

Manufacturing in the UK



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www.cranfield.ac.uk

The Telegraph

The tragic decline and fall of the UK's steel industry

A visitor from Mars would be forgiven for thinking that the UK's energy policy is deliberately designed to shut down our manufacturing industry



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Cadbury wraps up chocolate production at Somerdale factory in Keynsham

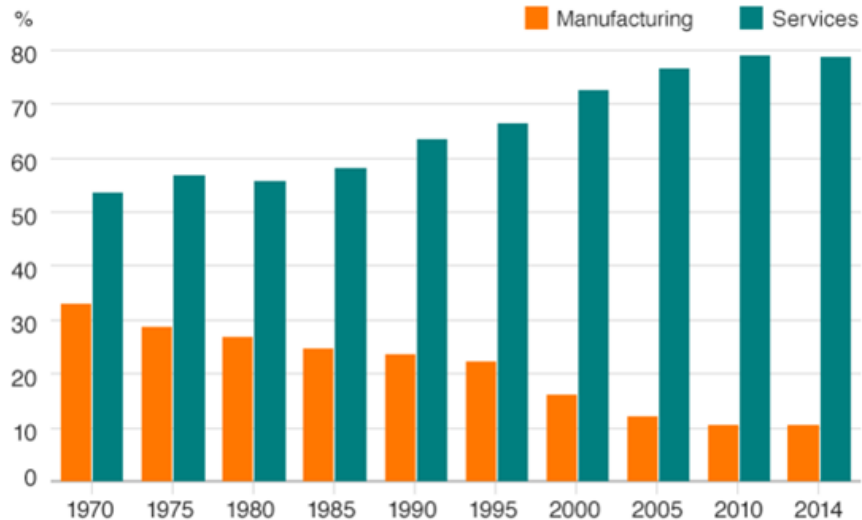
By **This is Bristol** | Posted: January 01, 2011

Comments (0)

Cadbury has confirmed the last bar of chocolate has rolled off the production line at its Somerdale factory in Keynsham.

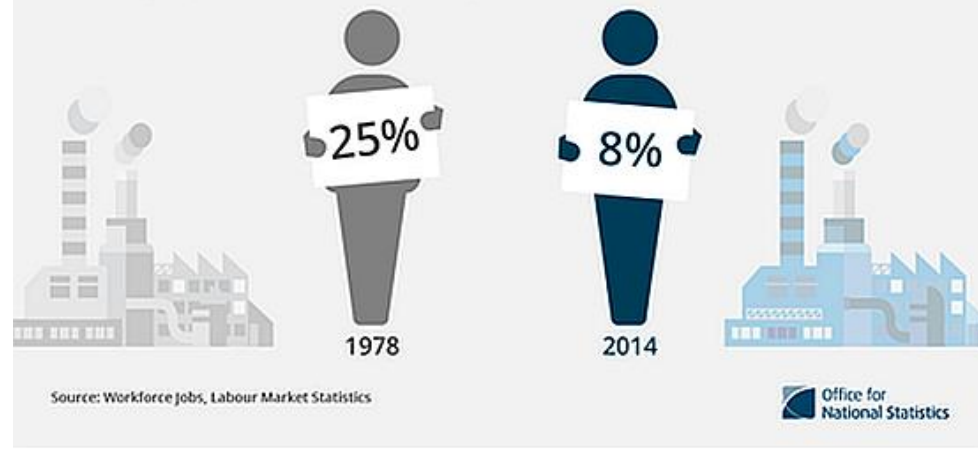
Historic trends

Proportion of GDP coming from manufacturing and services



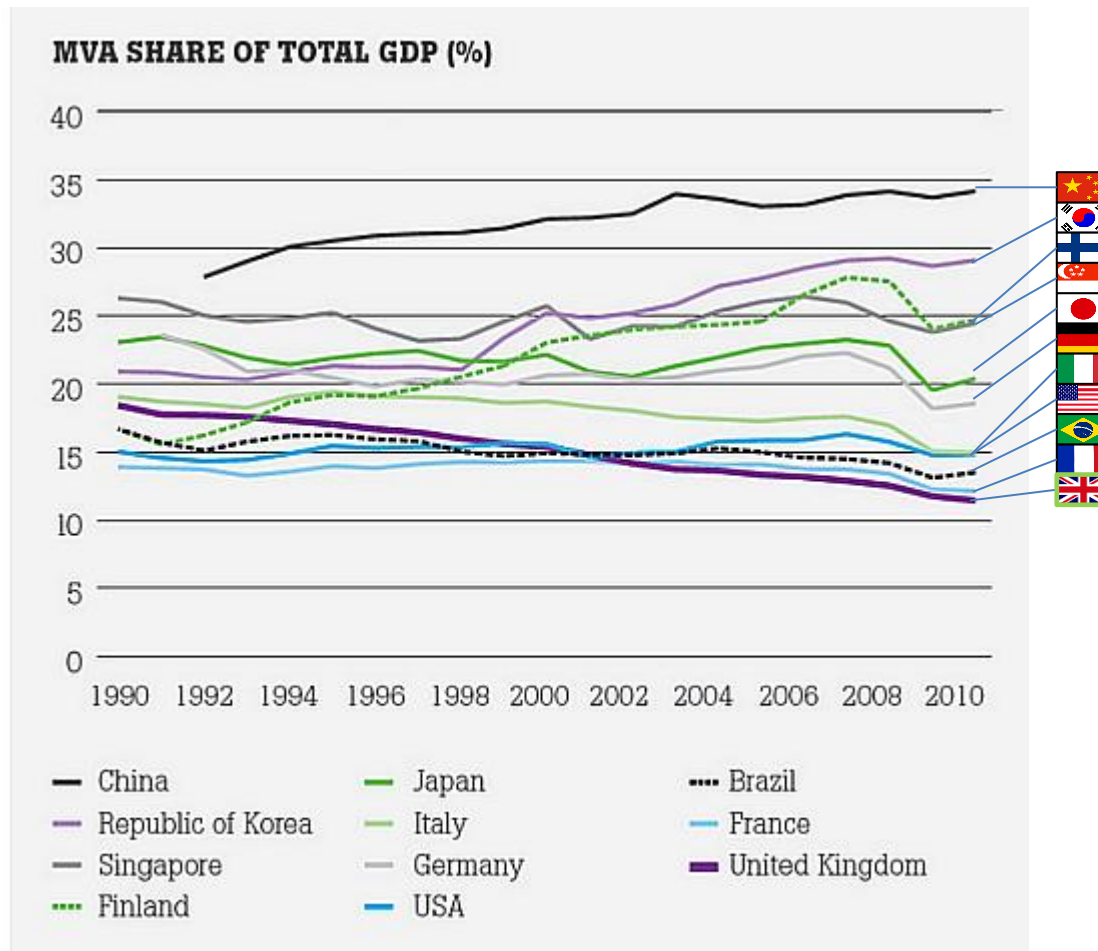
- Steady decline from 1970s – modern day

Percentage of jobs in the UK manufacturing sector



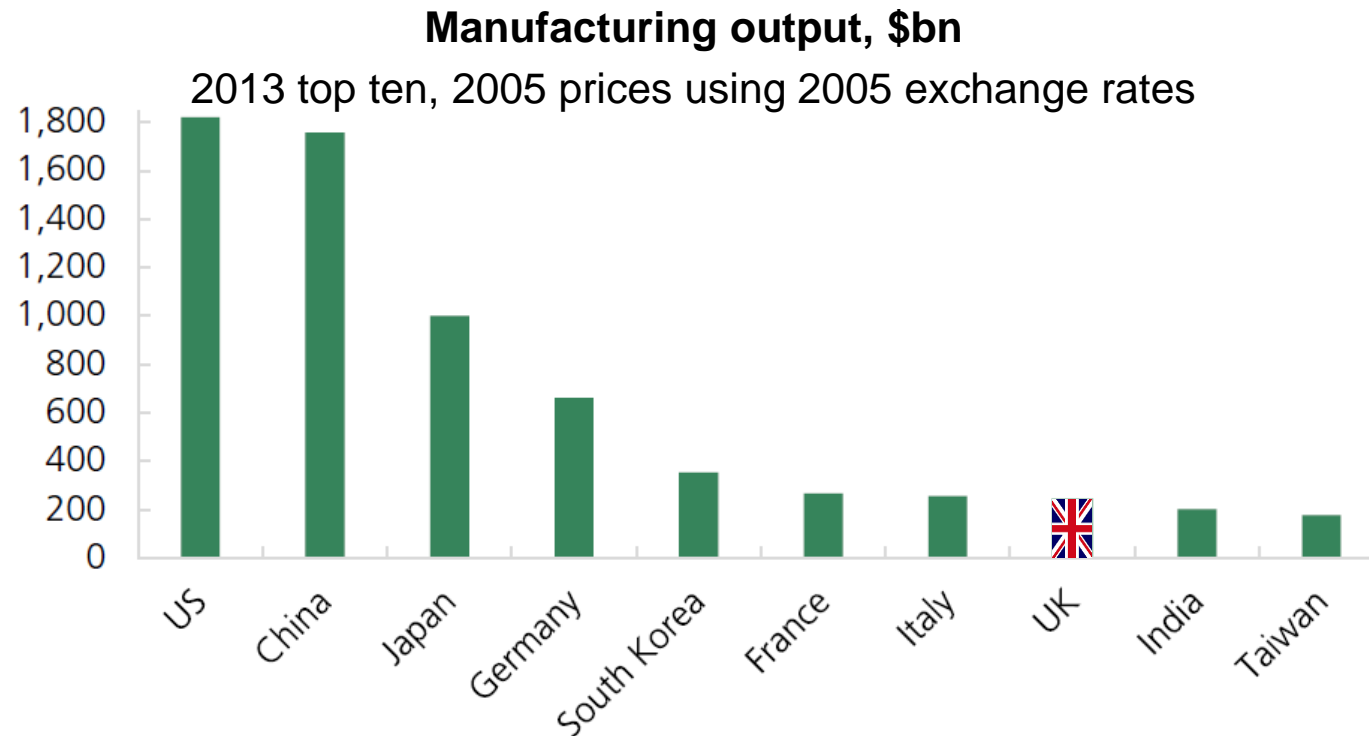
- Employs 8% of UK workforce

Historic trends: MVA share of GDP



- Manufacturing “Value Added” share of GDP in UK decreased to ~ 10% of GDP
- Similar level with France, Brazil, USA
- Strongest decline while other countries (China, Korea) growing

Historic trends: Labour Productivity



UK still ranked 8th in global manufacturing

USA: \$1.8tn (£980bn)

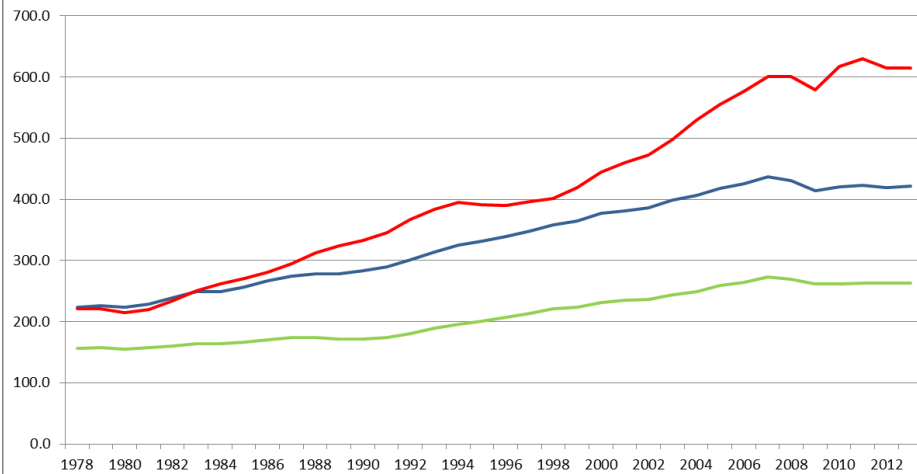
China \$1.8tn (£980bn)

UK \$245 bn (£134bn)

Historic trends: Labour Productivity

Labour Productivity (1978-2013), 1948=100

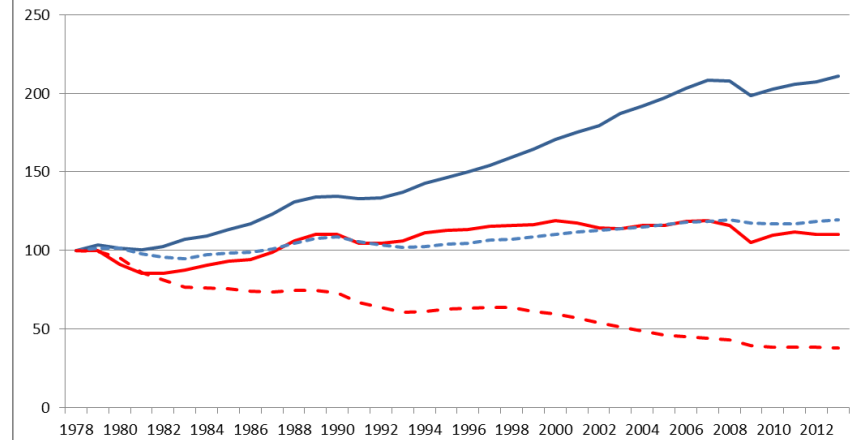
— Whole economy — Manufacturing — Services



Labour productivity in manufacturing
has grown, above other sectors

Sector output (1978-2013), 1978=100

— Manufacturing output — Whole economy output
- - - Total workforce jobs - - - Manufacturing workforce jobs



Manufacturing output has maintained
a similar level despite decline in jobs

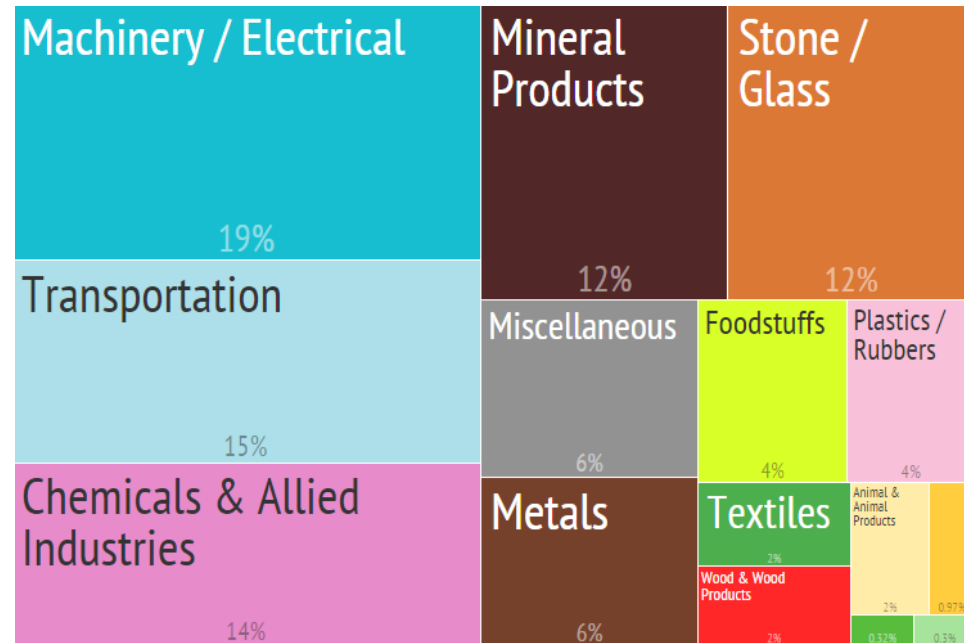
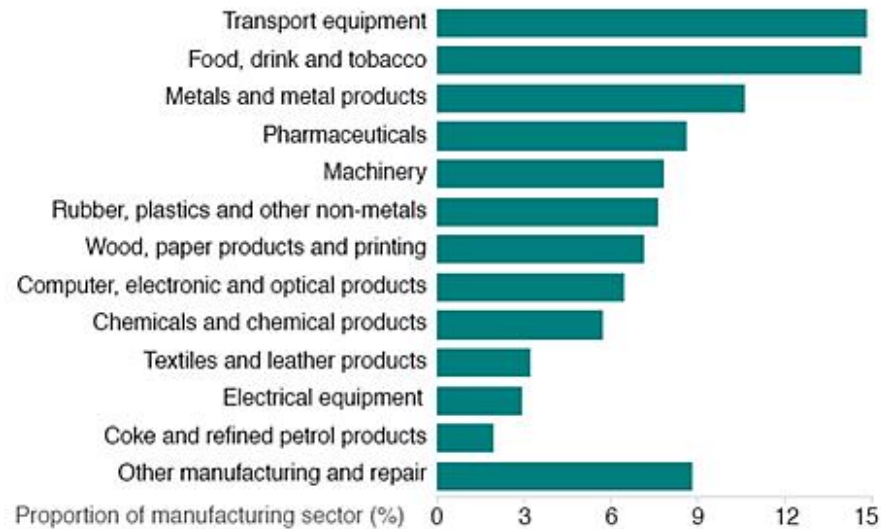
Manufacturing Sectors (summary)



- Space & Aerospace
- Automotive
- Chemical & Pharmaceutical
- Defence
- Electronics
- Energy
- Food & Drink
- Plastics
- Metals: iron, steel
- Textiles

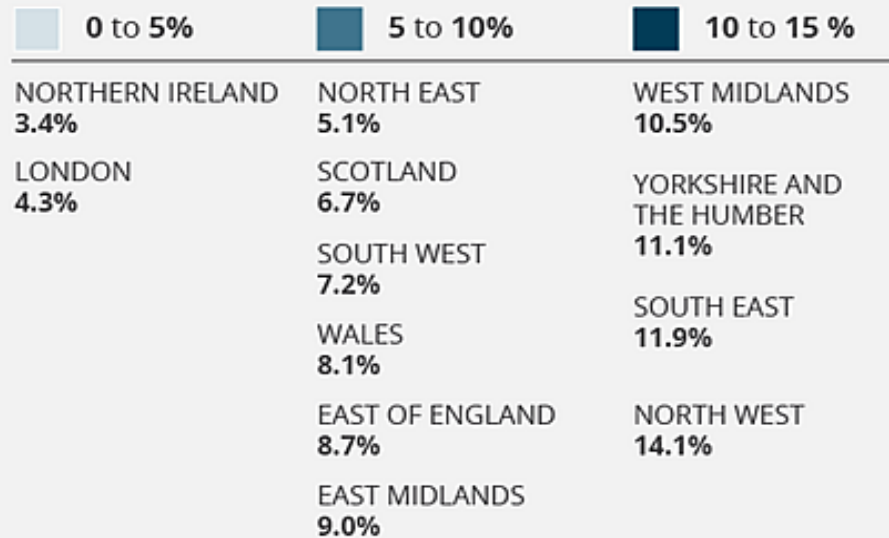
Manufacturer Production & Exports 2014

What do we make?

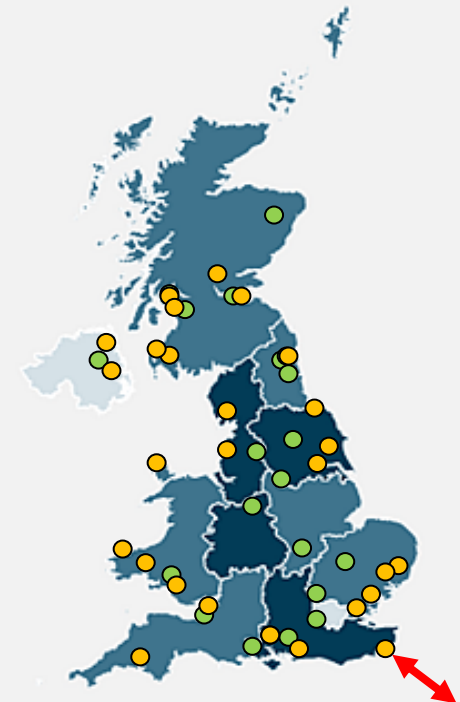


Geography: Manufacturing locations in the UK & infrastructure

Manufacturing turnover as a percentage of UK total, 2012



Source: ABS Regional Results, 2012



Office for
National Statistics

● Major sea ports ● Airports ↗ Channel tunnel rail link

Innovation and public assistance

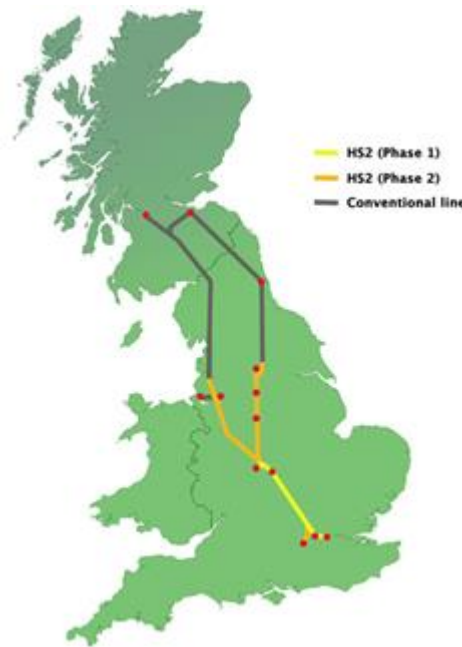


CATAPULT
High Value Manufacturing

- High value catapult manufacturing centres
- Govt. start-up loans scheme offering <£25k for 5 years low interest
- Tax incentives for R&D to offset tax liability and encourage research investment
- 'Reshore UK' govt. funding and support for SME's to relocate to UK

Major projects

- World's first commercial tidal energy project
- Hornsea project to be world's largest offshore wind farm
- “High Speed 2”, linking London & Channel tunnel to Midlands



Upcoming challenges & opportunities

- EU referendum 2015
- Trans-Atlantic Trade and Investment Partnership (TTIP) between EU & US ~£1.5tn each way
- Reduce trade tariffs & harmonise regulation control across borders
- Open up new markets for SME's that can't otherwise afford to expand customer base



Summary of UK & manufacturing

- UK GDP £1.9tn (2014)¹
- Manufacturing ~10% of national output (£134 bn)
- 44% total exports
- Employs ~ 2.6 million (~8% workforce)
- UK Manufacturing sector maintains high productivity

- Government support
 - low-interest loans and tax incentives to remain norm
 - Reshore UK support
 - TRL-bridging Catapult centres

- Upcoming challenges & opportunities:
 - “Made in UK” marque
 - EU referendum (2016)
 - TTIP free-trade agreement (2020)

Thank you

