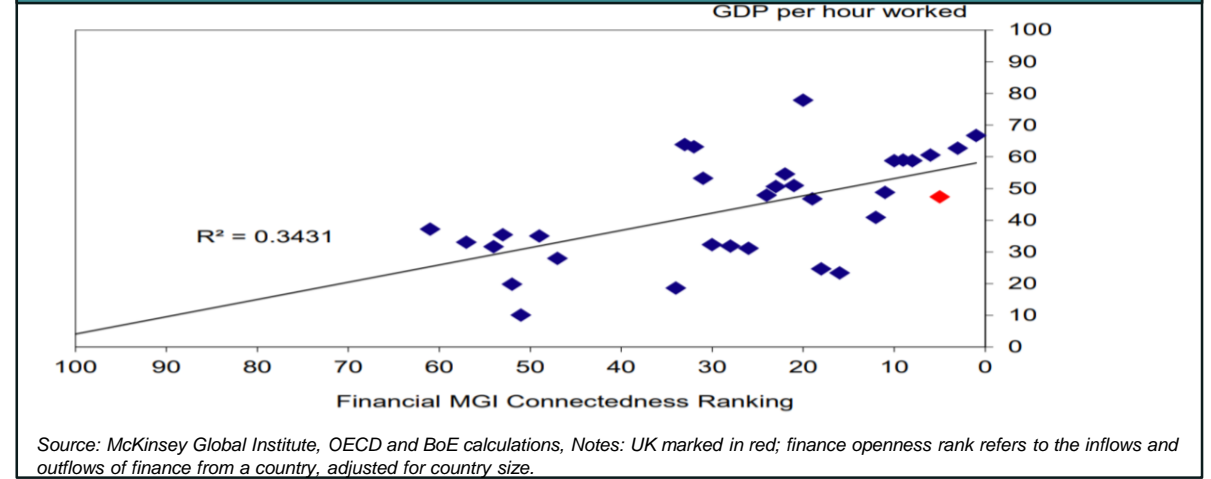


# Increased openness across various dimensions is also associated with higher levels of productivity

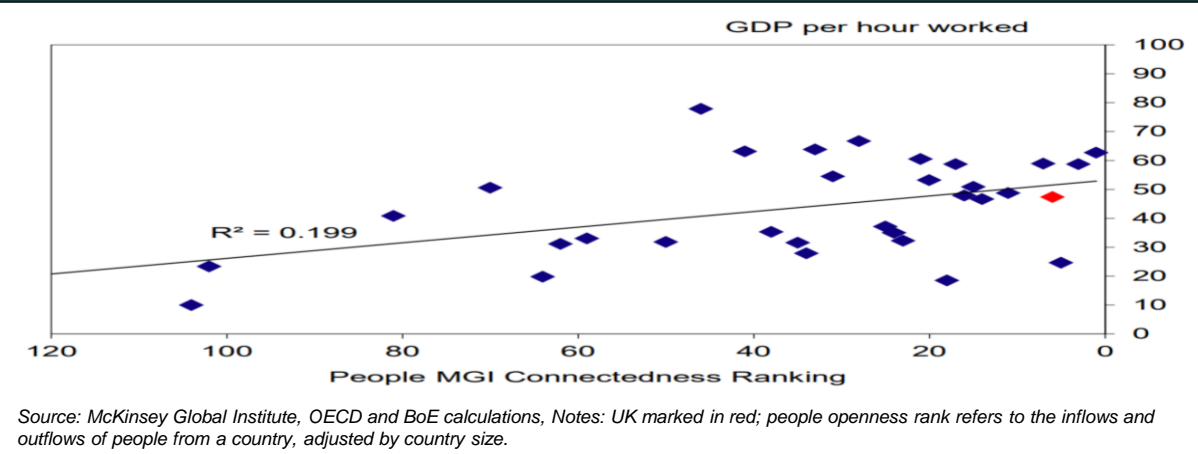
Trade openness and productivity



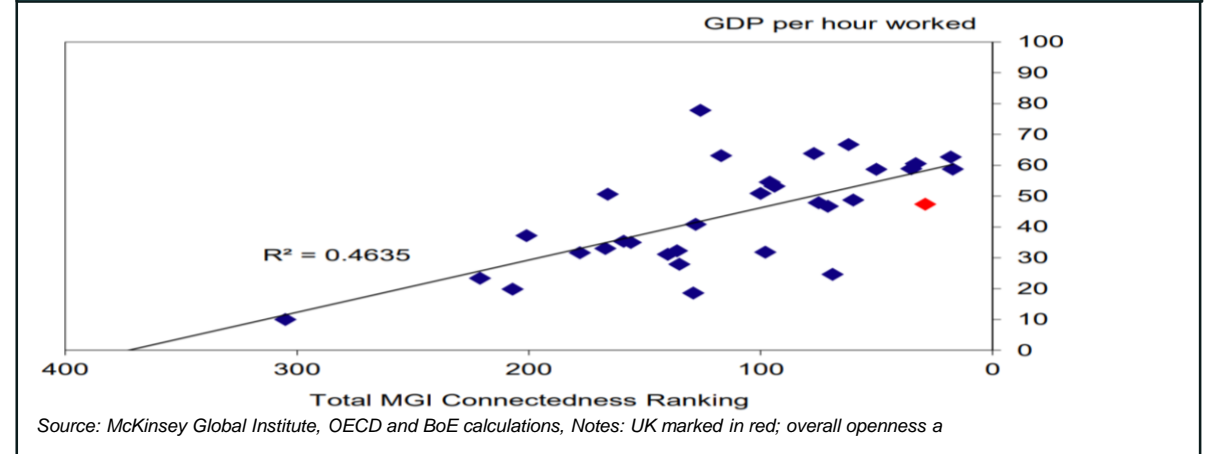
Finance openness and productivity



People openness and productivity



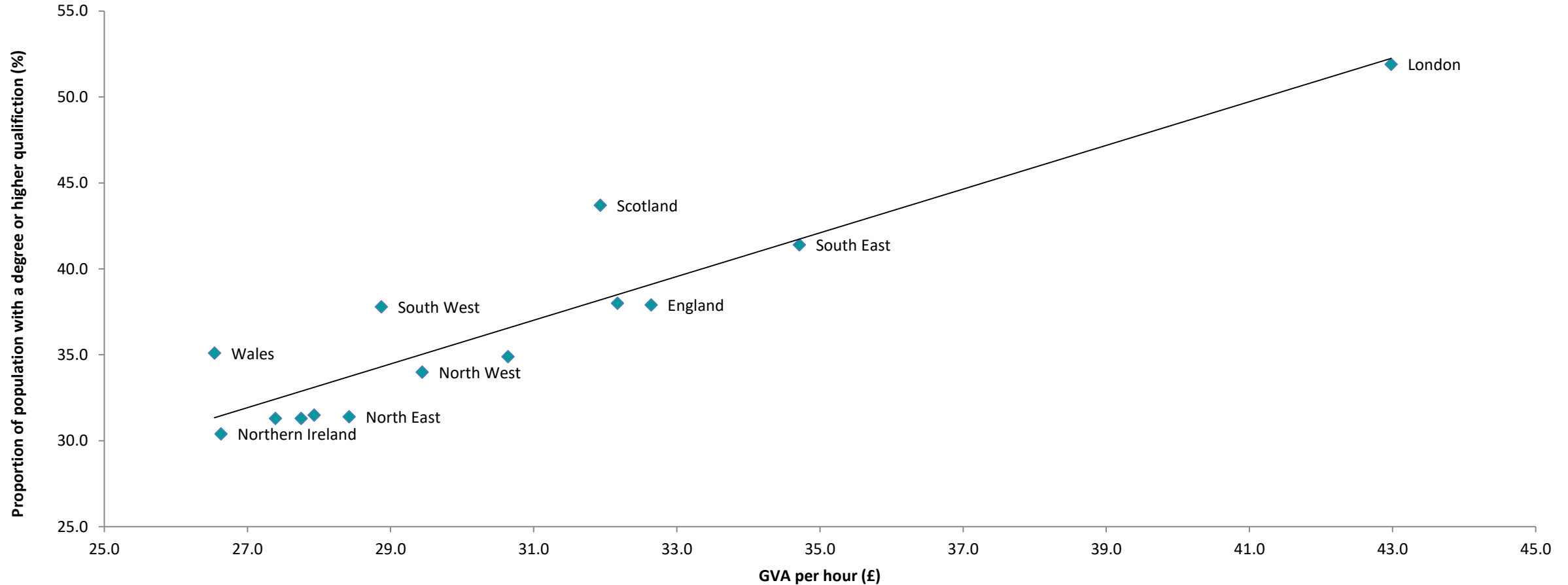
Overall openness and productivity



Recent [analysis](#) by the ONS found that of all factors that influence a firm’s productivity, trading internationally and being a foreign-owned company were key to the their productivity performance.



# There is a strong correlation between skills and productivity

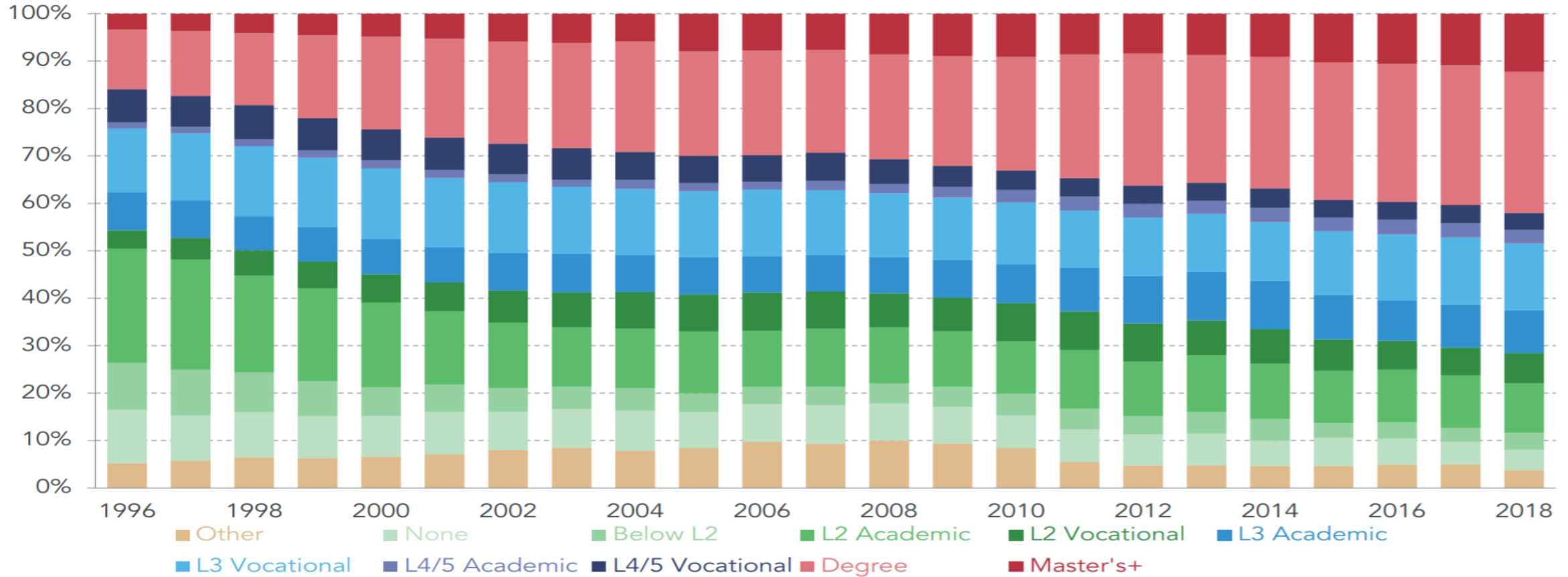


There is a strong correlation between the proportion of people with a degree or higher level qualification, and productivity in a given region. However, the proportion of people with no skills shows no correlation with productivity by region, which might be explained by relatively small numbers. In 2016, London's GVA per hour was £43 and 52% of its residents had a degree, while in the North East its GVA per hour was £28 and only 34% of its residents had degrees.



# Over the past 20 years in the UK the proportion of people educated to degree level or higher has doubled

## Highest qualification held by 25-28 year olds



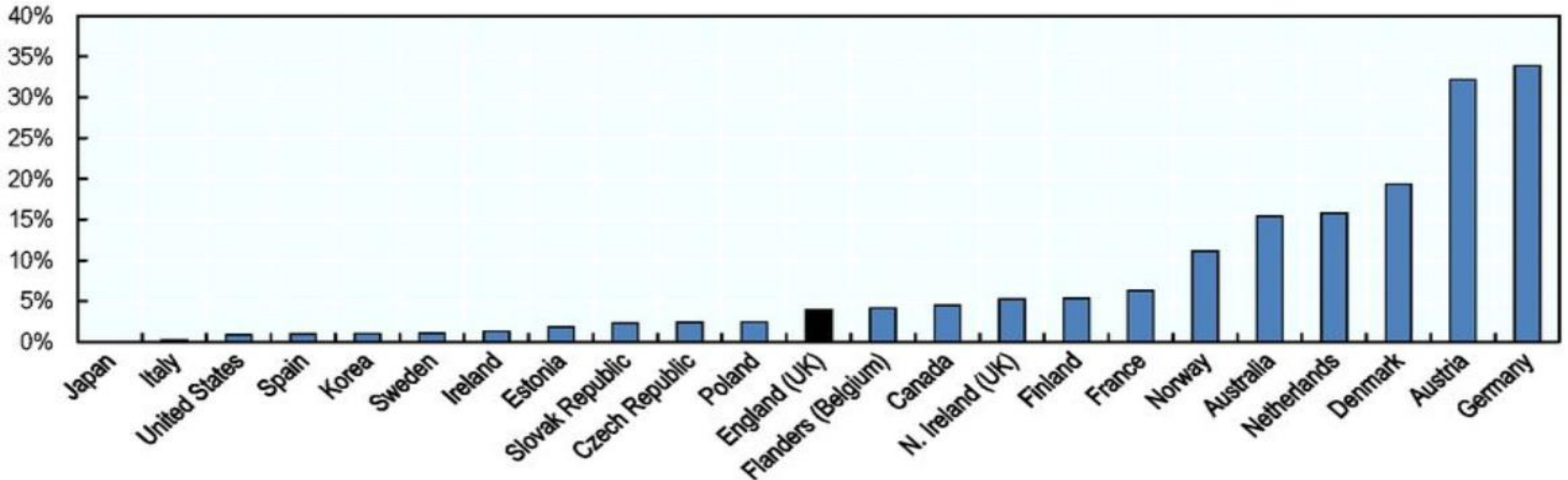
Between 1996-98 and 2016-18 the proportion of 22-64 year olds whose education stopped at a GCSE A\*-C or equivalent levels has fallen by one-third.





## But, the use of for example apprenticeships in the UK still lags behind many other OECD members

### Proportion of upper secondary level students enrolled in apprenticeships

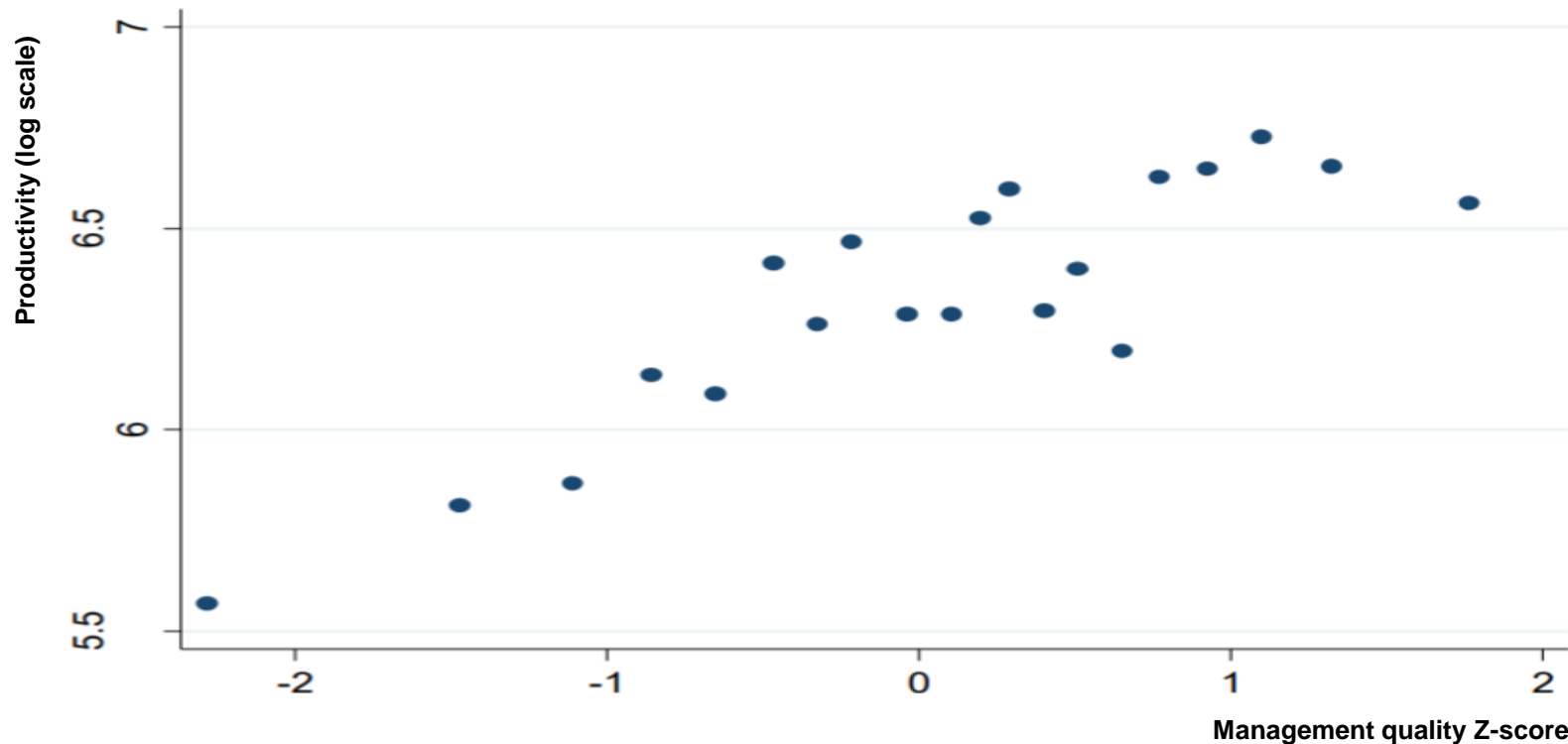


Whilst real progress has been made in increasing the take up of apprenticeships over the past 15 years, the UK still lags behind many international competitors. Research has demonstrated the importance of vocational skills in driving productivity and this demand is expected to grow further as economic structures shift with the fourth industrial revolution. Apprenticeships provide a key means through which these skills can be gained, allowing for better skills matching of individuals to jobs and enabling more efficient outcomes.



# Good management practices and leadership skills are one of the main determinants of firm-level productivity performance

## Positive correlation between labour productivity and management practices



Source: Bender et al. 2016;

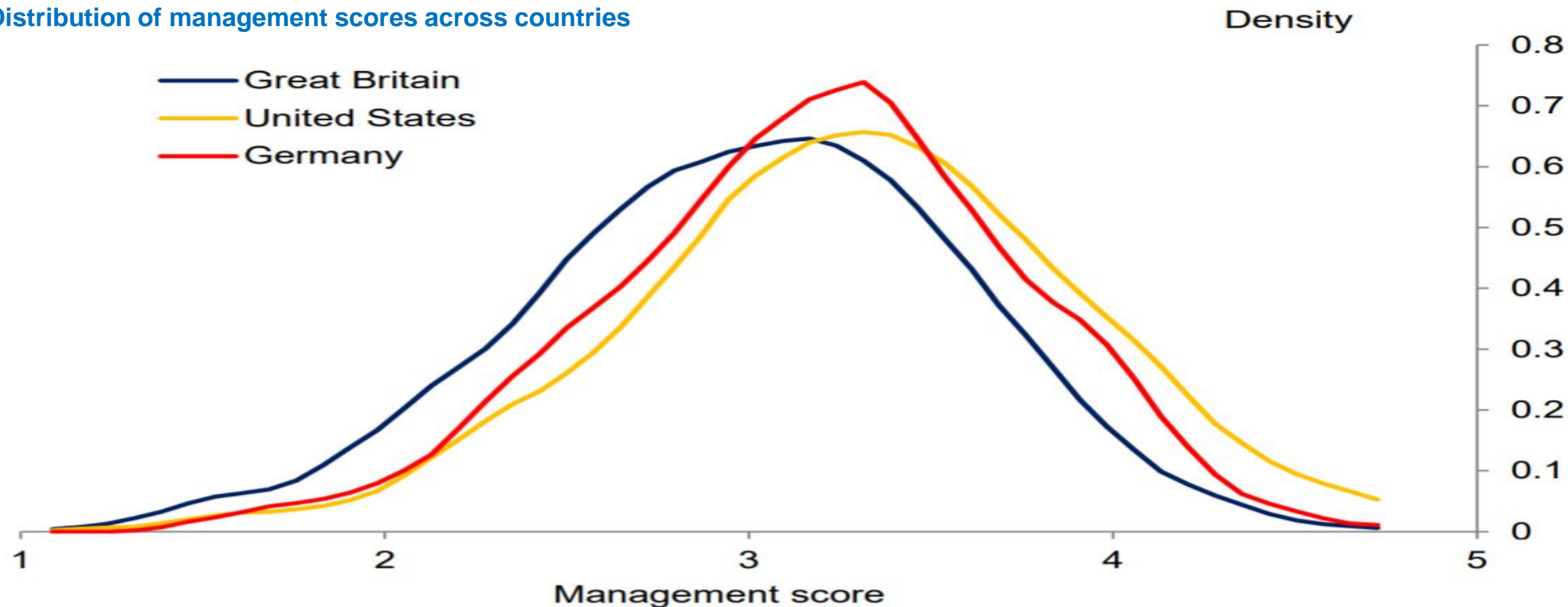
Notes: productivity measured by sales per worker compared against vigintiles of management scores as measured by the World Management Survey (an 18-question survey responded to by over 10,000 senior managers on general management practices). The analysis took responses from 732 medium sized firms from France, Germany, the UK and US.

[Research by the ONS](#) has found that firm level productivity performance is one of the most significant factors in determining spatial differences in productivity in the UK. The ONS has also found that services industries are more likely to employ structured management practices involving consistent hiring, performance review, and rewards related to performance than production industries. Equally, this was more common among larger firms, foreign-owned firms, and non-family-owned firms. These findings are broadly consistent with the wider literature.



# The UK has a longer tail of more poorly managed firms than key competitors

Distribution of management scores across countries



Source: World Management Survey and Bank of England Calculations  
Notes: Kernel density estimates

Key to the UK's poor productivity is its thicker tail of poorly managed firms. Management skills can affect the productivity of a firm in many different ways from constructing and implementing market strategy, to managing technical and organisational change, and effectively utilising workforce skills.



# Stronger competition leads to improvements in productivity performance

## Stronger competition

### Efficiency

Within firms, competition acts as a disciplining device, placing pressure on firms to become more efficient. This decreases x-inefficiency (the difference between the most efficient behaviour that the firm is capable of and its actual behaviour).

Bloom and Van Reenen (2010) find that strong market competition reduces x inefficiencies by, for example improving average management practices by eliminating badly managed firms and pushing incumbents to improve their practices.

### Market Share

Competition ensures that higher productivity firms increase their market share at the expense of the less productive.

For example, Syverson (2004) finds that in a homogeneous industry in the United States (ready-mix concrete), more competitive geographic markets tend to have a smaller tail of less-productive plants. This lends support to the idea that competition tends to drive out less-productive firms. Where competition is strong, firms with low productivity are unable to survive.

### Innovation

Competition drives firms to innovate. Innovation increases dynamic efficiency through technological improvements of production processes, or the creation of new products and services.

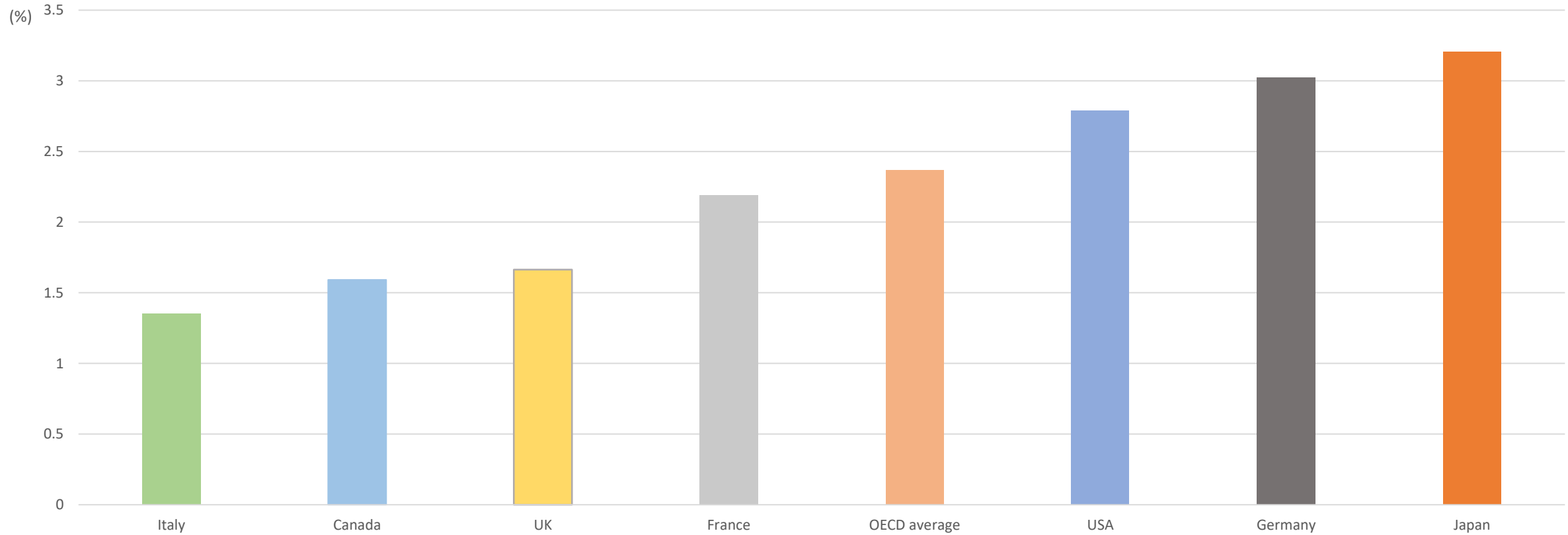
Aghion et al (2005, 2009) find evidence of an inverted-U shape relationship between competition and innovation in the UK. Where competition in a market is initially limited, an increase in the level of competition will tend to lead to an increase in innovation. However, beyond a certain point, further increases in competition may have the opposite effect.

## Higher productivity



# Comparing internationally, the UK ranks low on R&D expenditure, at just 1.7% of GDP

## Proportion of GDP spent on R&D, 2017

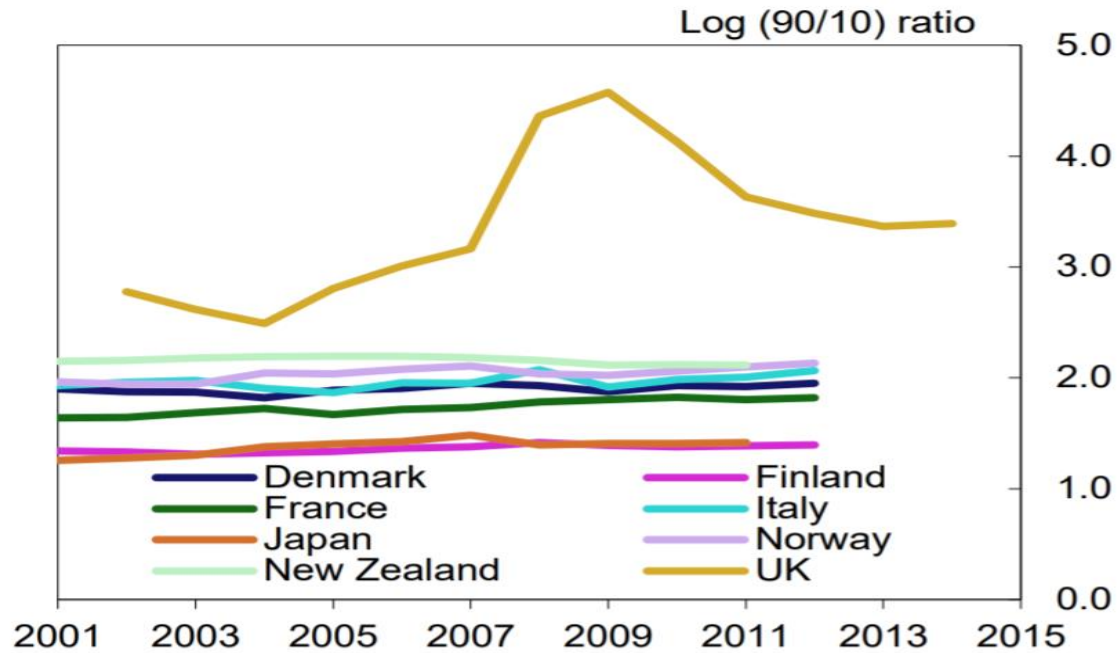


Whilst the UK is a world leader in some aspects of innovation, most research and development is concentrated in a small proportion of firms. Three-quarters of the UK's private R&D spend is carried out by only 400 companies which collectively account for less than 0.01% of the UK's business population.

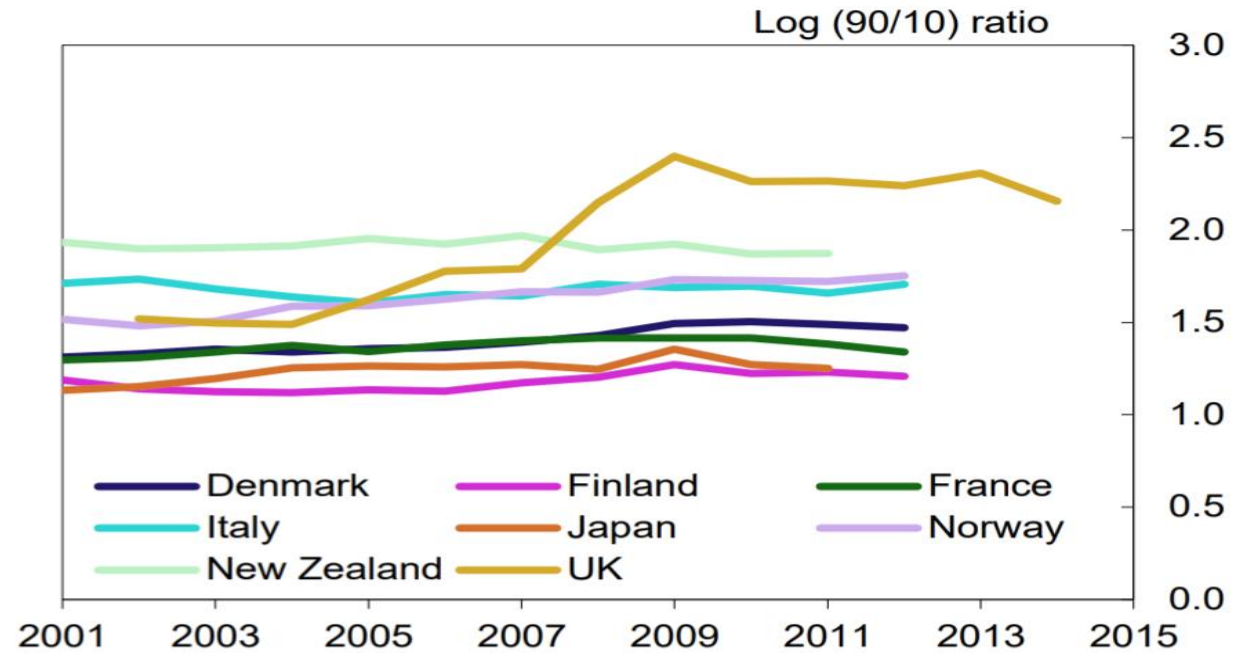


# The difference in productivity between the top and bottom performing companies is larger in the UK than other countries

## Services (levels)



## Manufacturing (levels)



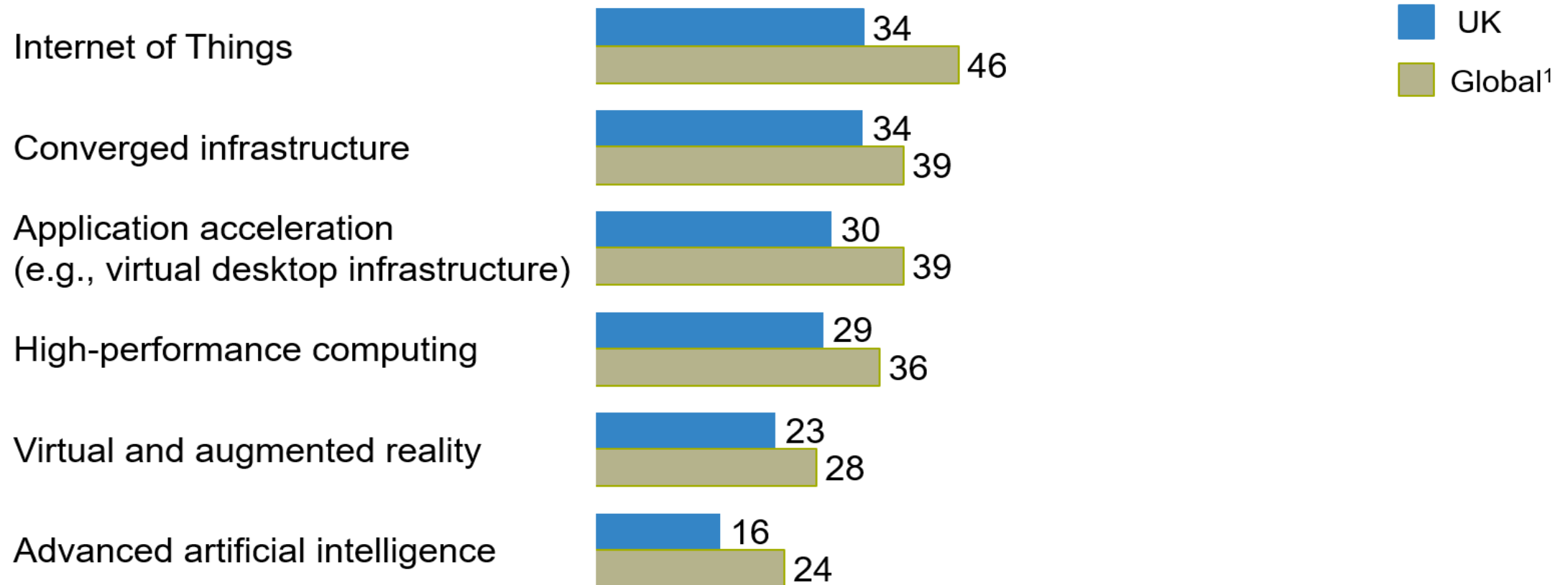
Note: the charts show the log difference between the 90<sup>th</sup> and 10<sup>th</sup> percentiles of companies by productivity performance.

There is a 'long tail' of low-productivity businesses in the UK, which pull down the national average. The most productive 25% of UK businesses are 2-5 times more productive than those businesses in the bottom 25%. The UK's most productive businesses can be found across a broad range of industries and are a broad range of sizes. However in the service sector, the gap between the top and bottom performing 10% of companies is 80% larger in the UK than international competitors. Since the financial crisis, this productivity gap has widened 2-3 times more in the UK than elsewhere.



## The UK's adoption of next-generation technologies also lags behind

### Enterprises adopting digital technologies, 2017 (%)



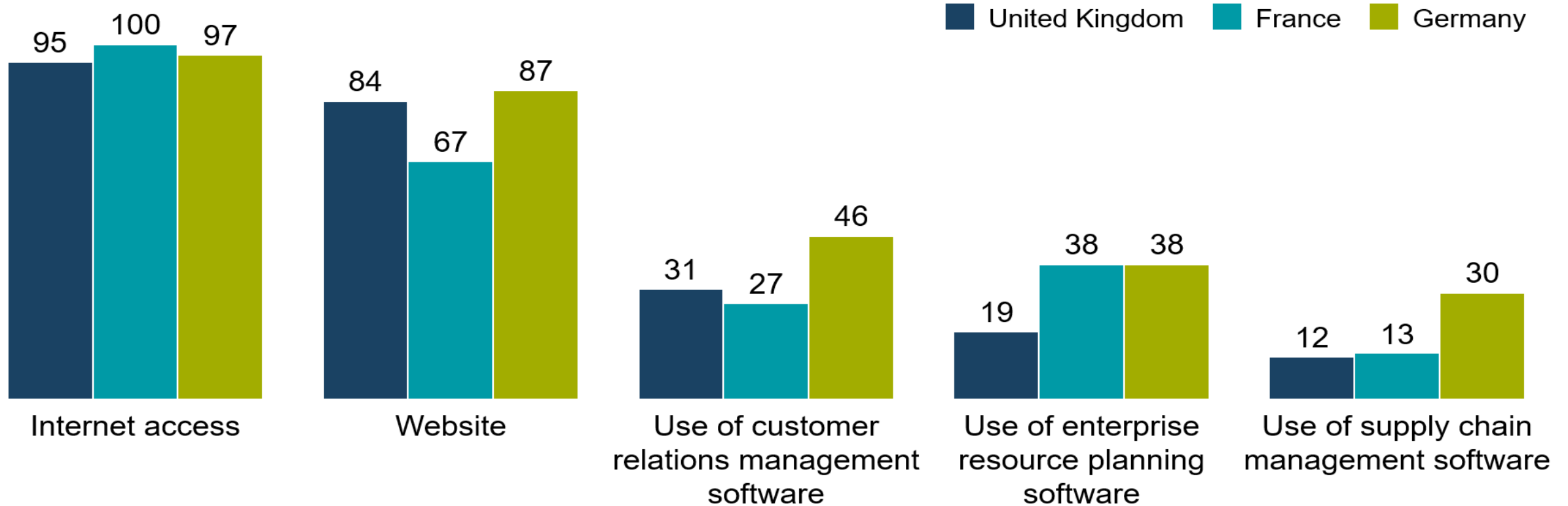
<sup>1</sup> Includes Australia, Brazil, China, France, Germany, India, Italy, Japan, Mexico, Netherlands, New Zealand, Saudi Arabia, Singapore, South Africa, United Arab Emirates, United Kingdom, and United States



## UK firms' adoption of digital technologies is uneven and lags in areas that require process transformation

### Enterprises adopting digital technologies in 2017

%



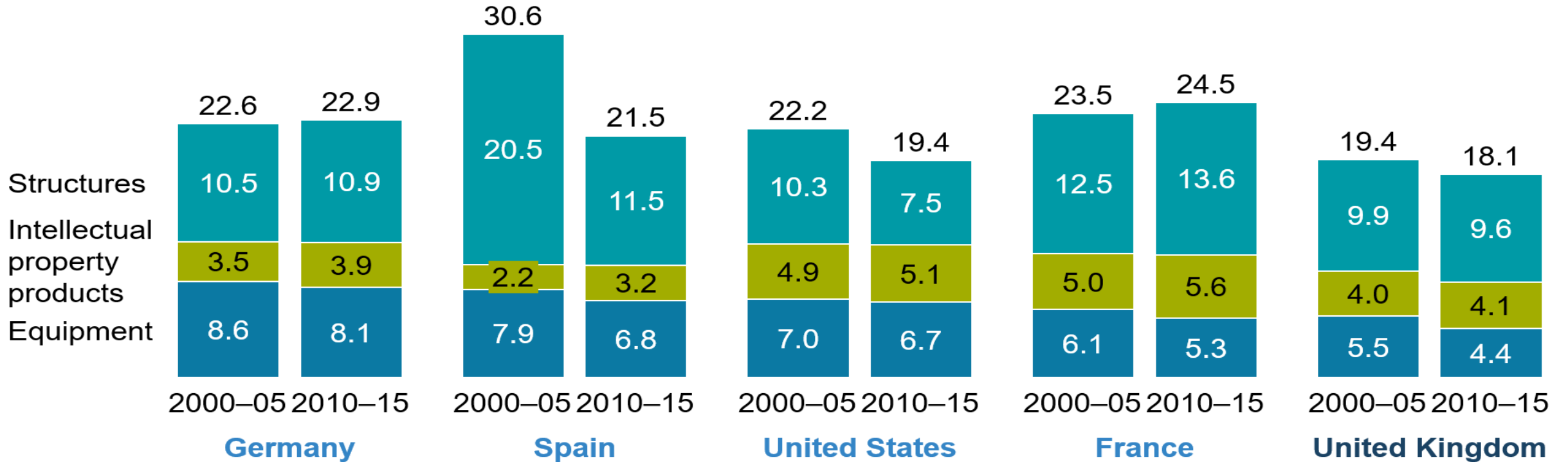




# The UK has a lower overall level of capital investment, with equipment investment experiencing the sharpest decline following the financial crash

## Average composition of total economy investments

Gross fixed capital formation as a share of gross value added, %

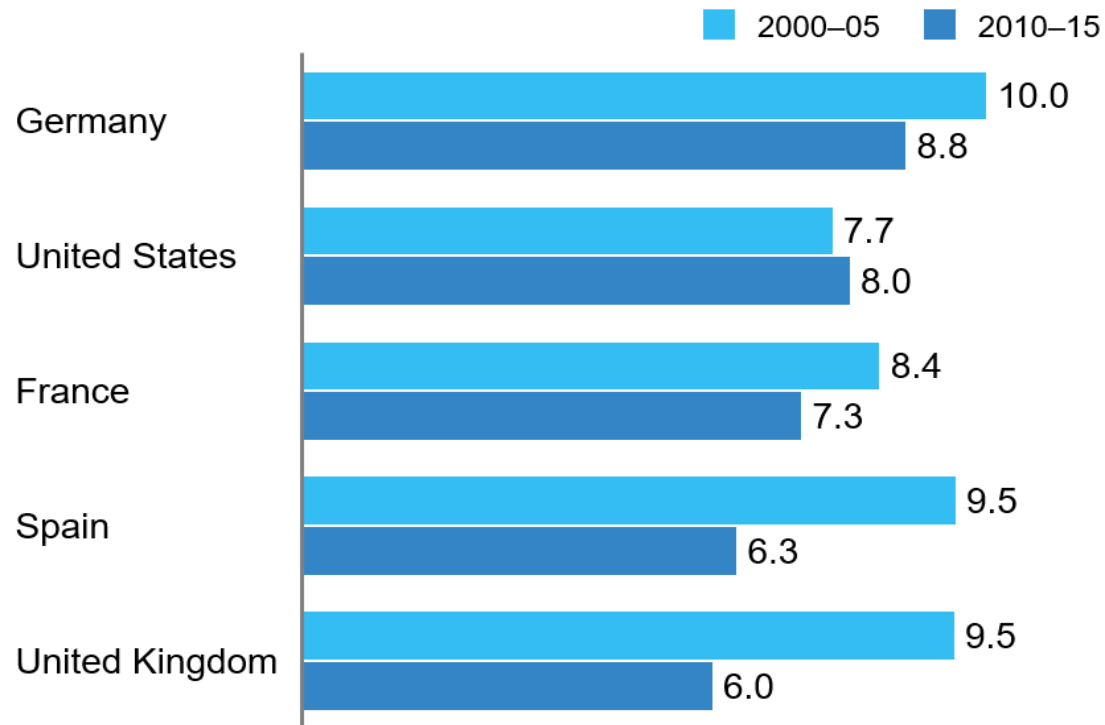




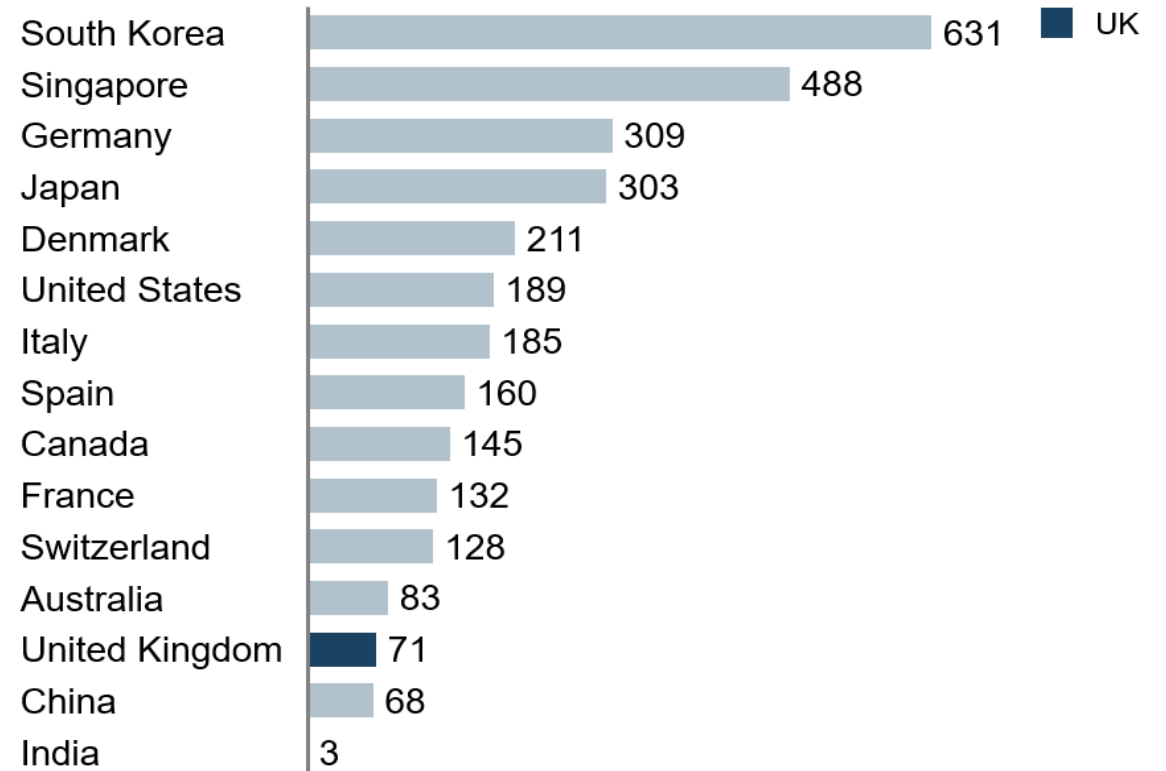
# UK manufacturing has seen the largest decline in equipment investment and has a low density of industrial robots

## Equipment investment in manufacturing<sup>1</sup>

Average equipment gross fixed capital formation over manufacturing value added<sup>2</sup>, %



## Installed industrial robots per 10,000 employees in the manufacturing industry, 2016

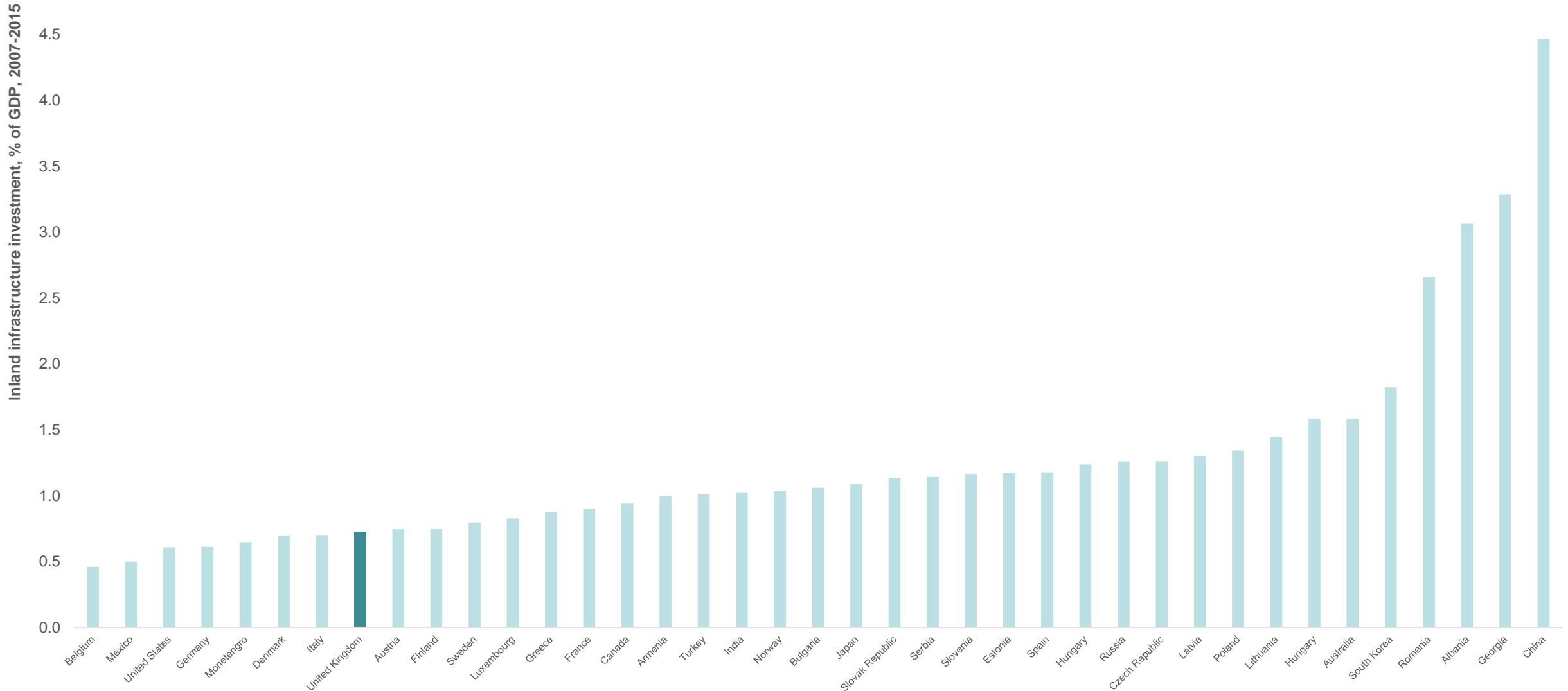


<sup>1</sup> Sorted by equipment investment over value-added in 2010–15.

<sup>2</sup> Nominal values.



# Historically, as a proportion of GDP, the UK has invested less in transport infrastructure than many other OECD countries

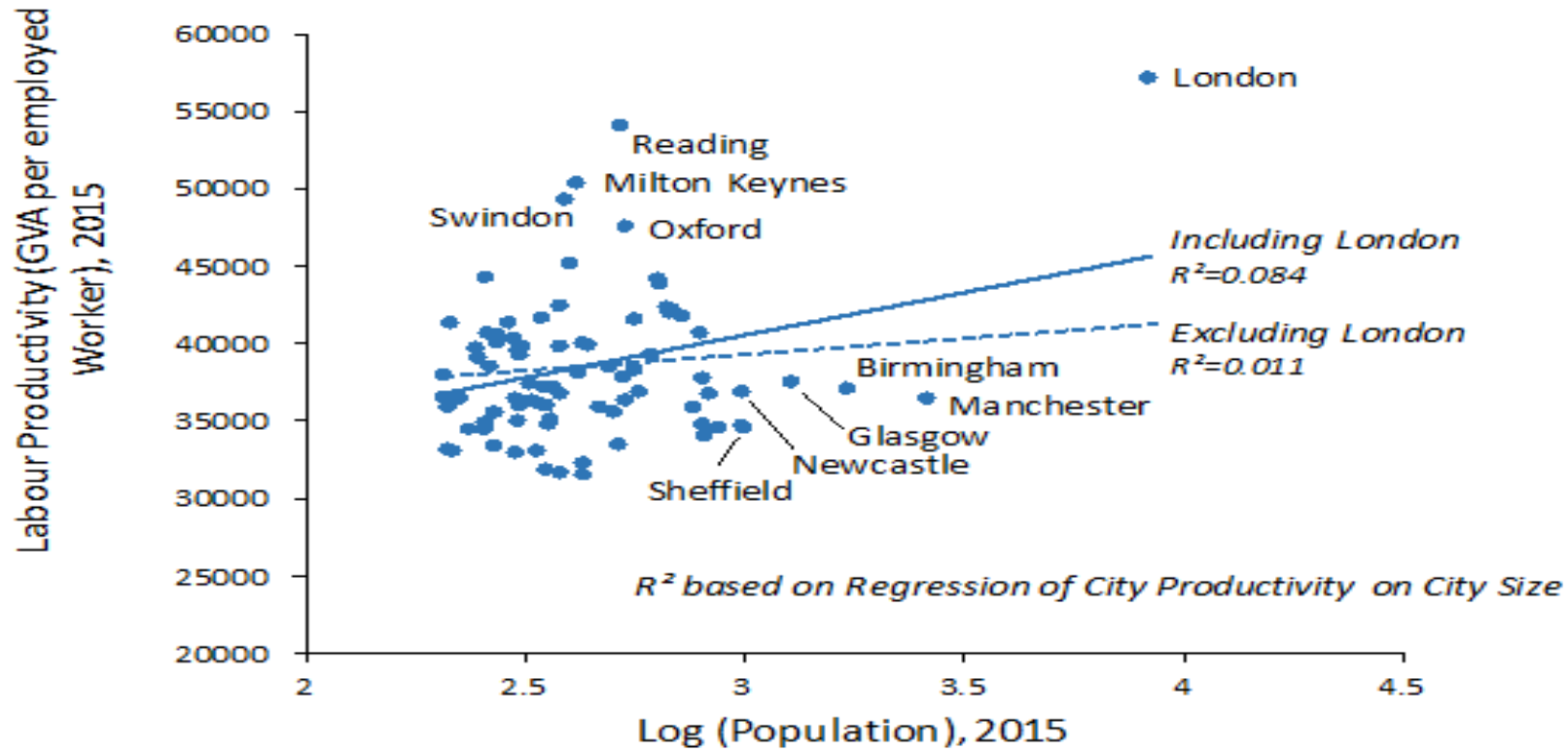


Notes: transport infrastructure includes road, rail, inland waterways, maritime ports and airports and takes account of all sources of financing.  
Sources: OECD



# Agglomeration theory suggests there are economic benefits associated with concentrating economic activity in one place

## City size and productivity, 2015

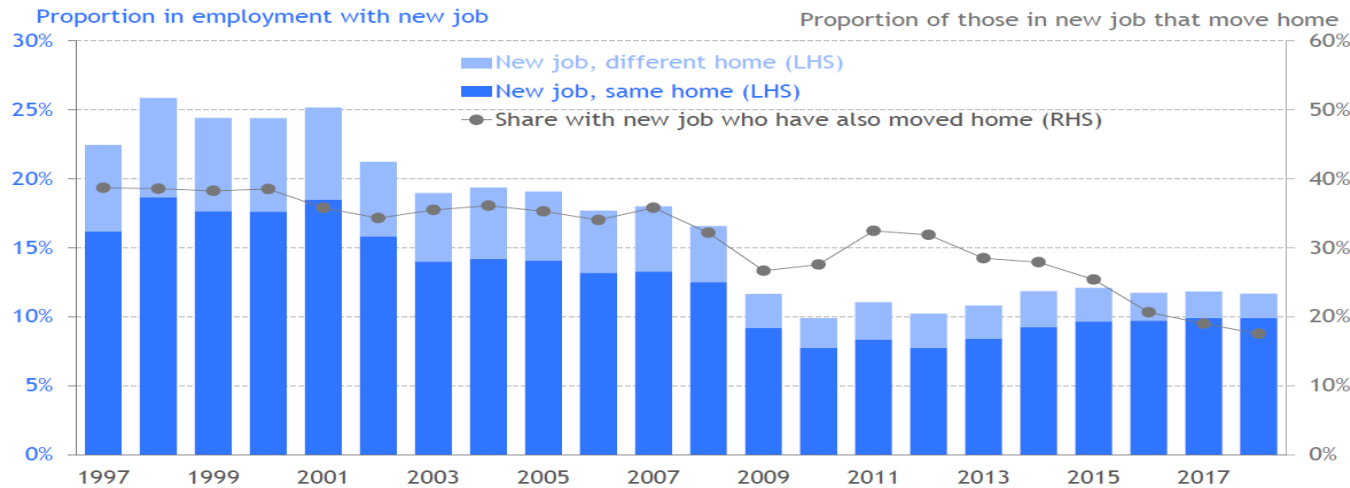


Firms located in large cities benefit from the common resources and large labour pool found there. Common resources such as roads, buildings and power supply benefit firms in cities regardless of their industry. Considering a concentration of workers as a key element of this, theory would suggest that a higher density of workers would be associated with higher income and wealth. However, this theory only tends to hold true in London, whilst some of the most productive places in the UK, such as Milton Keynes, Reading and Slough, are in fact towns or smaller cities. A recent study suggested however that larger cities' productivity may be held back by poor intra-city transport – preventing people from getting into the city centre and so shrinking the effective size of the city and opportunities to realise agglomeration economies.



# International evidence suggests that housing affects productivity

- There are several mechanisms through which both housing processes (e.g. construction) and outcomes (e.g. prices, quality and location) affect economic growth, for example regional house price differentials or high transaction costs could reduce the mobility of labour and thus damage growth whereas increasing housing density might promote agglomeration economies and thus labour productivity.
- A study modelling housing and productivity in Australia revealed strong, positive productivity effects from investing in better housing outcomes over a 40-year period where commuting times were reduced and a larger labour market accessed.
- Regulations on house building can also impact on employment and growth. A study in the US estimated that over the period 1964-2009, limits on construction meant that aggregate GDP growth was significantly lower than it might have been.
- Recent research by the Resolution Foundation has found that between 1998 and 2018, young private renters moving job *and* home has fallen by two thirds, a potential reflection of the impact of increases in housing costs in growing areas on labour mobility over the past two decades – potentially hurting productivity through poorer job matching.



Proportion of 25-34 year olds renting privately changing residence and jobs over a year (two-year rolling average): UK



## Social capital (thriving community) has a positive association with local economic growth

Social capital – the networks, norms and trust that allow people to effectively pursue shared objectives – may facilitate the efficient functioning of markets and contribute to productivity growth in a number of ways including: assisting the flow of information; increasing efficiency through collaboration; and reducing transaction costs because of high levels of social trust.

Evidence on the relationship between social capital and productivity is limited, but most commonly presents a positive association, in particular studies by Jankauskas and Šeputienė 2007, Knack and Keefer 1997 and Bjørnskov and Méon 2010.

Positive effects of social capital on sub-national, or **local economic growth** in particular, have been evidenced internationally:

- Helliwell and Putnam (2000) found that high levels of social capital in Italy's northern regions allowed them to utilise a powerful new tier of regional government to achieve higher economic growth.
- Coleman (1998) describes the close-knit, family tied social structures of diamond wholesaling communities, where high levels of trust mean that diamonds can be exchanged for testing with no deposit. This creates a highly efficient market.
- Evidence suggests the relative success of *industrial clusters* such as the Oxfordshire motor racing industry and Silicon Valley, is driven by the social networks within them which share information and skills (Saxenian, 1994; Jenkins, 2001).
- Andini & Andini, 2019; Peiro-Palomino & Tortosa-Ausina, 2012; Temple & Johnson 1998 have found that social capital has a positive causal influence on economic growth, including at the municipal and regional levels.

However, this evidence has not gone unchallenged. A study of US states, Casey and Christ (2005), concluded there not to be any significant relationship between productivity and different social capital indicators.



## Building resilience to economic shocks and promoting long term economic growth requires a multi-tiered, spatial approach





## A local approach allows for interventions to be tailored to the individual strengths and challenges of a place



Policies delivered through local authorities, mayors and combined authorities build the **capacity and capability of local areas** to achieve strong growth through interventions appropriate to their particular circumstance. In some areas, there are **specific barriers to regeneration** or opportunities arising from wider policy interventions that require a **site specific policy** response.

Policy responses to these challenge include encouraging **transformative change in our High Streets** through the Future High Streets Fund, boosting **economic activity in our towns** with the Stronger Towns Fund and coordinating **development and investment in specific sites** to maximise the benefit from agglomeration economies.





## A regional and sub-regional approach allows issues that cut across local areas to be tackled

### Pan-regional

Different regions face different challenges, with the **drivers of productivity varying in importance from place to place**. Hence, the policy mix must also vary by place. Regional initiatives provide the appropriate response in these circumstances, building on the shared economic opportunities of places and encouraging economies of scale. Policies and programmes such as **inter-city transport, energy and water infrastructure are best delivered at a regional scale** and can help to rebalance inward investment and regional productivity.

This is illustrated particularly by policies like the **Northern Powerhouse, Midlands Engine** and **Thames Estuary** which are promoting regional development and coordinating activity.

### Sub-regional/ functional economic area

Policies which work across economically self contained areas minimise spill over effects and zero-sum competition. These can often be larger than current administrative divisions and include Mayoral Combined Authorities and Local Enterprise Partnerships (LEPs). These local institutions can therefore **promote growth by delivering at the level of Functional Economic Areas**. At this spatial level, decision makers have an overview of linkages between areas and markets and can prioritise the tackling of market failures accordingly.

**Mayoral Combined Authorities** use their profile, devolved powers and spending from Westminster to promote growth in individual areas.

**Local Enterprise Partnerships** bring together business and civic leaders across a functional economic area to draw up **local industrial strategies** and prioritise investment from European and domestic funds to where it will most effectively drive growth and productivity.





## A national approach ensures that all places across the UK are given an opportunity to prosper

The **Industrial Strategy** provides a framework for national growth policy, focussing on tackling **4 grand challenges**:

1. Artificial intelligence and data
2. An ageing society
3. Clean growth and
4. The future of mobility

And takes a policy approach to these challenges based on **five foundations**:

1. Ideas
2. People
3. Infrastructure
4. Business environment and
5. Place

National policy also seeks to achieve the conditions required for productivity growth, which include good governance, openness, good quality human capital and skills, competitive intensity, research and development, the diffusion and adoption of innovation and new technologies, agglomeration, housing and social capital.

Policies that operate nationally such as the National Productivity Investment Fund or the forthcoming UK Shared Prosperity Fund provide the opportunity to reduce the fragmentation in the local growth landscape through joined up interventions.





Ministry of Housing,  
Communities &  
Local Government

**THANK YOU!**

**QUESTIONS?**