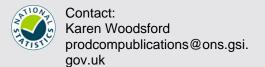


Statistical bulletin

UK Manufacturers' Sales by Product (PRODCOM): 2011 Provisional Results

First estimates of UK manufacturing sales by product (PRODCOM) with EU comparisons.



Release date: 29 June 2012

Next release: 20 December 2012

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1. Products of the European Community UK Provisional Estimate for 2011

- The first estimate of the 2011 PRODCOM Survey shows that UK manufacturers' sales increased by 2.7% when compared with 2010
- Total sales of manufactured products in 2011 are valued at approximately £340 billion, up from £331 billion in 2010
- The largest sales in manufacturing in 2011 (and 2010) are from: Food; Motor vehicles, trailers and semitrailers; Chemicals and chemical products; Machinery and equipment and the Fabricated metal products Divisions
- Of the top 10 products, listed in Table 1, three relate to the motor industry (motor vehicles) while four are from the food and drinks industries (water, beer, bread and cakes)

2. PRODCOM Survey

PRODCOM stands for PRODucts of the European COMmunity. The analysis within this bulletin and the accompanying tables reflect the most recent and comprehensive annual sales by value and volume data on industrial production in the UK, based on the PRODCOM Survey.

The PRODCOM Survey is carried out annually by all European Union (EU) member states under EU regulation. Latest data for the 27 EU members can be found on the Eurostat website. The survey is conducted across the manufacturing industries, a total of 234 industries and 3,866 products. Data in the accompanying tables are presented by manufacturing 'Division' divided into 'Industries', and then aggregates of products, then individual products. The PRODCOM list, which is set by the European Commission, contains a comprehensive breakdown of industries. The list is hierarchical, for example within the Food industry:

Division 10 – Manufacture of food products (abridged for illustrative use)

- Level 1 Industry code 10.83 Processing of tea and coffee
 - Level 2 Product aggregate code 10.83.11 Coffee, decaffeinated or roasted
 - Level 3 Product code 10.83.11.30 Decaffeinated coffee, not roasted
 - Level 3 Product code 10.83.11.50 Roasted coffee, not decaffeinated
 - Level 3 Product code 10.83.11.70 Roasted decaffeinated coffee

User Engagement

We are constantly aiming to improve this release and its associated commentary. We would welcome any feedback you might have; please contact us via email:

prodcompublications@ons.gsi.gov.uk or telephone Karen L Woodsford on +44 (0)1633 456746.

Table 1 shows the top ten UK manufactured products with the highest production by value in 2011. Motor vehicles with a diesel or semi-diesel engine > 2500 cm3 (excluding vehicles for transporting >= 10 persons, motor caravans, snowmobiles, golf cars and similar vehicles) has been suppressed because the value is disclosive of individual respondent data.

Table 1 - Top 10 UK manufactured products with the highest production by value in 2011

	£ billion
Product ¹	Value
Motor vehicles with a petrol engine > 1500 cm ³ (including motor caravans of a capacity > 3000 cm ³) (excluding vehicles for transporting >= 10 persons, snowmobiles, golf cars and similar vehicles)	12.1
Other medicaments of mixed or unmixed products, packaged for retail sale, not elsewhere classified	6.9
Manufacture, installation and repair of military aircraft and parts thereof	6.5
Motor vehicles with a diesel or semi-diesel engine > 1500 cm ³ but <= 2500 cm ³ (excluding vehicles for transporting >= 10 persons, motor caravans, snowmobiles, golf cars and similar vehicles)	6.1
Parts for all types of aircraft excluding propellers, rotors, under carriages, for civil use	6.1
Beer made from malt (excluding alcohol duty) excluding: - non-alcoholic beer - beer containing not more than 0.5% by volume of alcohol	3.9
Waters, with added sugar, other sweetening matter or flavoured, i.e. soft drinks including: - mineral and aerated)	3.7
Cakes and pastry products; other baker's wares with added sweetening matter	3.1
Motor vehicles with a diesel or semi-diesel engine > 2500 cm ³ (excluding vehicles for transporting >= 10 persons, motor caravans, snowmobiles, golf cars and similar vehicles	The value lies within the range 2.8 to 3.1 billion ²
Fresh bread containing by weight in the dry matter state <=5% of sugars and <= 5% of fat (excluding added honey; eggs; cheese or fruit)	2.8

Source: Office for national Statistics

Notes:

- 1. Product relates to level 3 as specified within the PRODCOM list.
- 2. The actual value has been suppressed to maintain confidentiality.

Table 2 shows the top ten product groups across the EU 27 in 2010 and the UK ranking in relation to its manufacturing contribution within the EU. A full copy of comparative data on share and growth distribution across the EU member states is available from the <u>Eurostat website</u> but for illustrative purposes only, Table 2 shows the latest ranking of the UK (top 5 places only).

£ hillion

Table 2 - The top 10 product groups by value of sold production, EU 27, 2010

Product group ¹	UK ranking 2010
Vehicles with compression-ignition internal combustion piston engine (diesel or semi-diesel)	4
Vehicles with spark-ignition engine of a cylinder capacity > 1 500 cm3	1
Parts and accessories not elsewhere classified, for motor vehicles	N/A ³
Medicaments, containing alkaloids or derivatives thereof, but not hormones or antibiotics	4
Other structures and parts of structures, plates, rods, angles, shapes and the like, of iron, steel or aluminium	3
Prepared feeds for farm animals, except lucerne meal and pellets	3
Vehicles with spark-ignition engine of a cylinder capacity <= 1 500 cm3	N/A
Safety seat belts, airbags and parts and accessories of bodies	2
Other non alcoholic beverages	3
Meat of swine, fresh or chilled	N/A

Source: Eurostat

Notes:

- 1. Product group relates to level 2 as specified within the PRODCOM list.
- 2. Only the top 5 rankings are listed as in the Eurostat report.
- 3. N/A ranking outside the top 5 places.

UK businesses selected for the PRODCOM survey are asked to supply the value of manufactured product sales as well as non-manufacturing income, the latter being used for balancing purposes only. Additionally businesses in approximately three quarters of the industries covered supply volume information. Sometimes data for some products cannot be reported, for example in cases where businesses are unable to report the volume in the required unit measurement, i.e. kilos opposed to the number of items.

The estimates cover products manufactured and sold within the UK and are accompanied by Her Majestys Revenue and Customs (HMRC) data on imports and exports, both intra (EU) and extra (non-EU). Analysis and data relating to the most recent period is published at uktradeinfo and is used by a wide range of government and international organisations. Used in conjunction with the PRODCOM data it is useful for helping businesses gauge market share and the means to establish new markets for their products. The trade data are also used in the ONS' UK Balance of Payment account to help quantify the health of the UK.

EU PRODCOM survey data are regularly used in matters relating to <u>EU anti-dumping cases</u> providing vital product information for scrutiny during formal investigations. Increasingly the data are used in analysis relating to climate-change, for example the <u>implications of EU climate change policy for energy intensive industries</u> and other environmental statistics such as ONS' review of <u>measuring the environmental goods and services sector</u> which utilises PRODCOM data in an aim to identifying potential 'green' products.

The 2011 survey period is 01 January 2011 to 31 December 2011.

3. Background notes

1. In 2011 a review of the methodology for producing standard errors for PRODCOM identified that several changes needed to be made to the underlying calculation. The effect of this is that the standard errors (and coefficients of variation) are now slightly higher than they were previously for some of the product headings. It is therefore important to note that any increases to the quality measures (contained within the

accompanying tables) compared with previous years quality measures do not necessarily represent a decrease in the quality of the estimates. It should also be noted that standard errors prior to 2009 have not been recalculated.

- 2. An extensive revision of NACE in 2007 resulted in changes to PRODCOM estimates for the 2008 survey onwards. All industry sectors now align exactly to the NACE classification. This differs from previous years where, in some instances, the UK published PRODCOM estimates under its own Standard Industrial Classification (SIC) which only matched the NACE classification to the first four digits.
- 3. This bulletin provides information on the value of UK product sales. The accompanying tables relating to this report contain sales estimates for UK based manufacturers of individual products covered by the PRODCOM survey. Most also contain the volume of production and imports and exports estimates supplied by HM Revenue and Customs (HMRC).
- 4. Data in the tables relating to merchanted goods, work done, waste and all other income, assist in the PRODCOM balancing process and business industrial classification.
- 5. Each divisional report contains data for the latest three years and is presented by manufacturing division. Each division is further broken down into product group then by individual products. The latest data are available from the ONS website. Due to the switch to SIC 07 in 2008 and the change in name and format of older publications, data pre-2008 are available on request from <a href="mailto:productsions.com/productsions.
- 6. The PRODCOM survey is conducted across all EU member states to allow comparison with other EU countries and to aid analysis in cases of anti-dumping. It is also used as a proxy in environmental statistics.
- PRODCOM outputs are required as part of the National Accounts Supply Table, an integral part of the annual Supply and Use Tables balancing process which is used to reconcile the three approaches to measuring Gross Domestic Product (GDP) and Gross National Income (GNI).
- 8. PRODCOM survey information is used to create a sampling frame for the <u>Producer Prices Index</u>, having identified businesses that make particular products.
- 9. By combining PRODCOM with overseas trade data, users can derive various other statistics. For example: the <u>trade balance</u>, the UK net supply to the market and unit prices for production, imports and exports; all at the product level.
- 10. A Quality and Methodology Information Report (QMI) Report, replacing the previous Survey Quality Report describes, in detail, the intended uses of the statistics presented in this publication, their general quality and the methods used to produce them.
- 11. A report on PRODCOM EU methodology is also available from the Eurostat website
- 12. Intra and Extra EU Import and Export data is that of HMRC and is not collected by ONS. It is matched with the PRODCOM codes and included within the PRODCOM tables for the benefit of demonstrating the trade balance and UK net supply. Data are available monthly, quarterly and annually from https://example.com/hmRC's Trade_balance.com/hmRC's Trade_balance.com/hmRC's Trade_balance.com/hmRC's Trade_balance.com/hmRC data collected uses a different codification.
- 13. The sum of constituent items in tables may not always agree exactly with the totals shown due to rounding.
- 14. The following symbols are used in the accompanying tables:
 - S Suppressed as disclosive
 - S* Suppressed as disclosive but included in the aggregated for UK Manufacturer Sales of "Other" products aggregated for UK in the Sales and Turnover table
 - N/A Data not available
 - * Not able to provide data due to secondary disclosure, different units of measurement or other technical issues.
- 15. Product information is available from the following Manufacturing Divisions

Manufacturing Divisions

Divisio	Division Title		
8	Other mining and quarrying		
10	Food products		
11	Beverages		
12	Tobacco products		
13	Textiles		
14	Wearing Apparel		
15	Leather and related products		
16	Wood and of products of wood and cork (except furniture); articles of straw and plaiting materials		
17	Paper and paper products		
18	Printing and reproduction of recorded media		
19	Coke and refined petroleum products		
20	Chemicals and chemical products		
21	Basic pharmaceutical products and pharmaceutical preparations		
22	Rubber and plastic products		
23	Other non-metallic mineral products		
24	Basic metals		
25	Fabricated metal products (except machinery and equipment)		
26	Computer, electronic and optical equipment		
27	Electrical equipment		
28	Machinery and equipment, not elsewhere classified		
29	Motor vehicles, trailers and semi-trailers		
30	Other transport equipment		
31	Furniture		
32	Other manufacturing		
33	Repair and installation of machinery and equipment		

The latest annual EU comparative data for PRODCOM are available from the Eurostat website

- 16. The PRODCOM list is updated annually to allow for the addition and deletion of products as the market evolves; clarification of product definitions and corrections where identified. To assist our users, these changes will be documented and incorporated within the December Statistical Bulletin each year.
- 17. The survey sample is derived from ONS' Inter-Departmental Business register. Businesses are selected by employment size and industry classification. Additional constraints are built into the sample design with a view to restricting the form filling burden on smaller businesses. Further details on sample selection are included in the QMI.
- 18. Further to the UK PRODCOM QMI, Eurostat also produce an annual <u>PRODCOM Quality Report</u> containing comprehensive quality information based on the latest data received from all EU members.
- 19. An EU glossary of terms can be used to interpret the technical descriptions and abbreviations used throughout the report.
- 20. The following information is available for each PRODCOM Commodity Code

- an estimate of standard error
- standard error as a percentage of the published value (the coefficient of variation)
- number of businesses providing data at the product level
- total employment of businesses providing data for the product
- 21. Standard errors are an estimate of the sampling error, which arises because an estimate is based on a survey rather than a population census. It is a measure of the precision of the estimate. A low standard error therefore indicates a precise estimate. To aid comparison and interpretation, the standard error is also expressed as a percentage of the product's estimated total sales. This quantity is sometimes called the coefficient of variation and it allows the standard errors to be put into context.

Standard error estimates are available for most product level value estimates. The latest data are available in the accompanying publication tables.

Following a review in 2011, it was discovered that the code used to calculate the PRODCOM standard errors was incorrect. A change was implemented in the last set of results published January 2012. An article detailing the change will be published in July 2012.

22. This is the first (Provisional) set of data for the 2011 period and at this time no revisions are made to previous periods. A second set (Intermediate) for 2011 and a third (Final) set of data for 2010 will be published on 20 December 2012.

Provisional survey estimates are published six months following the end of the reference period; intermediate estimates 12 months after the end of the reference period and a final set of estimates 18 months following the reference period.

Revision information relating to 2011 and the two previous periods will be incorporated within the December 2012 publication.

23. The response rates reflect the response rates at the time of publication. Late and revised returns are included in the intermediate and final estimates.

Response Rates

Period Forms Employment			
2011	80.3	84.9	

- 24. Data collected by the Annual Minerals Raised Inquiry (AMRI) on mineral extraction are used in the PRODCOM survey to avoid duplication and to reduce the burden on business.
- 25. Intra and Extra EU Import and Export data are supplied by HMRC to measure the flow of goods into and out of the UK. These data are also used as part of the UK's Balance of Payment Account to gauge the health of the UK. A recent correction to product data in the 2009 and 2010 trade data was announced by HMRC. A full copy of the report is available from the HMRC website. The two PRODCOM divisions affected by the changes were amended and republished on the ONS website.
- 26. The Index of Production (IOP) collects total production turnover but not data about individual products manufactured. There are, however, a significant number of respondents who return only one product figure to PRODCOM and it is, in theory, possible that this information could be collected through IOP for PRODCOM.
- 27. The Annual Business Survey (ABS) also collects total turnover plus other variables similar to the standard headings collected by PRODCOM. The feasibility therefore exists for the ABS to collect standard headings on behalf of PRODCOM. There are differences however which would create issues. For example ABS collection captures financial year-end whereas PRODCOM collects a calendar year; therefore PRODCOM would not be able meet Eurostat regulations in terms of timeliness. There would also be considerable differences in sales values for individual product headings in the smaller size-band because the ABS collect data on total sales of own manufactured products, but minimal collection on sales of individual manufactured products.

- 28. Statistical disclosure control methodology is applied to the PRODCOM estimates to ensure that information attributable to an individual business is not disclosed in any publication. However, to provide the most comprehensive dataset, ONS seek permission to publish data from businesses whose sales and/or volume data are deemed disclosive. Where permissions are granted the data is included in the final tables. The Code of Practice for Official Statistics sets out principles for how ONS protects data from being disclosed.
- 29. The recently launched ONS User Guide provides information on a range of business surveys, including Prodcom.
- 30. The scope, coverage and requirement for the PRODCOM survey are detailed in Eurostat's PRODCOM_User Guide. The interactive guide helps find statistics on UK business published by the Office for National Statistics. It covers statistics regarding the structure, content and performance of businesses across the UK, which includes measures of turnover and other financial transaction variables, employment, economic growth and productivity.
- 31. HMRC link to information on the collection of import and export data
- 32. As part of a package of measures to improve the quality of the PRODCOM results, the current methodology and systems used in the production of the data are under review. Details of work undertaken will be published in separate articles during 2012.
- 33. Planned articles in 2012 relate to
 - an amendment to the method of calculation of PRODCOM Standard Errors
 - the possibility of a bi-annual sample for the Prodcom Survey
 - introducing selective editing within the Prodcom Survey to reduce burden on business
- 34. Users will be informed of planned work and progress through future statistical bulletins and accompanying articles. Users are encouraged to feedback any comments relating to the PRODCOM output using the email address below.
- 35. Alternatively users can contribute to varying discussions through the <u>StatsUserNet</u>, a community forum promoted by the Royal Statistical Society. The Business Statistics community, in particular, covers statistics about the structure, content and performance of businesses across the UK, which includes measures of turnover and other financial transaction variables, employment, economic growth and productivity.
- 36. Details of the policy governing the release of new estimates are available from the ONS press office.
- 37. National statistics are produced to high professional standards set out in the <u>Code of Practice for Official Statistics</u>. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.
- 38. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk