



# The Economics of Why Manufacturing Matters

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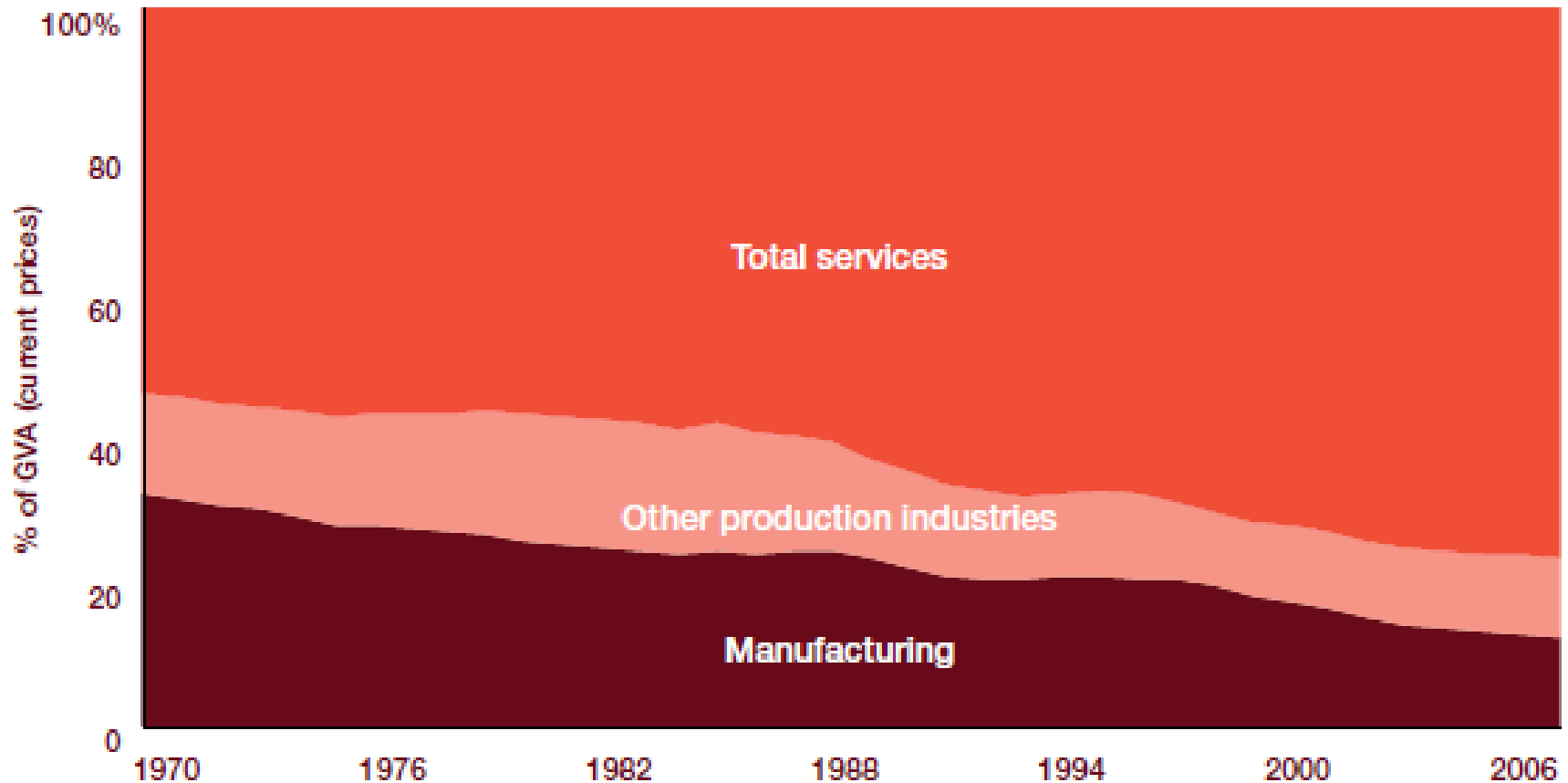


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# The Economics of Why Manufacturing Matters

- Recent focus on manufacturing as a source of future growth and to help the 'rebalancing' of the economy
- But does manufacturing matter?
- If it does, what are the ways forward?

# Manufacturing as share of the UK economy (GVA)



Note: 'Other Production Industries' includes: mining & quarrying; agriculture, forestry & fishing; energy and utilities; and construction.

Source: UK Office for National Statistics

Cited in PWC (2009)

George Osborne has  
declared that he wants  
to start a "march of the  
makers".

**Does  
Manufacturing  
Matter?**

**No**

# **Why Manufacturing “Does Not Matter”**

# Why Manufacturing “Does Not Matter”

1. ‘Deindustrialisation’ is a common feature of modern advanced economies
2. ‘Comparative advantage’ indicates that advanced economies should focus on services
3. Productivity differentials result in a declining share of employment in manufacturing
4. Consumers demand more services as they get richer
5. Structural change and the reclassification of activities



# Is 'Deindustrialisation' is a common feature of modern advanced economies?

- Yes
- But the rate of decline has been much greater in the UK than in most other advanced countries

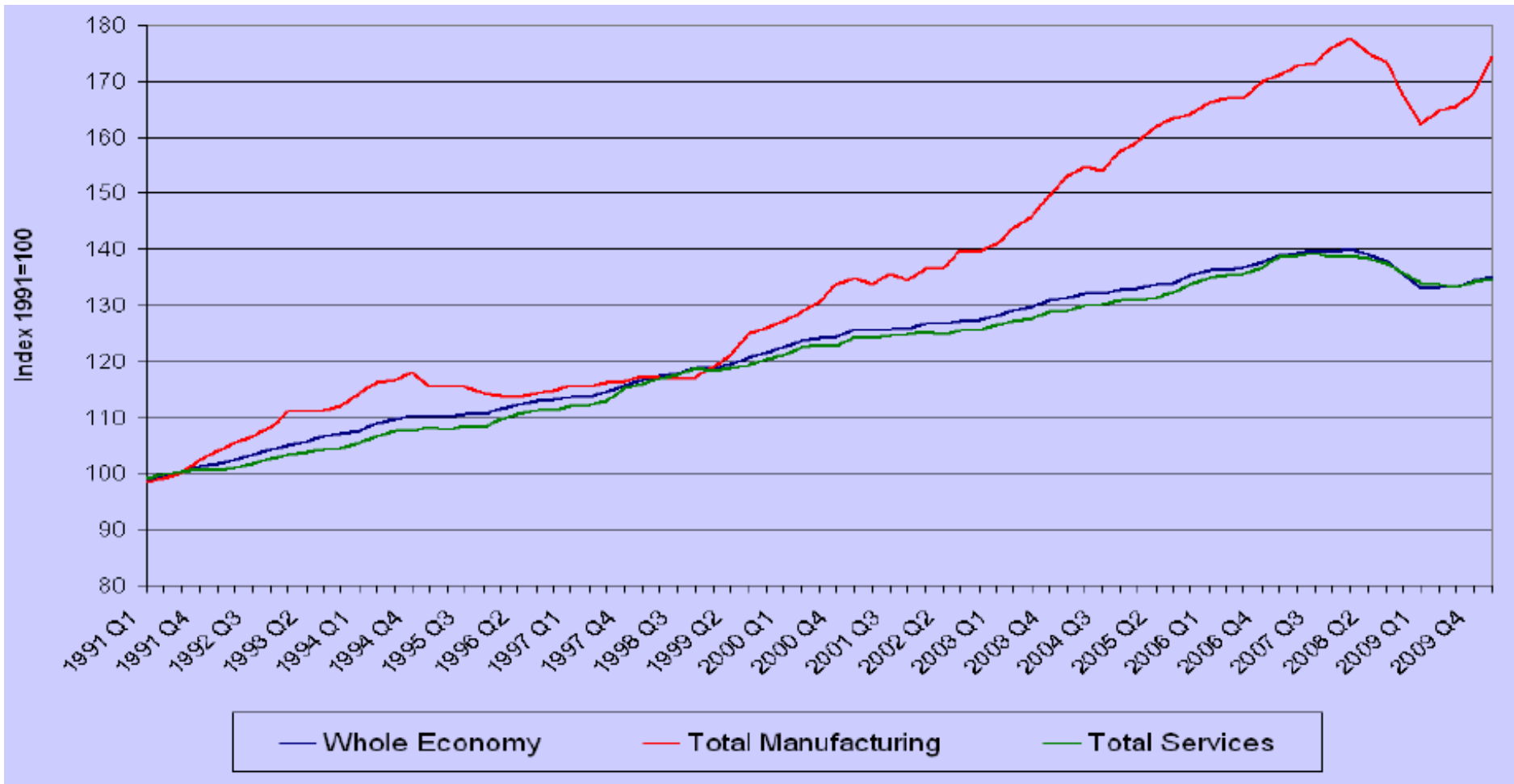
# **‘Comparative advantage’ indicates that advanced economies should focus on services**

- Comparative advantage is not a static concept
- Countries may get locked into a inappropriate economic structure resulting in low overall economic growth
- Comparative advantage can be changed by public policies and structural change

# Productivity differentials result in a declining share of employment in manufacturing

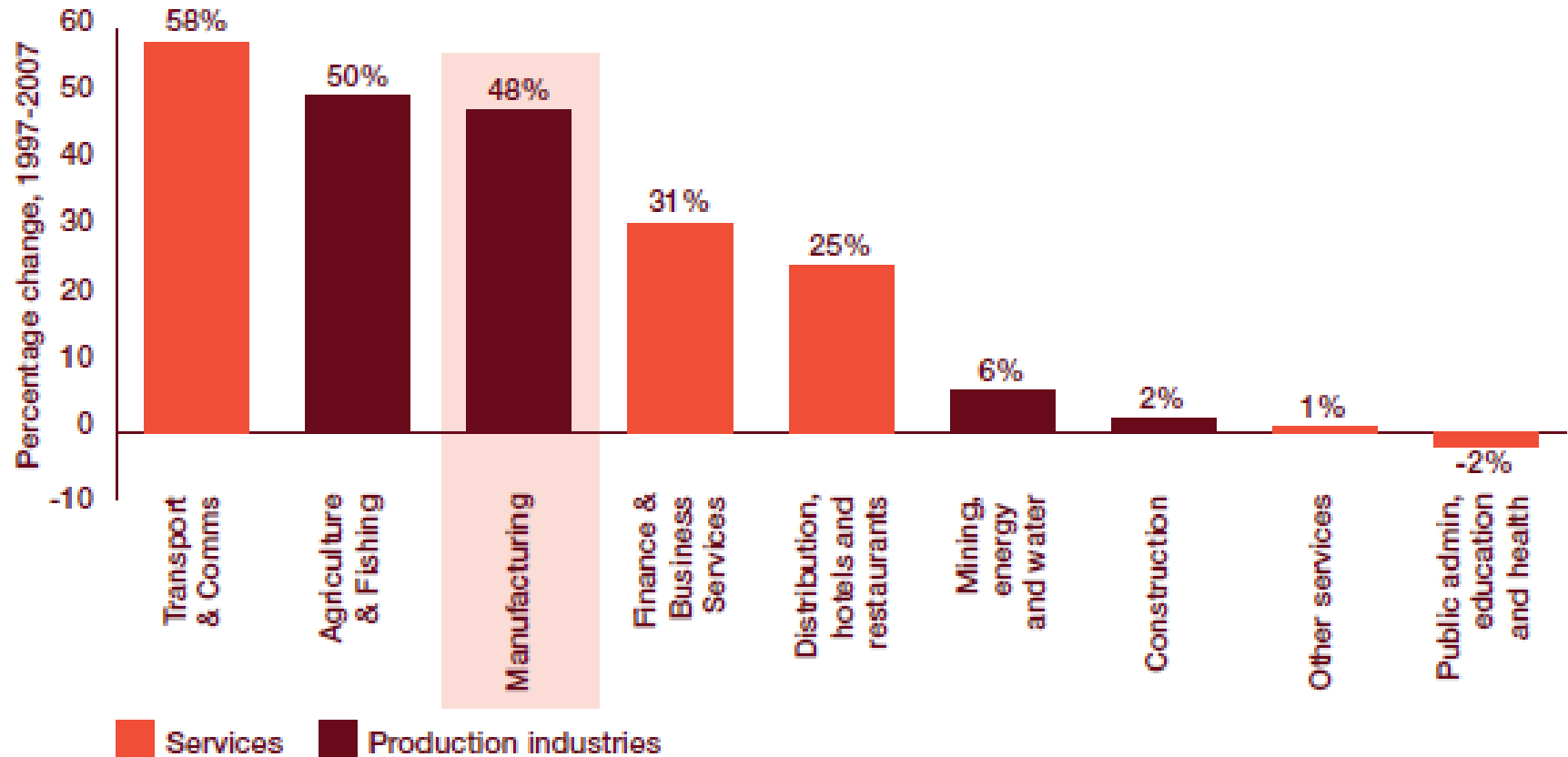
- But this does not explain the slow growth of output
- If productivity is higher in manufacturing then an overall shift to manufacturing will increase overall economic growth

# Relative Productivity of UK Manufacturing 1991-2009



Source: ONS Cited in BIS (2010)

# Productivity growth – output per employee, 1987-2007



Source: UK Office for National Statistics

Cited in PWC (2009)

# Consumers demand more services as they get richer

- The evidence is mixed
- Expenditure on manufactures has declined in monetary terms
- But expenditure on manufactures has not declined in real terms

# **Deindustrialisation is caused by structural change and the reclassification of activities**

- Contracting out of activities from manufacturing to specialist service providers (eg design, catering and transport)
- But can only explain a modest fall in manufacturing output and employment
- And many manufacturing firms now provide services as well as physical products

**Does  
Manufacturing  
Matter?**



**YES**

# **Why Manufacturing Does Matter**

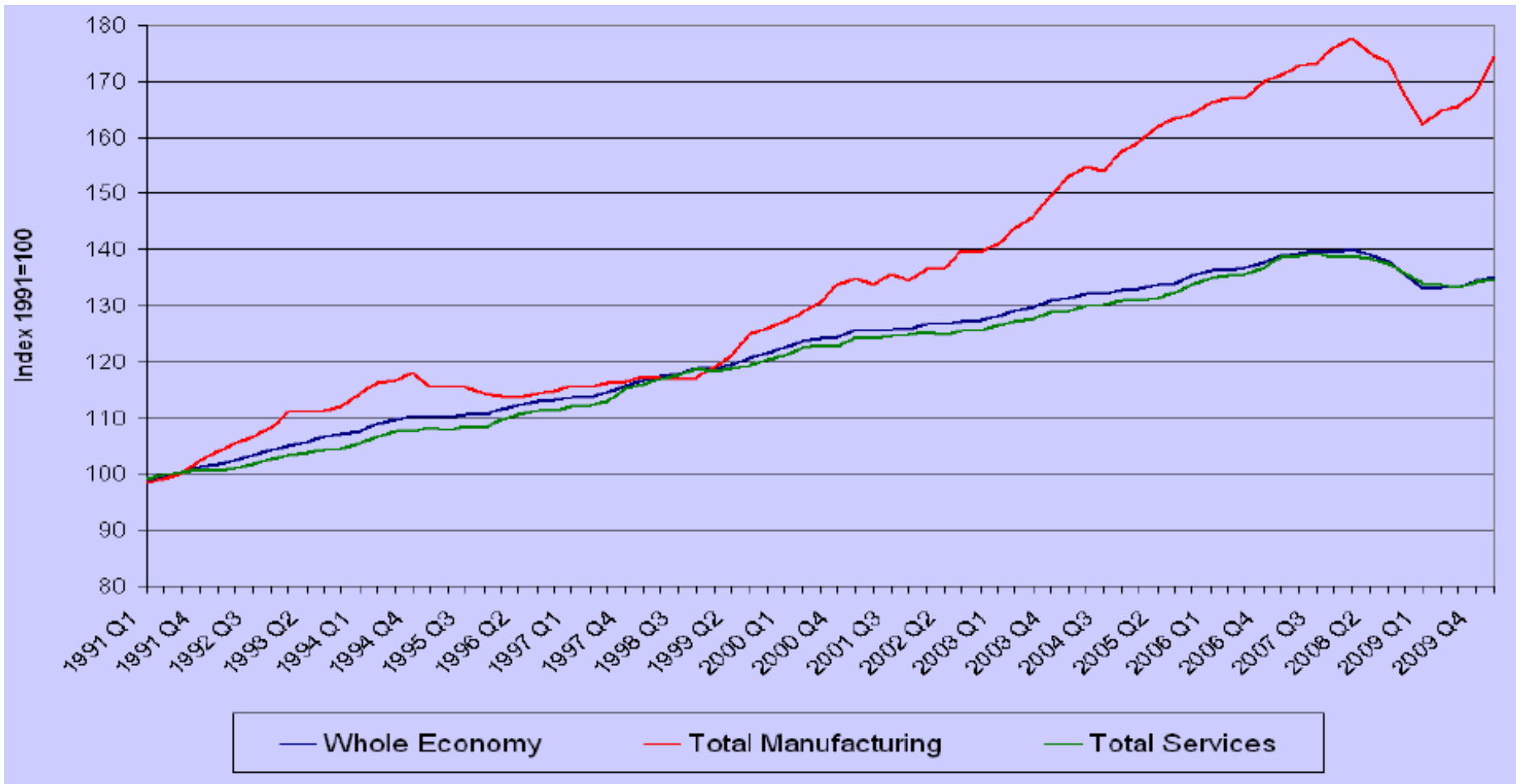
# Why Manufacturing Does Matter

- Manufacturing is an engine of growth
- Manufacturing is an important source of exports
- Manufacturing as an integral component of national economic and innovation system
  - Source of positive spill-overs
  - Development of technologies for sustainable growth

# Manufacturing is an engine of growth

- Manufacturing productivity (output per worker) is relatively high
- Manufacturing benefits from economies of scale
- A larger manufacturing sector can deliver higher overall economic growth

# Relative Productivity of UK Manufacturing 1991-2009



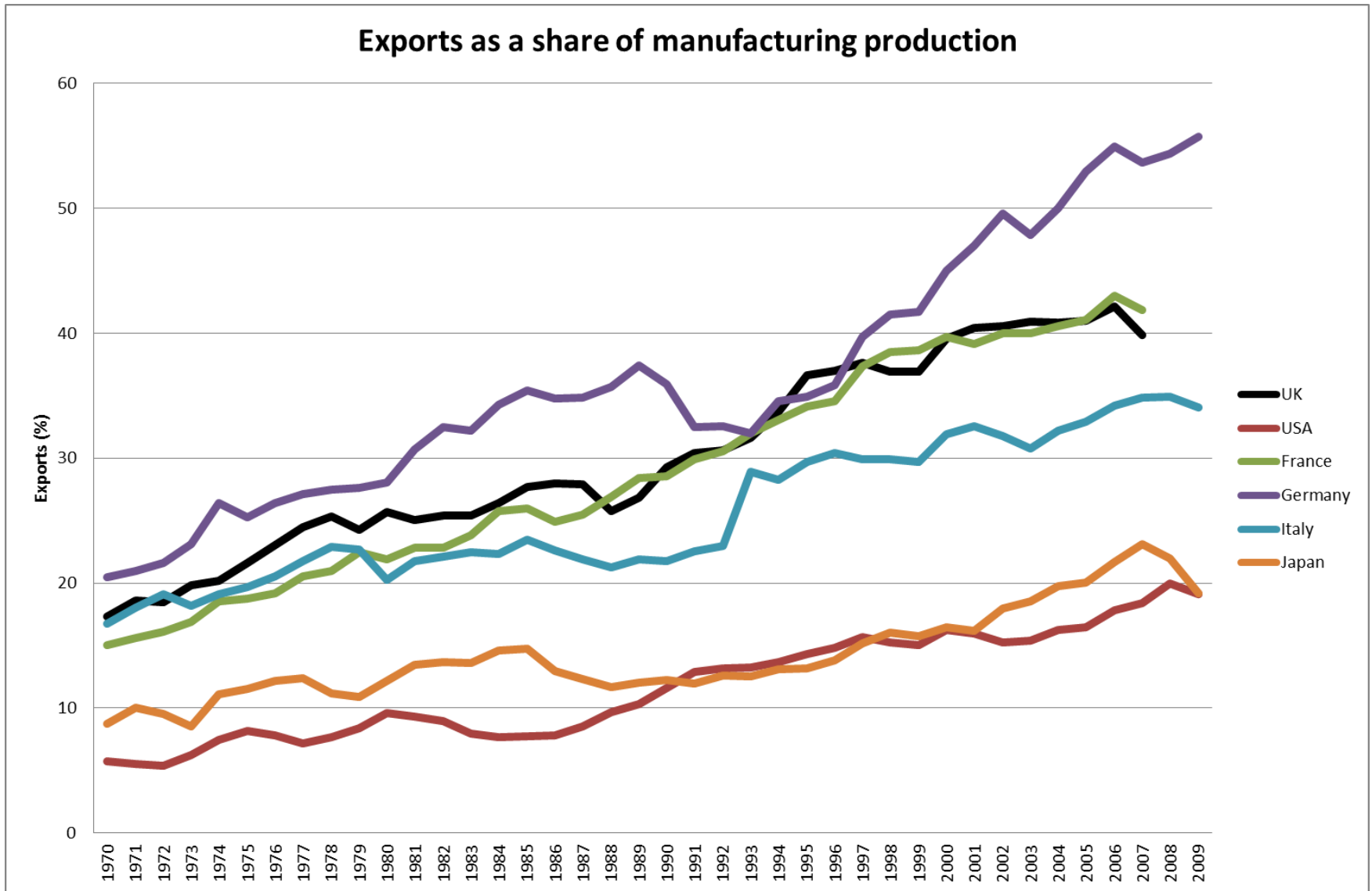
Source: ONS

Cited in BIS (2010)

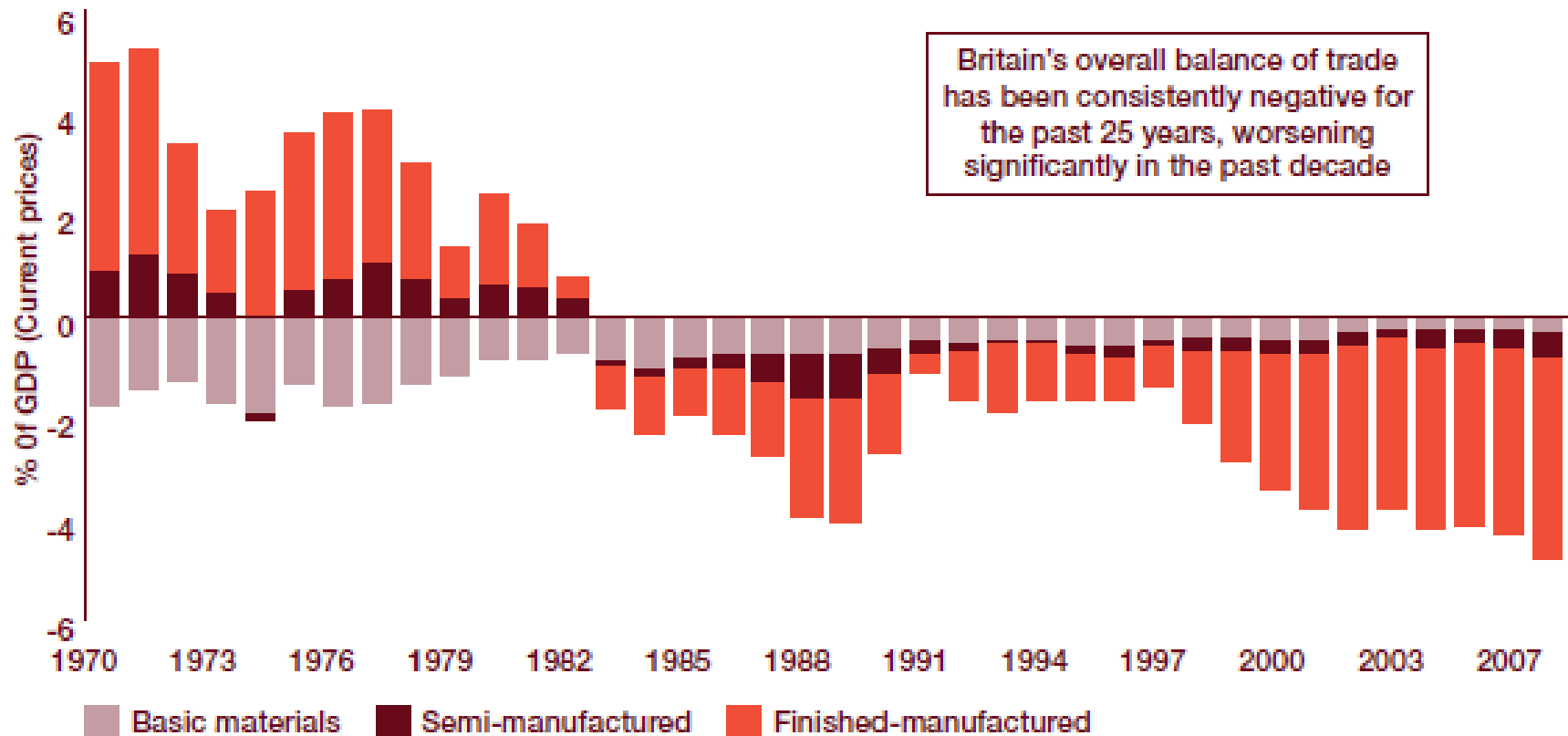
# Manufacturing is an important source of exports

- Manufacturing is an important source of exports
- But UK balance of trade has been consistently negative over the past 25 years
- This has deficit has been funded by borrowing and the sale of assets
- Such trade deficits are unlikely to be sustainable in the future
- Need to reverse the manufacturing trade balance

# Exports as a Share of Manufacturing production (selected countries)



# UK Manufacturing Balance of Trade, 1970-2007



Source: UK Office for National Statistics

Cited in PWC (2009)



# **Manufacturing as an integral component of national economic and innovation system**

- Innovation is required for sustained economic growth
- Manufacturing is a source of innovation and positive spill-overs ('externalities') which improve growth in other sectors
- Manufacturing is a sources of technologies for sustainable growth

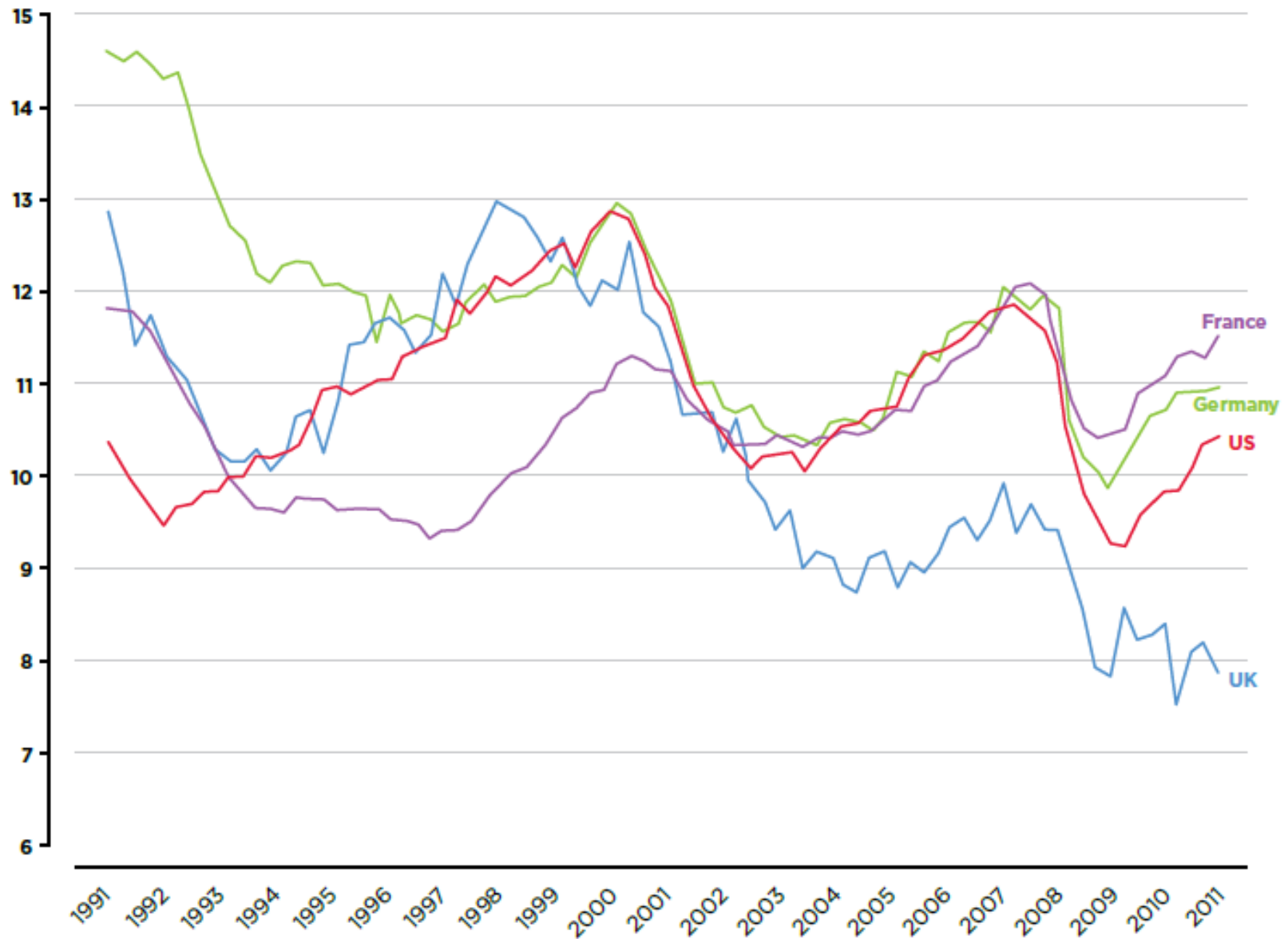
# Manufacturing in the UK

- The relative decline of manufacturing in the UK has been greater than other advanced countries
- The UK is suffering from 'negative deindustrialisation'
- This has been masked balance of payments deficits during the past 25 years – which are now unsustainable
- The manufacturing base is dangerously small to contribute to significant overall growth in the future

# Reversing 'Negative Deindustrialisation'

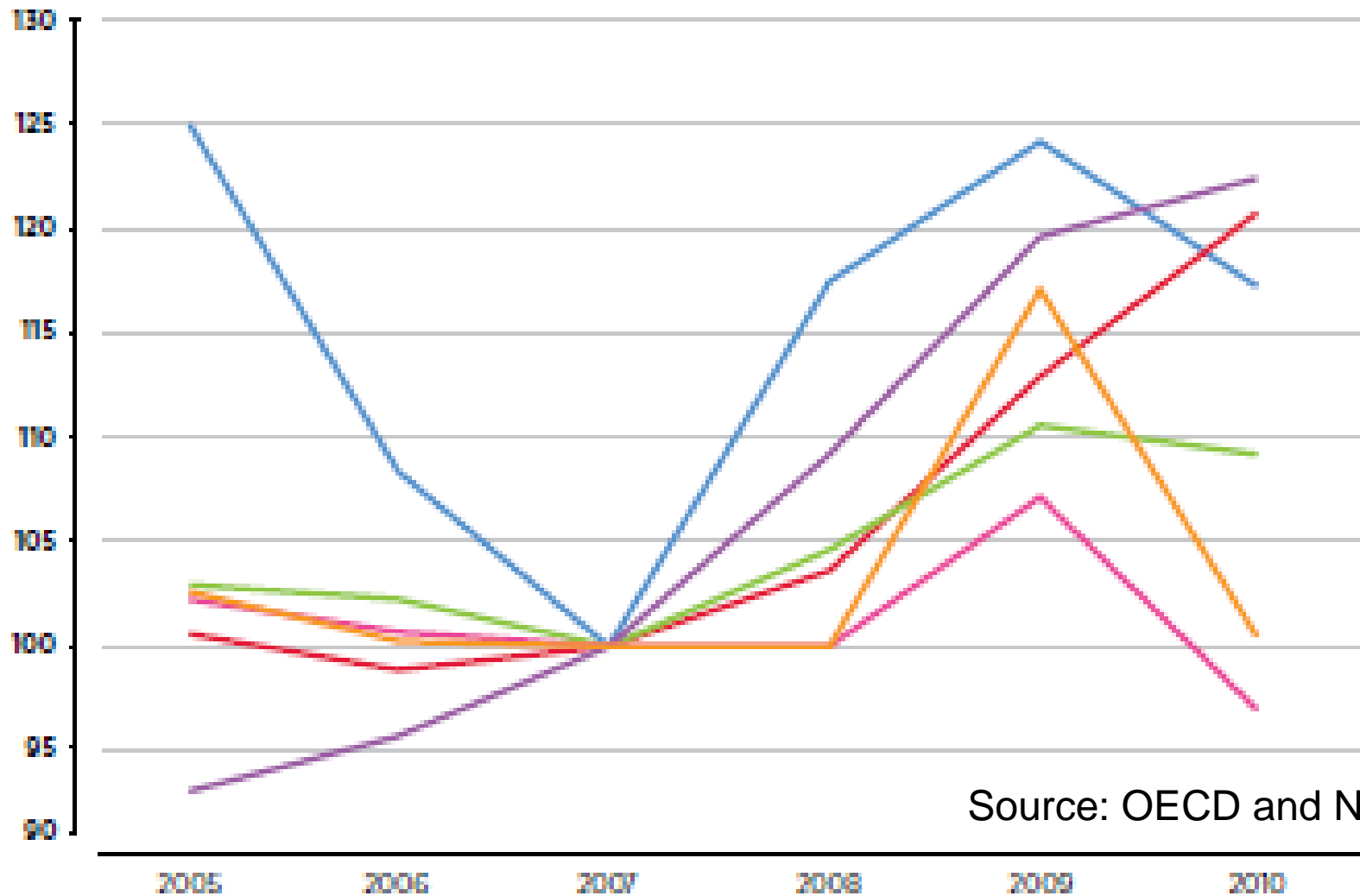
- The policy approach to manufacturing has been one of 'benign neglect'
- No coherent industrial policy
  - The fear of 'picking winners'
- Lack of long-term investment
  - Lack of finance
- Lack of stable markets
  - Although there are some exceptions (eg pharmaceuticals and aerospace)
  - Exacerbated by periods of exchange rate instability

# Investment in Fixed Capital, 1991-2011 (% of GDP)



Source: NESTA and Oxford Economics

# Government Budget Outlays on Research and Development (weighted by size of country), 2007=100



France Germany Japan Korea United Kingdom United States

# Moving forward

- Governments must invest in technology and new ideas to ensure future growth
- If the financial sector is reluctant to finance investment, the government must fill the gap
- Need for a coherent industrial policy which targets strategic sectors

# References

## **Publications**

BIS (2010) Manufacturing in the UK: Supplementary Analysis

NESTA (2012), Plan I: The Case for Innovation Led Growth

PWC (2009), The future of UK manufacturing: Reports of its death are greatly exaggerated, PWC, London

## **Data**

ONS

## **See also**

Kitson, M. and Michie, J. 'The Deindustrial Revolution: The Rise and Fall of UK Manufacturing, 1870-2010' in R.Floud P. Johnson (eds), The Cambridge Economic History of Modern Britain, Vol 2, CUP, forthcoming. Available at:

<http://michaelkitson.files.wordpress.com/2013/02/kitson-and-michie-the-deindustrial-revolution-oct-20121.pdf>