



Monthly Statistics of Building Materials and Components

Commentary June 2015

Coverage: UK and Great Britain

Geographical area: Country, region and

county

Date of publication: 1st July 2015

This publication was updated on 6th July to correct minor formatting issues.

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Headline results:

- Construction material prices fell in April. The 'All Work' Construction Material Price Index for May 2015 decreased by 0.6% compared to the previous month.
- Brick deliveries fell. Seasonally adjusted deliveries of bricks decreased by 6.5% in May 2015 compared to April.
- Concrete block deliveries fell. Seasonally adjusted deliveries of concrete blocks fell by 1.9% in May 2015 compared to April.

Introduction

Please note - we have recently updated the design of many of the charts in this publication, and would welcome any feedback. Please send any comments to: MaterialStats@bis.gsi.gov.uk.

This commentary accompanies the latest Monthly Statistics of Building Materials and Components bulletin, published on the BIS building materials <u>web page</u> on 1st July 2015. It aims to provide a brief overview of recent trends in the data presented in the bulletin.

The bulletin presents the latest detailed information on selected building materials and components. It covers the following building materials statistics (in parentheses, the data collection frequency and the geographical area covered):

- Construction material price indices (monthly, UK)
- Sand and gravel sales (quarterly, GB*)
- Slate production, deliveries and stocks (quarterly, GB)
- Cement and clinker production, deliveries and stocks (annual, GB)
- Bricks production, deliveries and stocks (monthly, GB*)
- Concrete building blocks production, deliveries and stocks (monthly, GB*)
- Concrete roofing tiles production, deliveries and stocks (quarterly, GB)
- Ready-mixed concrete deliveries (quarterly, UK)
- Values of overseas imports and exports trades for selected materials and components for use in construction (quarterly, UK)
- Value of EU and Non-EU Trade for selected materials and components for use in construction (annual, UK)

Note: * Regional figures available

These statistics support analysis of the construction materials market and business planning. They are regularly reported in the construction press and are used for a variety of purposes, including policy development and evaluation concerning the construction products industry, as well as monitoring market trends. Further detail is available in this document under <u>Uses of the data</u>.

Seasonal Adjustment

In work done for the Department for Business, Innovation and Skills (BIS) on improving the quality of statistics published in the Monthly Statistics of Building Materials and Components, the Office for National Statistics' Methodology Advisory Service (MAS) recommended that BIS should start seasonally adjusting key data series (see ONS/MAS review of building materials statistics: final report for more detail). Seasonal adjustment is widely used in official statistics and aids data interpretation by removing effects associated with the time of the year or arrangement of the calendar. Seasonal effects frequently obscure features of interest in data, such as long term trends and the effects of unusual occurrences. By removing seasonal effects, users can more readily identify the features of interest.

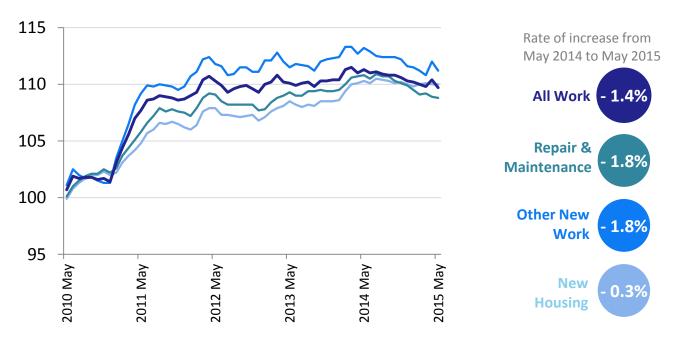
Following advice from the MAS, and the results of a consultation (see the <u>results of the BIS</u> <u>consultation on seasonal adjustment</u> for more detail), BIS agreed to publish seasonally adjusted data for the following series:

- Sand and gravel, total sales
- Concrete blocks, all types deliveries
- Bricks, all types deliveries
- Ready-mixed concrete, deliveries

For the initial publication of seasonally adjusted data, data from 1983 onwards will be seasonally adjusted. Subsequently, for each monthly publication, data up to 12 months or 4 quarters previous to the new data point will be revised. Upon the completion of each year's data series, data for the previous 12 years will be revised. BIS will publish both non-seasonally adjusted and seasonally adjusted data in the tables of this publication. From the June 2015 edition of this publication onwards, BIS will only publish seasonally adjusted data in the commentary.

Summary of results

Chart 1: Construction Material Price Indices, UK Index, 2010 = 100



Source: Table 1, Monthly Statistics of Building Materials and Components

The headline 'All Work' Construction Material Price Index decreased by 0.6% in May 2015 compared to the previous month, following a 0.5% increase in April. April's increase is the only monthly increase since July 2014. Looking at the individual sub-sectors, 'New Housing' remained unchanged at 0.0% in May, whilst 'Other New-Work' and 'Repair and Maintenance' both decreased by 0.7% and 0.1% respectively in May 2015. Looking at the longer term change, the 'All Work' material price index fell by 1.4% in May 2015 compared to the same month in the previous year. This is the 6th consecutive decrease on this basis.

From October 2009 to June 2011, construction material prices increased rapidly, rising by 10.0% over the period. The price of construction materials has increased more slowly since June 2011: by 1.0% overall for the headline 'All Work' index.

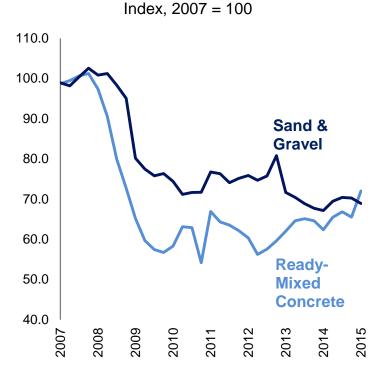
Table 1: Construction materials experiencing the largest price increases and decreases in the 12 months to May 2015, UK

Construction Materials	% change on a year earlier
Largest price increases All bricks Imported plywood Ready-mixed concrete	8.2 7.7 5.2
Largest price decreases Concrete reinforcing bars Fabricated structural steel Imported sawn or planed wood	-11.8 -9.1 -8.1

The 'All Work' Construction Material Price Index shows that the year on year change in material costs for May 2015 was -1.4% (see chart 1). However, this aggregated figure hides larger price movements for some specific products and materials. The three largest increases and decreases are presented here.

Source: Table 2, Monthly Statistics of Building Materials and Components

Chart 2: Seasonally Adjusted Sales of Sand and Gravel and Ready-Mixed Concrete, GB



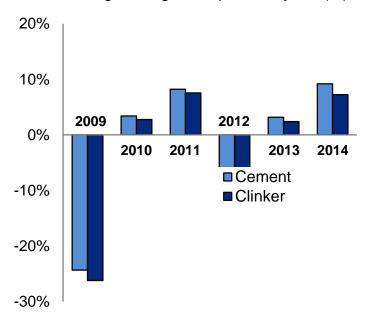
Source: Tables 4 & 13, Monthly Statistics of Building Materials and Components

Seasonally adjusted sales of sand and gravel have declined since the recession, reaching their lowest value in 2014Q1. Since then, sales have recovered slightly. Quarter on quarter decreases have been recorded for the past two months, with 2015Q1 falling by 1.9% compared to 2014Q4. However, comparing 2015Q1 to the same quarter in the previous year, sales increased by 2.7%.

For ready-mixed concrete, the seasonally adjusted data show that the lowest quarterly sales in the post-recession period occurred in 2010Q4, which included extreme winter conditions. Sales have steadily recovered since 2012Q2. In the most recent quarter, 2015Q1, sales increased by 15.4% compared to the same quarter in the previous year. This is the ninth consecutive increase on this basis.

Chart 3: Production of Cement and Clinker, GB

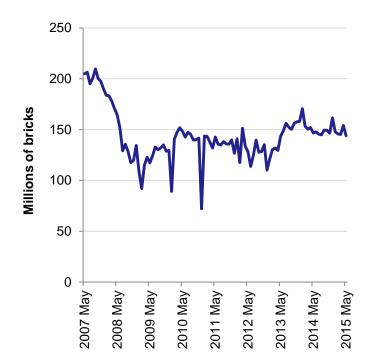
Percentage change over previous year (%)



Source: Table 8, Monthly Statistics of Building Materials and Components Cement production rose by 9.2% to 9.0 million tonnes in 2014, compared to the previous year. This growth in cement production follows growth of 3.2% to 8.2 million tonnes in 2013. Pre-recession production peaked in 2007 at 11.9 million tonnes.

Production of Clinker rose by 7.2% to 7.2 million tonnes in 2014, compared to the previous year. This growth in clinker production follows growth of 2.4% to 6.7 million tonnes in 2013. Pre-recession production, in 2007, stood at 10.2 million tonnes.

Chart 4: Seasonally Adjusted
Deliveries of Bricks, GB
number of bricks



Source: Table 9, Monthly Statistics of Building Materials and Components

Brick deliveries declined during the recession, and reached their lowest value during the extreme cold weather in December 2010.

The seasonally adjusted figures for May 2015 show a 1.8% decrease in deliveries of bricks compared with May 2014. This follows a 1.3% increase in April, on the same basis. The month on month change has been more volatile, recording a 6.5% decrease in May and a 6.1% increase in April.

Chart 5: Seasonally Adjusted Deliveries of Concrete Blocks, GB area of concrete blocks

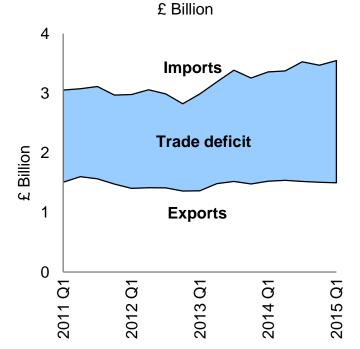
9,000 Thousands of square metres 8,000 7,000 6,000 5,000 4,000 3,000 2,000 1,000 0 2014 May 2015 May 2009 May 2011 May 2012 May 2013 May 2008 May 2010 May

Concrete block deliveries declined during the recession, and reached their lowest value during the extreme cold weather in December 2010.

For concrete blocks, the seasonally adjusted deliveries figures show an increase of 10.4% in May 2015 compared to the same month in the previous year. This is the 6th consecutive increase on this basis, and follows an increase of 11.3% in April. The month on month change shows a decrease of 1.9% in May, following a decrease of 1.0% in April.

Source: Table 11, Monthly Statistics of Building Materials and Components

Chart 6: Exports and Imports of Construction Materials, UK



The increase of the trade deficit in 2015Q1 was largely due to an increase in the trade deficit for products and components of £56 million. For semi-manufactures, the trade deficit increased by £18 million. The raw materials trade deficit also increased, by £12

million.

Exports of construction materials decreased

by £8 million in the first quarter of 2015 (to £1,497 million), a decrease of 0.5% on the

previous quarter. Imports increased, by £77

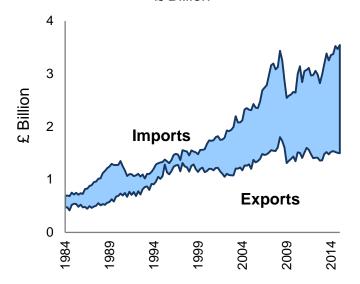
million (to £3,546 million), a 2.2% increase. As a result, the trade deficit increased by £86 million, to £2,049 million, in 2015Q1.

Source: Table 14, Monthly Statistics of Building

Materials and Components

Chart 7: Exports and Imports of Construction Materials, UK. 1984 to present.

£ Billion



Over the period 1984Q1 to 2015Q1, construction materials imports have increased, on average, by 3.3% per quarter. Over the same period, exports increased by an average of 1.7% per quarter.

The trade deficit was historically at its smallest throughout the 1990s, with a mean of £0.3 billion over this period. This trade deficit was 24% of the value of imports. Currently (2015Q1) the trade deficit is £2.0 billion, 58% of the value of imports.

Source: Table 14, Monthly Statistics of Building

Materials and Components

Table 2: Top-5 UK Exported and Imported Construction
Materials in 2014

£ Million Top-5 Exported Materials		Top-5 Imported Materials	
Paints & Varnishes	669	Electrical Wires	1,572

The top five exported materials in 2014 accounted for 35% of total construction material exports.

2 **Electrical Wires** 642 Sawn Wood > 6mm thick 847 Pluas & Sockets 290 Lamps & Fittings 812 283 **Central Heating Boilers** Lamps & Fittings 591 269 Air Conditioning Equip. Air Conditioning Equip. 534

The top five imported construction materials in 2014 accounted for 32% of total construction material imports.

Source: Table 14, Monthly Statistics of Building Materials and Components

Table 3: UK Trade of Construction Materials with EU and Non-EU Countries, 2014

£ Million (% of total trade in italics)

All Building Materials & Components	EU		Non-EU
Imports		8,478	5,194
		62%	38%
Exports		3,574	2,489
		59%	41%

Compared to pre-recession levels in 2007, the share of total UK construction material exports going to the EU has declined from 70% to 59%.

Source: Table 15, Monthly Statistics of Building Materials and Components

Table 4: Top 5 UK Export and Import Markets for Construction Materials in 2014

£ Million

Top-5 Export Markets		Top-5 Import Markets	
Ireland	78/	China	2,171
Germany		Germany	2,052
France		Italy	896
USA		Spain	715
Netherlands	443	Netherlands	657

Source: HMRC Overseas Trade Statistics

The top 5 export markets comprised 46% of total construction materials exports in 2014. Ireland remains the largest market, despite having shrunk from a pre-recession peak of 27% of total exports in 2007, to 13% in 2014.

The top 5 import markets comprised 47% of total construction materials imports in 2014. China has overtaken Germany as the leading source of UK construction material and component imports, with 16% of all imports.

The 'Rotterdam Effect' (also known as the 'Antwerp Effect') may affect trade figures. This is explained in detail by HM Revenue & Customs.

Economic background

The third estimate of 2015 Q1 GDP, published by the Office for National Statistics (ONS) on the 30th of June, reported that the economy grew by 0.4% compared to the previous quarter. This was revised up 0.1 percentage points from the first estimate. Growth in 2015 Q1 was limited to services and production, which both increased by 0.4% and 0.2% respectively. The other two main industrial groupings fell: construction fell by 0.2%, an upward revision from the previous estimate of -1.1% (described in detail below). Agriculture decreased by 2.3%. Manufacturing output, which accounts for just over two-thirds of total production, rose by 0.1% over the same period, following growth of 0.2% in 2014Q4. GDP was estimated to have grown by 3.0% in 2014, revised up 0.2 percentage points from the previous estimate.

The most recent construction output figures were published by the ONS on the 12th of June. The ONS applied a new methodology for deflating the construction output figures, resulting in revisions to all published output figures from January 2014 onwards. In addition to the new deflators, amendments to the seasonal adjustment parameters and the receipt of late data also contributed to the amendments. The result of these factors was to revise construction output upwards. Most notably, the previously reported technical recession for construction has now been removed. Output is estimated to have increased by 0.2% in 2014Q4 (previously reported as a 2.2% decrease), and decreased by 0.2% in 2015Q1 (previously down 1.1%). Output over the period 2014Q1-Q3 has also been revised upwards.

The latest monthly Consensus Economics forecasts in June 2015 (which uses an average of private sector forecasts) revised GDP growth expectations for 2015 down to 2.4% (previously 2.5%). The forecast for 2016 remained at 2.5%. The 2015 forecast is similar to that produced in March 2015 by the Office for Budget Responsibility (OBR), at 2.5%.

The latest reports from the Bank of England's regional agents state that construction output growth had eased further, but pointed to moderate growth. There were reports that the General Election resulted in delays affecting construction output in some public sector related projects. Overall, steady growth in commercial construction and infrastructure was reported. There had been some signs of a shift of activity away from major schemes in London & the South East towards smaller projects in other regions. House building growth had been partly affected by skills shortages, resulting in more modest growth than a year ago.

This spring, two forecasters revised their expectations for the construction sector. Experian revised their prediction for 2015 downwards, to 5.5%. Growth in 2015 is expected to be more balanced than in 2014, with expansion predicted for every sector. Expectations for 2016 were also revised downwards, to 3.0%, with a further 3.4% forecast for 2017. Strong growth is predicted in 2015 for new work, most notably increases of 8.0% for private housing, 13.0 % for infrastructure and 7.0% for private commercial. Growth in repair and maintenance is predicted to be more subdued, at 2.7%. The Construction Products Association (CPA) also expects the construction sector to grow by 5.5% in 2015, revised up from 5.3% in their last forecast. Subsequently, growth is predicted to slow to 4.0% in 2016, and 3.4% in 2017. Growth in 2015 is expected to be driven by rising output in private housing (+10.0%), infrastructure (+7.6%), and commercial (+6.4%) construction.

Background notes

Quality information for the Building Materials bulletin

1. The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- · are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed. The full assessment <u>report</u>, published on 22nd December 2011, can be found on the UK Statistics Authority website.

2. Quality issues related to the Building Materials and Components outputs are discussed in the review of the Building Material statistics that was carried out in 2010 by BIS's construction team. The review aimed to: ascertain user needs; examine whether existing data collection methodologies are fit for purpose; estimate compliance costs; assess compliance with the Code of Practice; and identify options for change.

The full <u>report</u> can be found on the BIS Building Materials and Components webpage.

Detailed information on data suppliers, coverage and data collection methodology can be found in sections 2.1-2.10. Quality issues (coverage and accuracy of sample panels, response rates, survey results processing, disclosure etc.) and potential measures that could be employed to improve the quality of the statistics are discussed in section 2.11 of the review. Users' views on the quality of the *Building Materials and Components* statistics are given in section 3.3.4. These are derived from a user survey carried out in early 2010, as part of the review (see section 3 for details).

- 3. Following the review, BIS acted on the recommendations including commissioning the Office for National Statistics Methodology Advisory Service (ONS/MAS) to address some of the recommendations from the 2010 review. In July 2011, MAS published their <u>interim report</u>. In July 2012, MAS published their <u>final report</u>. This will inform a full summary Quality Report that will be published by BIS shortly.
- 4. HM Revenue and Customs use administrative sources to produce Overseas Trade Statistics. A <u>Statement of Administrative Sources</u> used to compile construction material trade statistics is available on the BIS <u>Building Materials and Components</u> webpage:

Separately, HM Revenue and Customs also have a <u>Statement of Administrative Sources</u> which covers Overseas Trade Statistics.

5. <u>The pre-announcement of any major changes to samples or methodology</u> also details some methodological changes to the collection of data.

6. The following table gives a summary of response rates related to some of the latest survey results. Where the response rate is less than 100%, estimates are made for missing values.

For latest data used	Bulletin table number	Response rate
Quarterly Sand and Gravel	4, 5 & 6	79%
Quarterly Sand and Gravel – Land Won	4, 5 & 6	75%
Quarterly Sand and Gravel – Marine Dredged	4, 5 & 6	96%
Quarterly Slate	7	90%
Monthly Bricks Provisional data	9	96%
Monthly Bricks Final data	9 & 10	100%
Monthly Concrete Blocks	11	91%

Uses of the data

7. The *Building Materials and Components* statistics are used for a variety of purposes, including policy development and evaluation concerning the construction products industry, as well as monitoring market trends. In a wider context, the figures are regularly reported in the construction press to facilitate market analysis and business planning for its wide range of readers. The statistics are also increasingly used by financial institutions for assessing market information and industry trends. For more information on the uses of the Building Materials statistics, their usefulness to users and users' views on the quality of these statistics, see Section 3 of the *Building Materials and Components review*.

Related Statistics

- 8. <u>Construction Statistics: Sources and Outputs</u> lists the known sources of information available on the construction industry and their outputs. These include information on employees, employment, enterprises, output and new orders in the construction industry as well as the contribution of the industry to the economy. Related information, for example housing, is also included.
- 9. The <u>Construction Statistics Annual</u> brings together a wide range of statistics currently available on the construction industry from a variety of sources and provides a broad perspective on statistical trends in the construction industry, with some international comparisons.
- 10. In its monthly **Index of Production (IoP)** publication, the ONS publishes Gross Value Added (seasonally adjusted, UK) data for the following two industries:
 - SIC 23.1-4/7-9 industry, which includes the manufacture of bricks, tiles and other construction products.
 - SIC 23.5-6 industry, which includes the manufacture of concrete, cement and other products for construction purposes.

These data are not directly comparable with the data in this bulletin, due to differences in coverage and methodology. They are nevertheless useful in illustrating the latest output trends of related construction materials as measured by the ONS.

The latest IoP data show that output in the SIC 23.1-4/7-9 industry grew by 3.1% in the 12 months to April 2015, following a fall in March of 1.5%. Year on year for April 2015, output in the SIC 23.5-6 industry rose by 11.5%, after a rise from March of 9.4%. This was the 16th consecutive monthly increase on a year-on-year basis.

Revisions

- 11. Our <u>revisions policy</u> can be found on the BIS Building Materials webpage.
- 12. <u>The pre-announcement of any major changes to samples or methodology</u> and <u>Summary of Revisions</u> give further information on revisions and other changes to data and can also be found on the BIS Building Materials webpage.

Further information

The coverage of cement and cementitious statistics changed from UK to GB in 2002 due to data confidentiality issues in Northern Ireland as the number of manufacturers decreased. Where the coverage of figures for other building materials is limited to Great Britain (i.e. sales of sand and gravel, and production, deliveries and stocks of slate, clinker, bricks, concrete building blocks and concrete roofing tiles), no equivalent data are collected for Northern Ireland.

The most recently published bulletin and accompanying data tables can be found on BIS' *Building Materials and Components* website

Accompanying tables with data relating to 2011 are accessible from this link.

Accompanying tables for 2005 - 2010 are accessible from this link.

Requests for older data should be sent to MaterialStats@bis.gsi.gov.uk

Please send us any comments or feedback you may have about this commentary.

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skills/series/building-materials-and-components-monthly-statistics-2012

Department of Business of Business, Innovation & Skills.

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