

Compendium

Explanation of industrial analyses



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Notice

30 September 2016

Following a quality review it has been identified that the methodology used to estimate elements of purchased software within gross fixed capital formation (GFCF) has led to some double counting from 1997 onwards. When this issue is amended in The Blue Book 2017 it will reduce the level of GFCF across the period by around 1.1% per year. The average impact on quarter-on-quarter GFCF growth is negative 0.02% and the average impact on quarter-on-quarter GDP growth is 0.00%.

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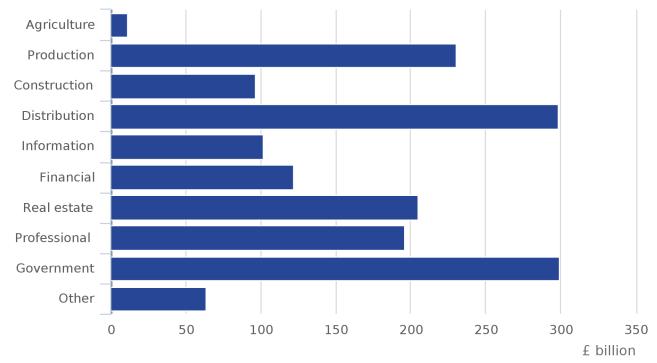
1. The industrial analysis

Analysis of the 10 broad industrial groups shows that in 2014, the government, health and education industries provided the largest contribution to gross value added at current basic prices, at £298.8 billion out of a total of £1,624.3 billion (18.4%). Distribution, transport, hotel and restaurant industries contributed £298.5 billion to the total (also 18.4%).

Of the remainder:

- production industries contributed 14.2%
- real estate industries contributed 12.6%

Figure 2.1: Breakdown of gross value added at basic prices, by industry, 2014, UK

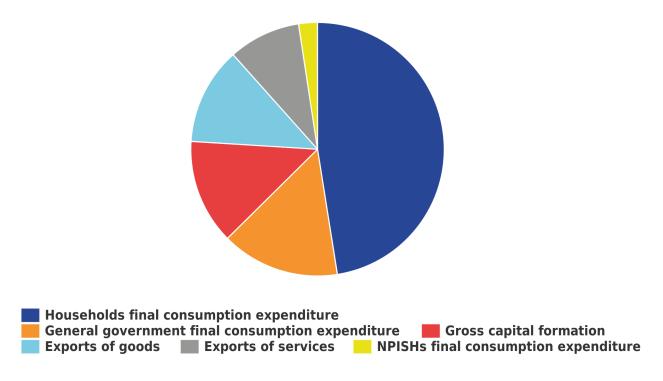


Source: Office for National Statistics

In 2014, of all goods and services entering into final demand:

- households consumed 47.5%
- 12.4% of goods and 9.2% of services were exported
- government, both central and local, consumed 15.1%
- gross capital formation, by all sectors of the economy, consumed 13.4%
- non-profit institutions serving households (NPISH) consumed 2.4%

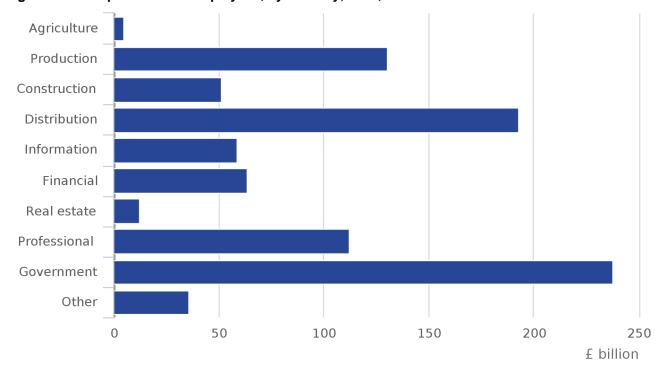
Figure 2.2: Composition of final demand for 2014, percent, UK



Source: Office for National Statistics

The government, health and education industries showed the highest level of compensation of employees in 2014 at £237.5 billion (26.4%). The second largest industry, in terms of its contribution to total compensation of employees, was the distribution, transport, hotel and restaurant industries at £193.1 billion (21.5%).

Figure 2.3: Compensation of employees, by industry, 2014, UK



Source: Office for National Statistics

2. Input-output supply and use tables

The annual estimates included in UK National Accounts, The Blue Book: 2016 edition incorporates the results of annual inquiries that become available in the first part of the year, although last year's estimates are largely based on quarterly information. Any newly collected data are shown as revisions. In order to reassess these estimates, supply and use tables are prepared using all the available information on inputs, outputs, gross value added, income and expenditure. To produce consolidated sector and financial accounts requires preparation of "top-to-bottom" sector and sub-sector accounts to identify discrepancies in the estimates relating to each sector.

The latest annual <u>supply and use tables</u> provide estimates for the years 1997 to 2014, with data for 2014 balanced for the first time. Data for 2012 to 2013 have been fully re-balanced. Data from 1997 to 2011 have been revised to incorporate changes required under new international standards and guidelines, as well as to make sure the data are comparable and meet user needs. The article <u>Commentary on Supply and Use balanced estimates of annual GDP, 1997 to 2014</u> has further details.

Further general information regarding the supply and use framework and the balancing process can be found in the <u>guidance and methodology</u>.

3. Current price analysis

The analyses of gross value added and other variables by industry, shown in <u>tables 2.1, 2.1A and 2.2</u> reflect estimates based on <u>Standard Industrial Classification 2007</u> (SIC 2007). These tables are based on current price data reconciled through the input-output supply and use framework from 1997 to 2014.

Estimates of total output and gross value added are valued at basic prices, the method recommended by <u>European System of Accounts 2010</u> (ESA 2010). Therefore, the only taxes and subsidies included in the price will be those paid or received as part of the production process (such as business rates), rather than those associated with the production of a unit of output (such as VAT).

4. Chained volume indices (2013=100) analyses

Table 2.3 shows chained volume estimates of gross value added at basic prices by industry. The output approach provides the lead indicator of economic change in the short-term. In the longer-term, the output measure of real gross domestic product (GDP) is required to follow the annual path indicated by the expenditure measure of real GDP (usually to within 0.2 per cent of the average annual gross value added growth). To achieve this, balancing adjustments are sometimes applied to the output-based gross value added estimates.

We have developed an automatic function for assigning the annual adjustments to gross value added. This is designed to minimise changes to the quarterly path while adjusting the overall annual growth rate to align to the expenditure measure. For technical and other reasons the adjustments are not, at present, made to retail or the non-service industries for any years.

5. Workforce jobs by industry

<u>Workforce jobs</u> (WFJ) is the preferred measure of the change in jobs by industry. A person can have more than 1 job; therefore the number of jobs is not the same as the number of people employed.

Table 2.4 breaks down WFJ into 10 broad industry groupings on SIC 2007.

The main component of WFJ is employee jobs. Estimates for employee jobs are obtained mainly from surveys of businesses selected from the Inter-Departmental Business Register (IDBR). All other business surveys collecting economic data also use this register.

WFJ also includes Her Majesty's Forces (within industry section O) and government supported trainees from administrative sources (split by industry using the Labour Force Survey).

The Labour Force Survey (LFS), a household survey, is used to collect self-employment jobs. It codes respondents according to their own view of the industry they work in; therefore the industry breakdown is less reliable than that for the business surveys.

6. Summary supply and use tables for the UK

Table 2.1a: Summary Supply and Use tables 2011

Table 2.1b: Summary Supply and Use tables 2012

Table 2.1c: Summary Supply and Use tables 2013

Table 2.1d: Summary Supply and Use tables 2014

7. Gross value added (GVA)

The UK National Accounts, The Blue Book provides a comprehensive industry breakdown of gross value added (GVA), with activities grouped into 20 broad sections in accordance with SIC 2007.

The Blue Book also includes supplementary information for the different components that make up GVA for each industry. Under the income approach, GVA is split into compensation of employees (CoE), taxes less subsidies, gross operating surplus (GOS) and mixed income. Estimates of each industry's intermediate consumption and total output are also published, with the difference between the 2 equalling GVA.

This additional information, available in The Blue Book, allows for more detailed analysis of national output to be conducted. For example, CoE can be used to calculate how much of an industry's production income is spent on wages and salaries and employers' social contributions, whereas GOS data can be used to estimate how much profit is generated by companies after considering labour costs and taxes less subsidies.