

Manufacturing

Last update: 29 March 2012

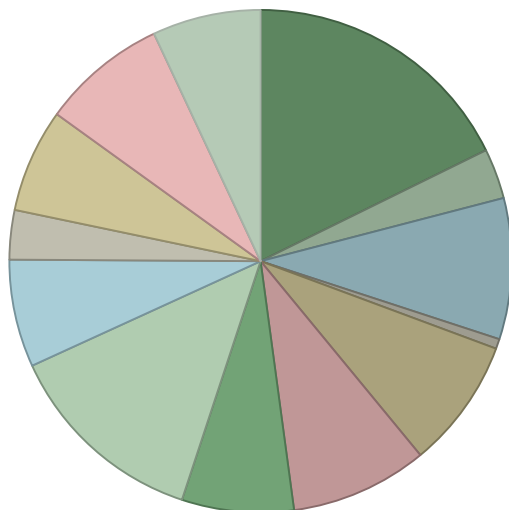
Manufacturing is an important part of the UK economy. It remains a significant contributor to UK GDP, exports and employment. However it is also facing challenges from international competitors, rising energy prices and pressures to become more energy efficient.

Manufacturing in the UK

The UK manufacturing sector is diverse and consists of a wide variety of different industries, technologies and activities.

It is important to note that many industries in the manufacturing sector are interdependent upon one another, as the output of one industry is often a crucial input for another.

UK Manufacturing by Sector, 2010 (Contribution to GVA)



- Food, Beverages and Tobacco
- Textiles, clothes and leather
- Wood, paper and printing
- Petroleum products
- Chemical products
- Pharmaceutical products
- Rubber and plastic
- Metal products
- Computers and electronic products
- Electrical equipment
- Machinery
- Transport equipment
- Other manufacturing

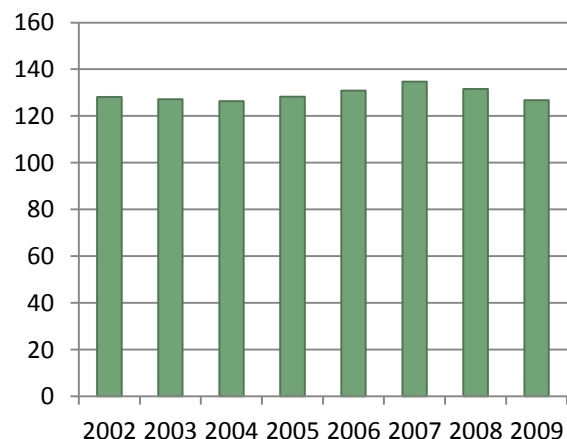
In 2009, Manufacturing was the **third largest sector in the UK economy in terms of Gross Value Added (contributing £126.74billion)**, behind Wholesale and Retail (£137.68billion) and Financial Services (£126.89billion).

Figures from ONS, Blue Book 2011

Manufacturing output and productivity

The total value of the goods and services produced by the manufacturing sector is calculated using the Gross Value Added (GVA) measure. This represents the total manufacturing output, minus immediate consumption. It is equal to the value of the net output of the manufacturing sector, and thus shows the value of the new products created.

GVA Total Manufacturing Output (£billion)



Productivity indicates the economic output per employee. In the UK, the manufacturing sector has recorded greater increases in productivity than the services sector, and the economy as a whole.

In Q4 2011, manufacturing productivity per hour was 6.0% greater than in Q4 of the previous year (2010), and 0.7% greater than the previous quarter (Q3 2011).

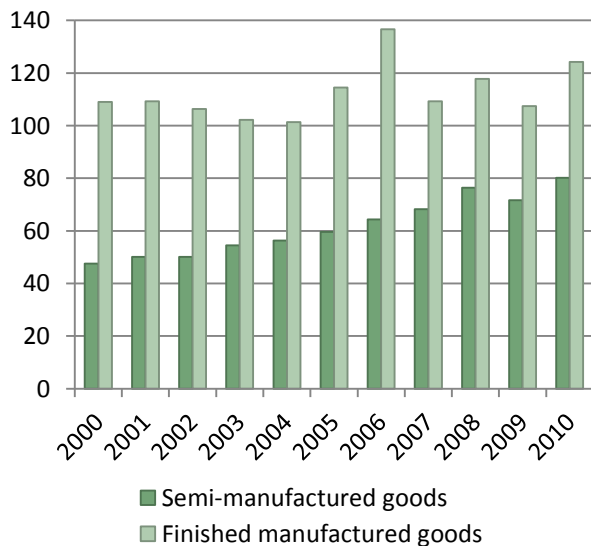
Figures from ONS, Blue Book 2011, and Labour Productivity: <http://www.ons.gov.uk/ons/rel/productivity/labour-productivity/q2-2011/stb-labour-productivity.html>

Manufacturing Exports

The level of manufacturing exports from the UK indicates the contribution manufacturing makes to the UK's trade income, and can also be considered a measure of the ability for UK manufacturing companies to compete on the world market.

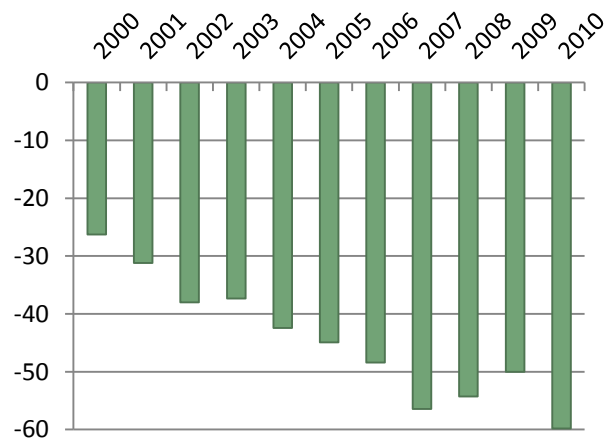
UK manufacturing exports have increased significantly over the last two decades, primarily due to the rise in the export of high and medium-high technology goods.

Value of UK Manufacturing Exports (£billion)



A consideration of the balance of exports and imports of manufactured goods shows that the UK consistently imports more than it exports and the size of the trade deficit in manufactured goods has more than doubled in the last decade.

Balance of Trade in Finished Manufactured Goods (£billion)



Figures from ONS, Pink book 2011

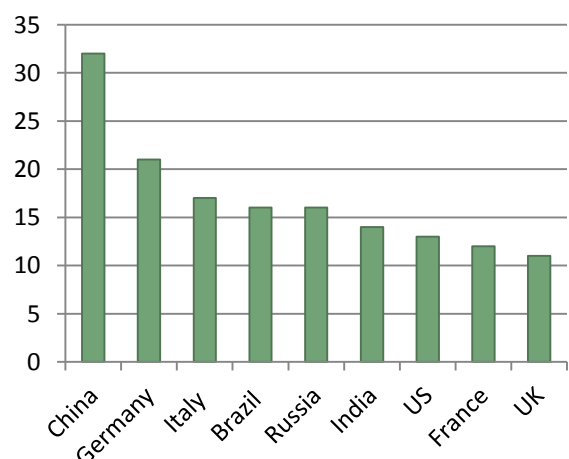
See also: Balance of Payments

www.civitas.org.uk/economy/Balanceofpayments.pdf

International Comparison

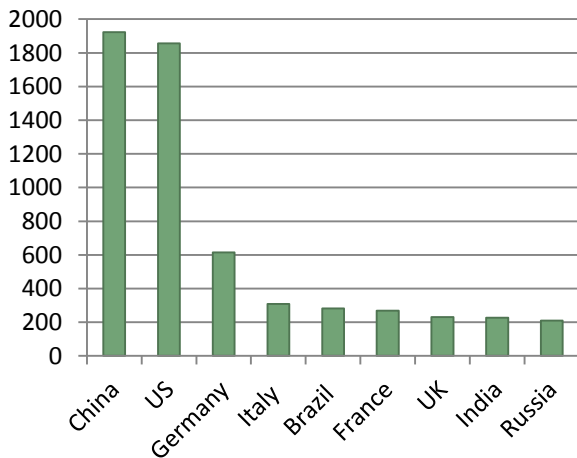
The UK's manufacturing sector is facing increasing competition from the emerging economies, particularly in the BRIC countries. These countries are continually improving the value of their manufacturing industries in areas where the UK traditionally had a comparative advantage.

Value Added by Manufacturing, 2010 (%)



Comparing the percentage value added by manufacturing to the economies of different countries shows the relative importance of the manufacturing sector for each economy.

Value Added by Manufacturing, 2010 (\$billions)



Comparing the monetary value of the value added by manufacturing to the countries' economies presents a slightly different picture.

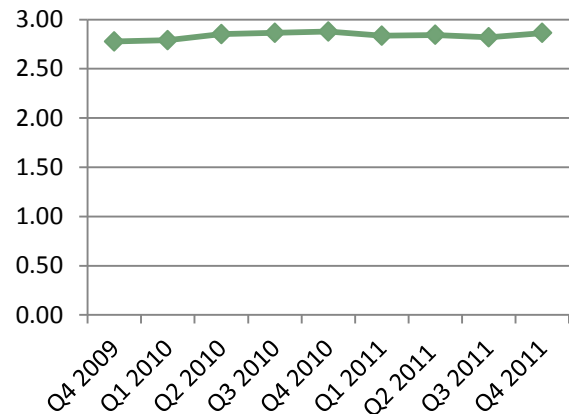
Figures from UN Stats, National Accounts Main Aggregate Database:
<http://unstats.un.org/unsd/snaama/selbasicFast.asp>

Employment in Manufacturing

Manufacturing is responsible for a significant proportion of employment in the UK. However, employment in the manufacturing industry has fallen in recent times, and the occupations of those employed in manufacturing have also shifted away from production and sales towards support services, logistics and distribution and research and development activities.

In Q4 2011, employment in manufacturing amounted to 9.8% of the total workforce.

Employment in Manufacturing (millions of jobs)



Figures from ONS, Labour Market Statistics:
<http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/november-2011/index.html>

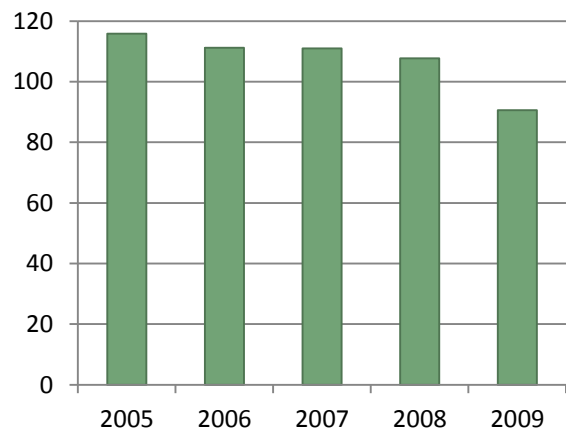
See also: Labour Market

www.civitas.org.uk/economy/Labourmarketfactsheet.pdf

Manufacturing and the Environment

The manufacturing sector faces both challenges and opportunities from the increased emphasis on environmental protection. Stricter targets on carbon dioxide emissions mean that those manufacturers whose practices are more energy-intensive face pressure to become more energy-efficient or increased costs from so-called 'green taxes' such as the Climate Change Levy (CCL).

Greenhouse Gas Emissions from the Manufacturing Sector (Million tonnes CO₂ equivalent)



Figures from ONS, Environmental Accounts:
<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Environmental+Accounts>

However, in some sectors the move towards a greater awareness of the environment and its challenges provides saving opportunities, as becoming more environmentally conscious and energy efficient can bring down costs in the long term. In addition, manufacturers of products which are designed to mitigate against harmful environmental effects are likely to enjoy increasing demand and consequently improved profits.

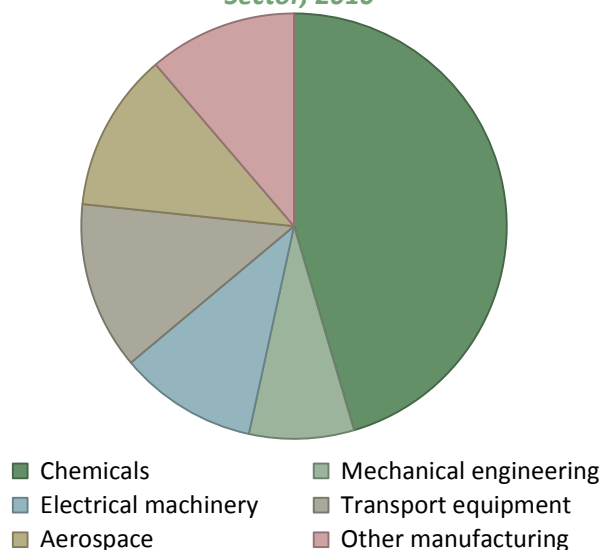
See also: Energy
www.civitas.org.uk/economy/Energyfactsheet.pdf

Research and Development

Over time, manufacturing companies have moved away from sole emphasis on production to other activities, importantly including research and development. Research and development activities are important for innovation, and ensure that the company keeps up with its competitors and customers.

In 2010, the UK manufacturing sector spent £11.7billion on research and development, 72.5% of all expenditure on research and development over the year.

Research and Development Expenditure by Sector, 2010



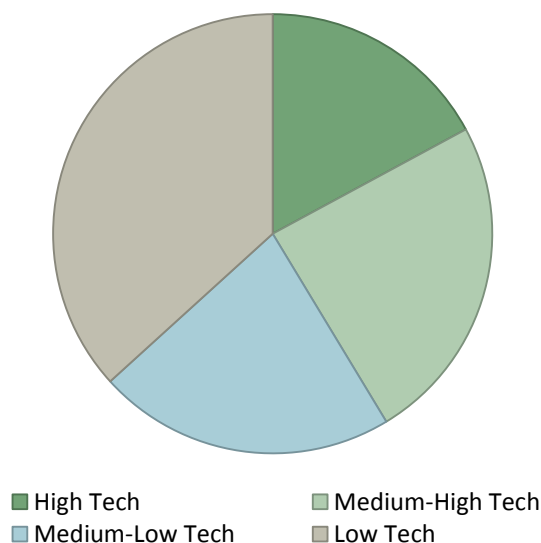
Figures from ONS, Business Enterprise Research and Development: <http://www.ons.gov.uk/ons/rel/rdit1/bus-ent-res-and-dev/2010/index.html>

High-Tech and High-Value Manufacturing

In common with other leading manufacturing countries, the UK is increasingly developing high-technology manufacturing industries such as aerospace and pharmaceuticals. This is in contrast with emerging economies, such as Brazil and China, which focus to a greater extent on low-technology industries such as textiles.

It is important to note however that high-technology industries are not always high-value. Low-technology industries can also be high-value: value refers to more than just monetary value in terms of revenues or profits, but necessarily also includes social value and value to local, regional and/or national economies. Examples of high-value manufacturers in the UK include Cadbury Schweppes, Rolls Royce and GlaxoSmithKline.

UK Manufacturing by Technology Intensity, 2007



Figures from OECD, STAN Indicators:
<http://stats.oecd.org/Index.aspx?DataSetCode=STANINDICATORS>