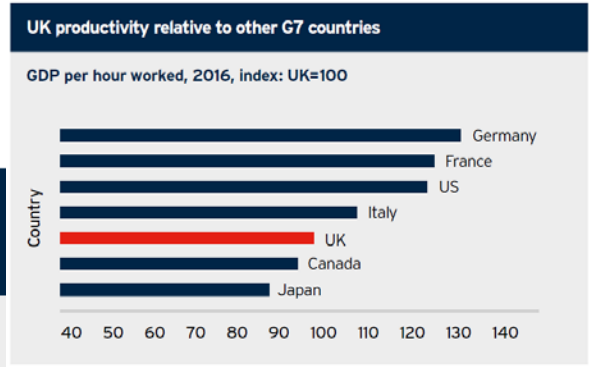
Industrial Strategy

Simon Sharpe, Department of Business, Energy and Industrial Strategy - Presentation at University of Sussex, 2 May 2018

INDUSTRIAL STRATEGY

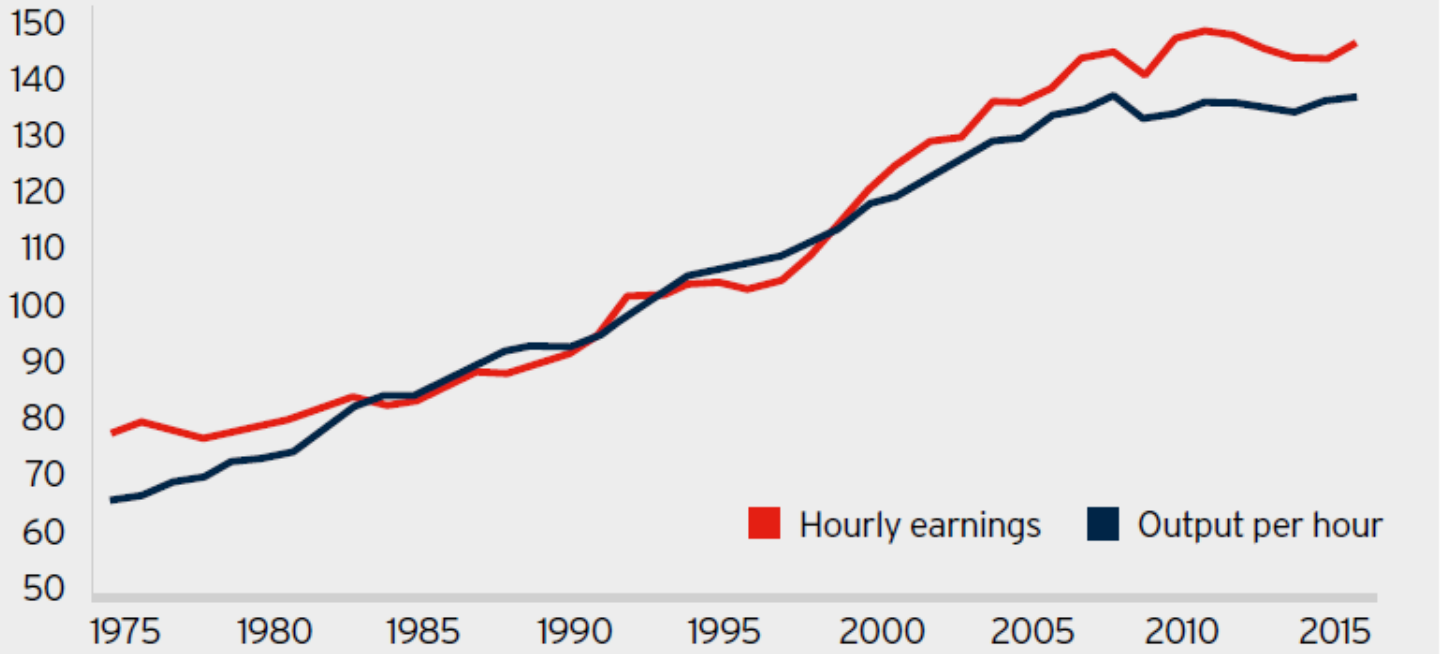
A problem



Source: ONS (2017) International Comparisons of Labour Productivity.

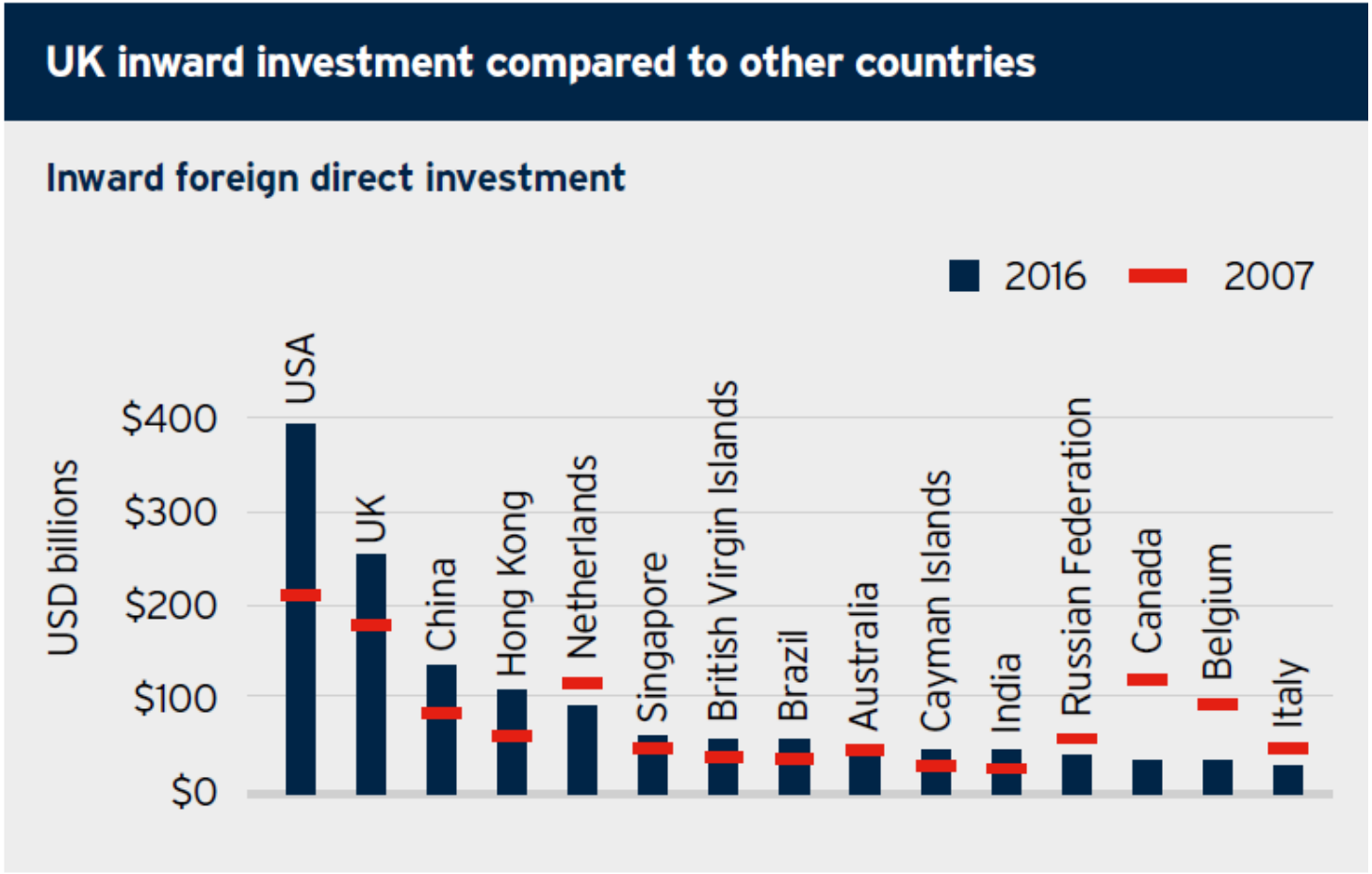
Rising wages depend on growing productivity

Hourly earnings and output per hour, index: 1993=100



Source: Data based on analysis of ONS national accounts and ASHE data (courtesy of Professor Paul Gregg, the University of Bath). *Hourly earnings is defined as mean compensation per employee hour.

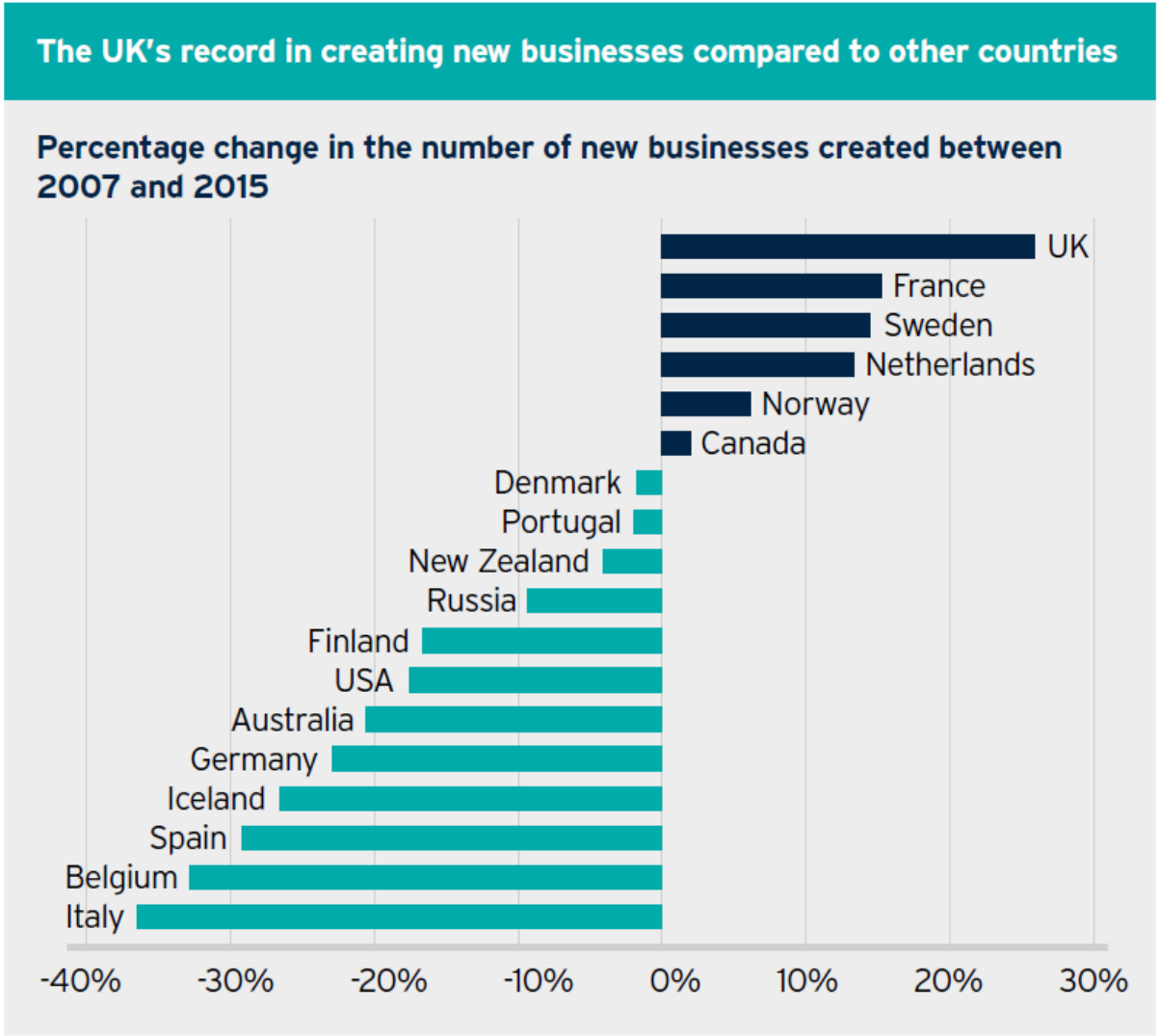
Going well (1): inward investment



UK attracts more overseas investment in R&D than many major countries, including Germany, France and China

Source: United Nations Conference on Trade and Development (2017) *World Investment Report 2017*

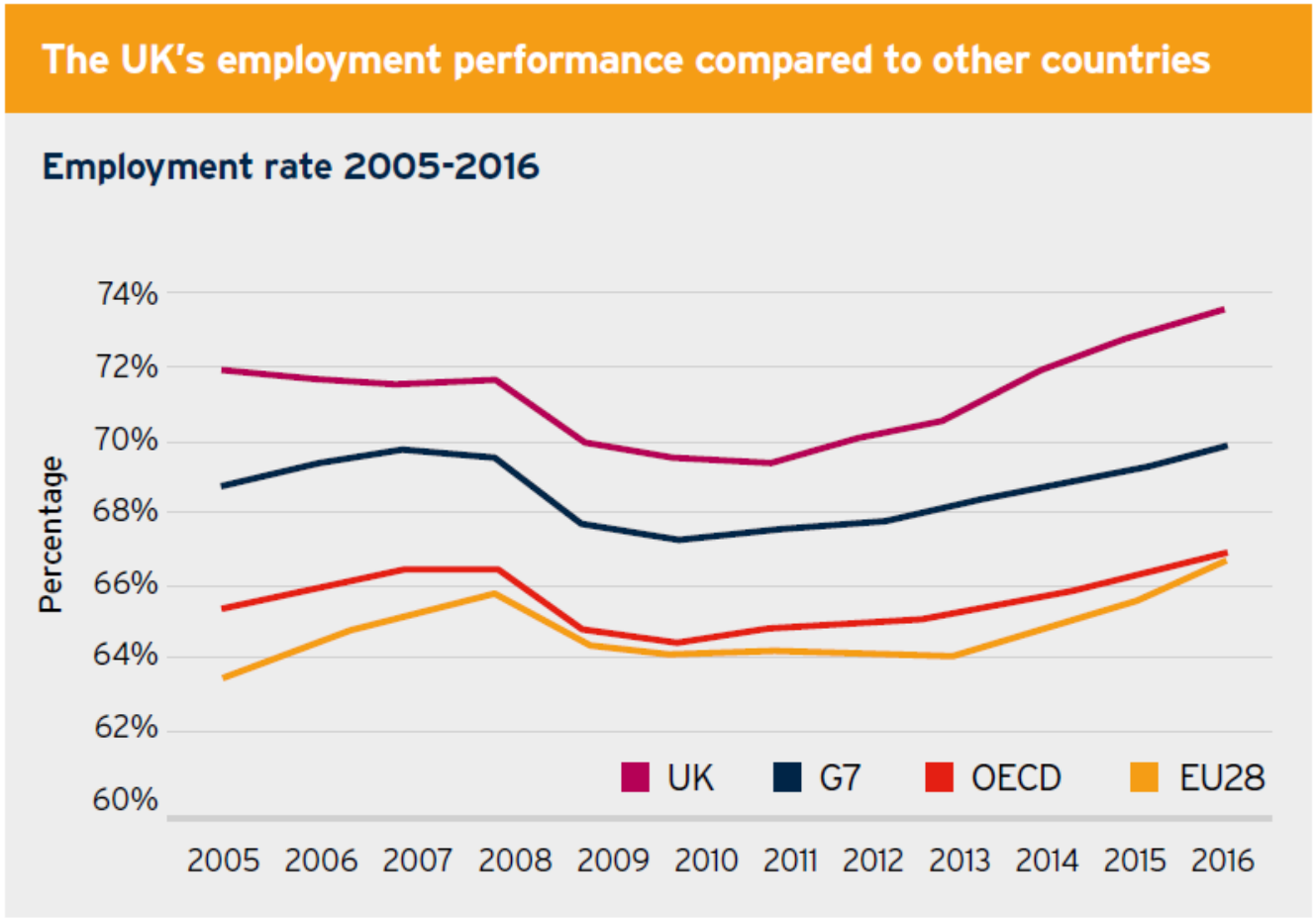
Going well (2): business creation



Source: OECD (2016) *"Entrepreneurship at a Glance 2016"*

UK is ranked 7th globally in the World Bank's Ease of Doing Business Index

Going well (3): employment rate



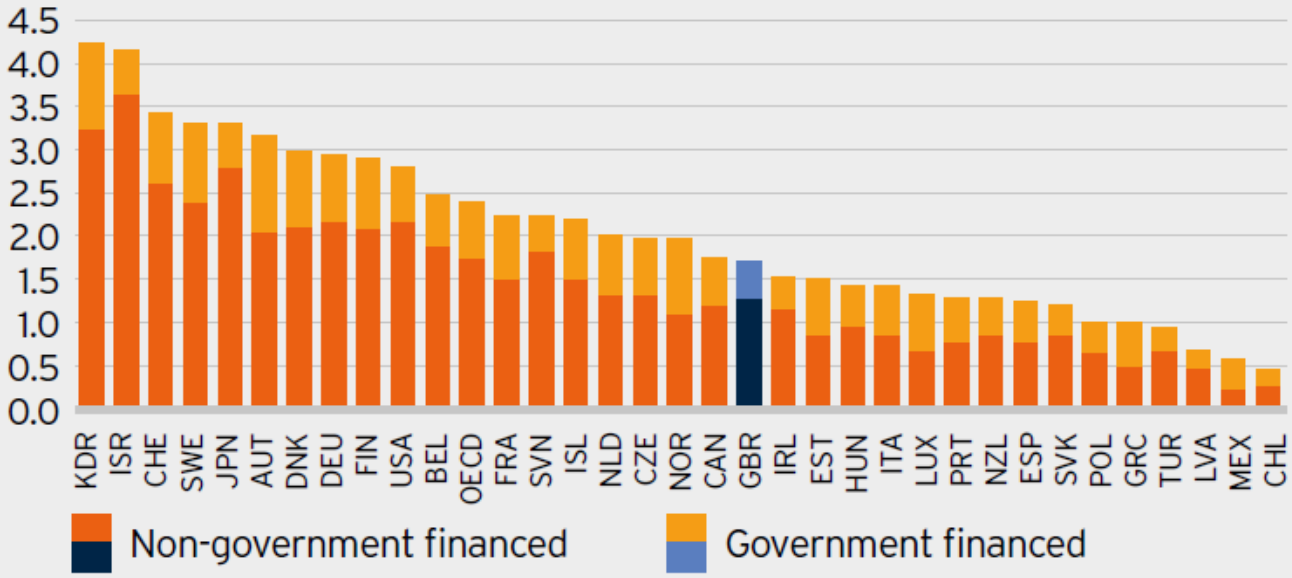
Source: OECD (2017) *"Employment Outlook 2017"*. *Employment rate is as a per cent of working-age population working (aged 15-64)

- UK has one of the most successful labour markets in the world
- Employment rate near historic high
- World-class higher education system

Not so well (1): R&D spend

UK's spending on research and development compared to other countries

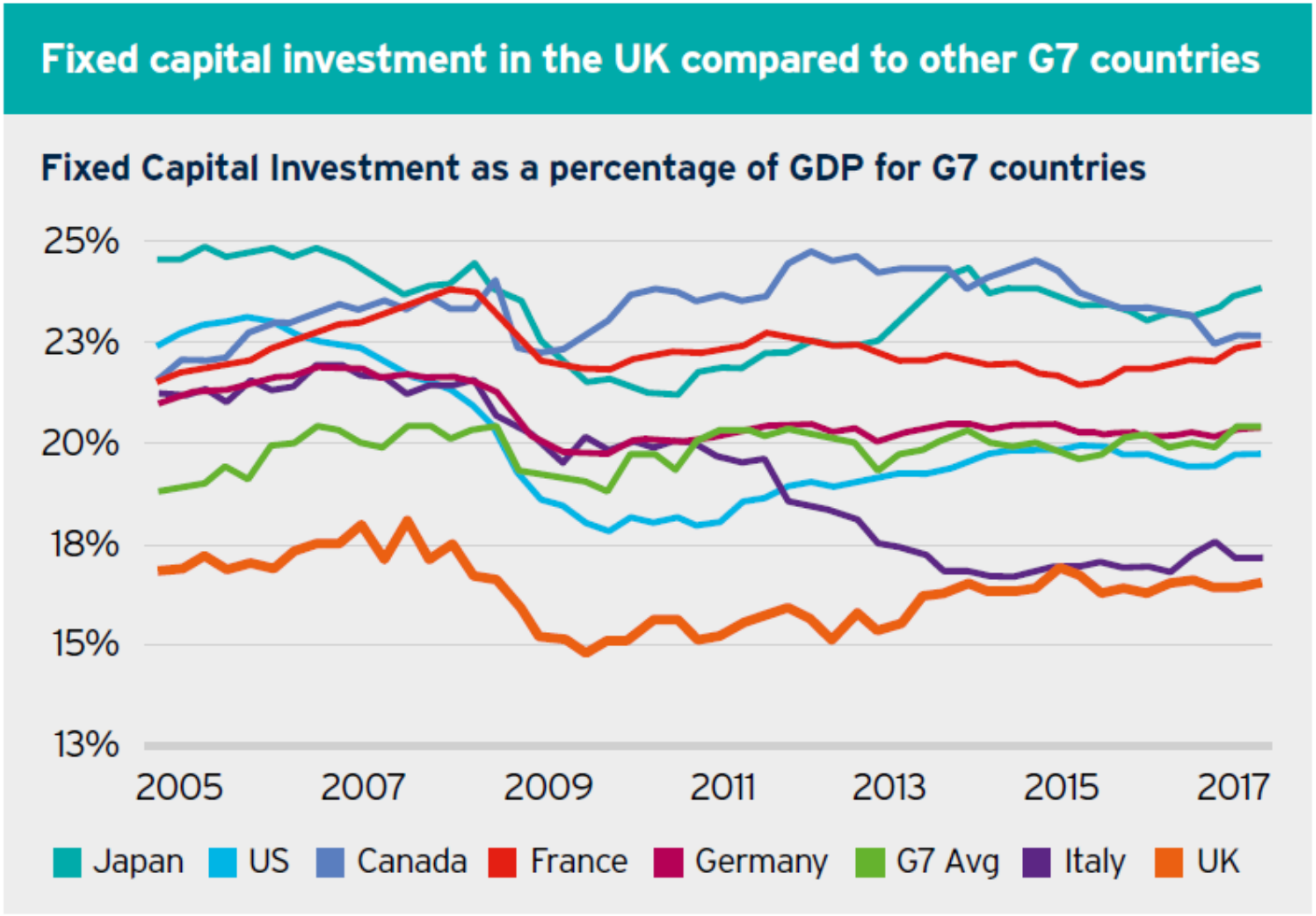
Gross domestic expenditure on R&D by source of financing as a proportion of GDP, 2015



Source: OECD (2017) *"OECD Economic Surveys: United Kingdom 2017"*. *2014 data for France, Ireland, Italy, Portugal and OECD aggregate. 2013 data for Belgium, Israel, Luxembourg and Sweden. Non-government financed includes finance from higher education, which may be partly government-financed; and from the rest of the world, which may include foreign and supranational government finance

We invest less in R&D than most of our competitors –
UK: 1.7% of GDP
US: 2.8%
Germany: 2.9%
OECD avg: 2.4%

Not so well (2): Fixed capital investment

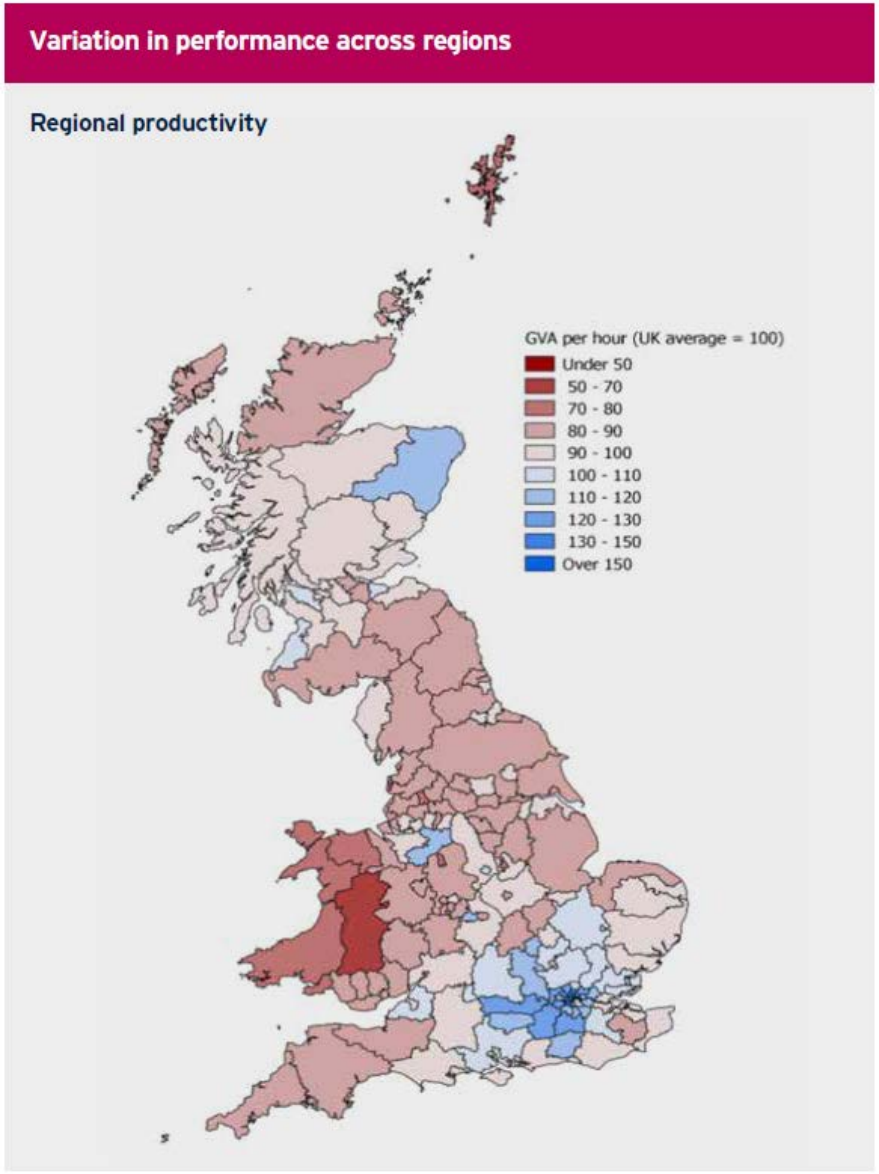


Source: OECD (2017) *"Quarterly National Accounts 2017"*. Fixed Capital Investment is gross fixed capital formation

UK's investment rate lowest in the G7

Many UK businesses are not investing as much as our competitors' businesses in skills, technology and equipment.

Not so well (3): Growth across the country



Source: ONS (2017) *"Subregional Productivity: Labour Productivity."*
Ordnance Survey Data © Crown Copyright 2017*NUTS3 statistical region classification

UK has greater disparities in regional productivity than other European countries

Industrial Strategy: Foundations of productivity

We will create an economy that boosts productivity and earning power throughout the UK:

Ideas
the world's most innovative economy

- Raise total research and development (R&D) investment to 2.4 per cent of GDP by 2027

People
good jobs and greater earning power for all

- Establish a technical education system that rivals the best in the world to stand alongside our world-class higher education system

Infrastructure
a major upgrade to the UK's infrastructure

- Increase the National Productivity Investment Fund to £31bn, supporting investments in transport, housing and digital infrastructure

Business environment
the best place to start and grow a business

- Launch and roll-out Sector Deals – partnerships between government and industry aiming to increase sector productivity. The first Sector Deals are in life sciences, construction, artificial intelligence and the automotive sector
- Drive over £20bn of investment in innovative and high potential businesses, including through establishing a new £2.5bn Investment Fund, incubated in the British Business Bank

Places
prosperous communities across the UK

- Agree Local Industrial Strategies that build on local strengths and deliver on economic opportunities
- Create a new Transforming Cities fund that will provide £1.7bn for intra-city transport. This will fund projects that drive productivity by improving connections within city regions

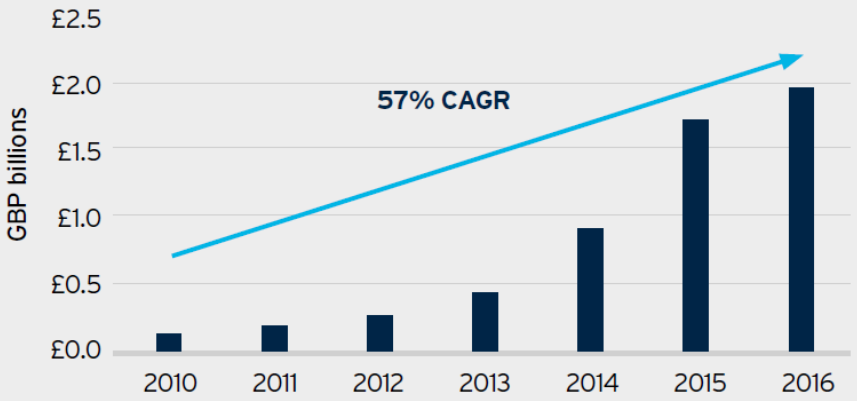
INDUSTRIAL STRATEGY

*“**A truly strategic government must do more than just fix the foundations:** it must also plan for a rapidly changing future, look to shape new markets and industries, and build the UK’s competitive advantage.”*

Foreseeable change

Global venture capital investment in artificial intelligence

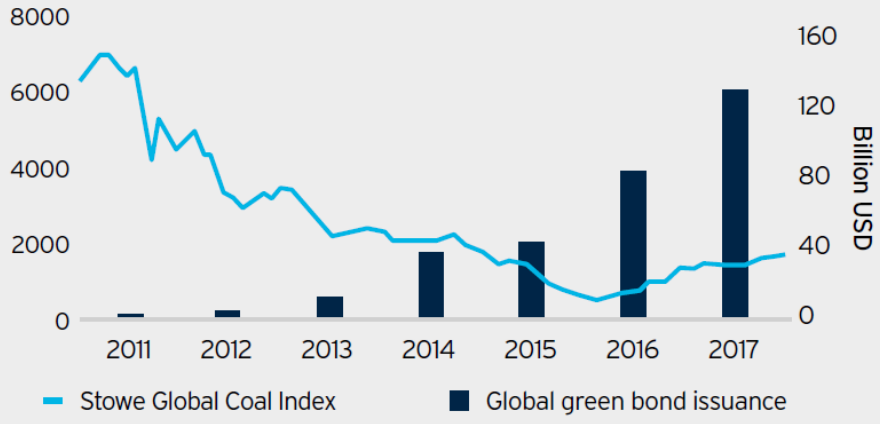
Cumulative average growth rate (CAGR), 2010-2016



Source: Hall, W. and Pesenti, J. (2017) *Growing the Artificial Intelligence Industry in the UK.* Growth is cumulative average growth rate 2010 to 2016

Shift of global investment towards the clean economy

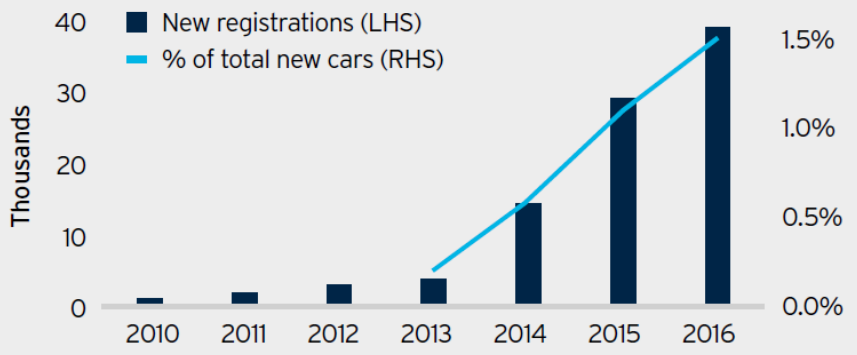
Stowe Global Coal Index and global green bonds issuance



Source: Climate Bonds Initiative (2017); Stowe Global Indexes. *2017 green bond issuance is estimated. The Coal Index takes the last data of each month from Jan 11 to Oct 17

UK electric car ownership has increased rapidly since 2010

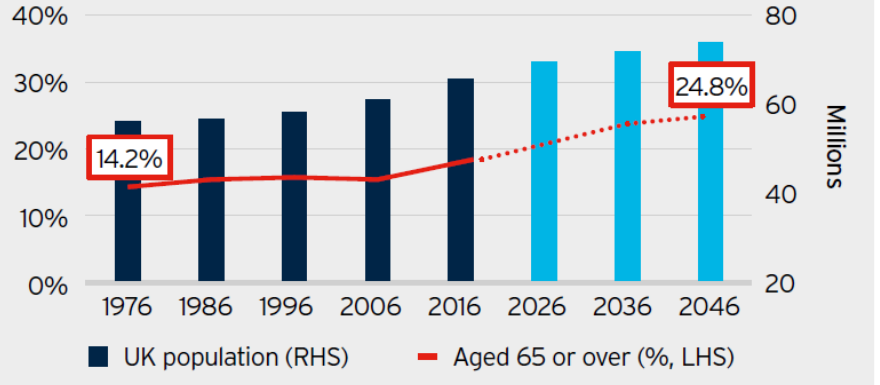
New electric car registrations



Source: Department for Transport (2017) Vehicles statistics. *Electric car includes plug-in hybrids, 100% electric, range extended electric and fuel cell electric cars

By 2046 almost 1 in 4 people will be 65 years old and over

UK population and proportion of population aged 65 and over



Source: ONS (2017) *"Population estimates"*
*2016-based population projections are used

Industrial Strategy: Grand Challenges

AI & Data Economy

We will put the UK at the forefront of the artificial intelligence and data revolution

Future of Mobility

We will become a world leader in the way people, goods and services move

Clean Growth

We will maximise the advantages for UK industry from the global shift to clean growth

Ageing Society

We will harness the power of innovation to help meet the needs of an ageing society

INDUSTRIAL STRATEGY

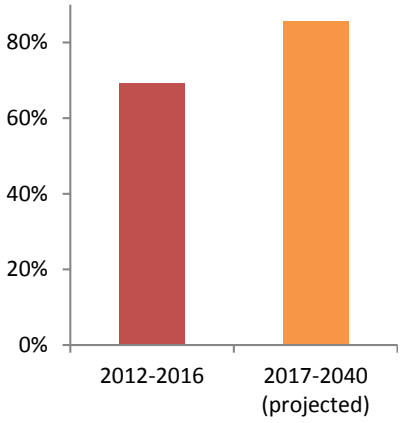
We will set Grand Challenges to put the future of the UK at the forefront of the industries of the future

The public and private sector must work with universities, researches and civil society to put the UK at the forefront of these revolutions, breaking down conventional barriers within and between business sectors and academic disciplines.

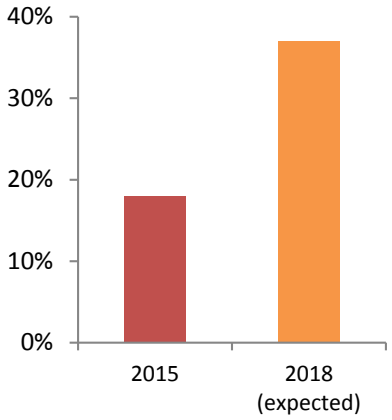
Example: clean growth

The clean economy's growing share of global markets

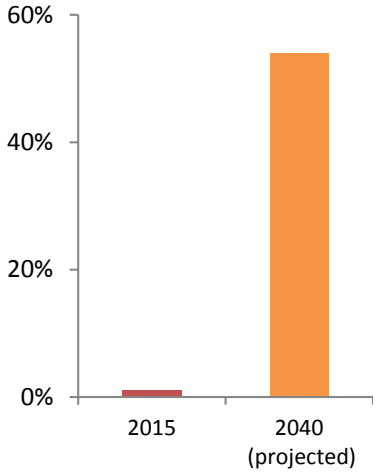
Clean power investment as share of global power investment



Share of global construction businesses for whom the majority of activities are green



Global market share of electric vehicles



We will:

- ***increase our support for innovation so that the costs of clean technologies, systems and services are reduced across all sectors;***
- ***align our policies, regulations, taxes and investments to grow the markets for these new innovations so that they are successfully commercialised in the UK.***

INDUSTRIAL STRATEGY

Industrial Strategy Challenge Fund

Requirements

Expressions of interest **must**:

1. Be industry-led. (May be a combination of industry, academia, and public sector partners)
2. Demonstrate clear alignment with at least one of the Grand Challenges in the Industrial Strategy

Selection criteria

- **Challenge is compelling**, focused, and articulated in a way that anyone will understand and see the benefit of solving
- It is **industry-led** in an area of existing UK strength
- It takes advantage of our research depth and **expertise**
- There is a clear **opportunity for growth** with a sustainable global market and contribution from industry
- Evidence indicates that Government intervention is necessary and of **strategic importance** to the UK
- Evidence indicates that solving the challenge will catalyse **productivity growth**

INDUSTRIAL STRATEGY