Department for Business Innovation & Skills

# Monthly Statistics of Building Materials and Components

## Commentary

## August 2015

Coverage: UK and Great Britain
Geographical area: Country, region and county
Date of publication: 2nd September 2015

**Contents**



## Headline results:

- *Construction material prices fell in July.* The 'All Work' Construction Material Price Index for July 2015 decreased by 0.6% compared to the previous month.
- The *trade gap between imports and exports decreased.* The construction materials trade gap decreased by £139 million to £1,917 million in the second quarter of 2015.
- *Sand & gravel sales increased*. Seasonally adjusted sales of sand & gravel show a year-on-year increase of 12.2% in the second quarter of 2015.

## 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 web page on the 2nd of September 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 Uses of the data.

# 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.

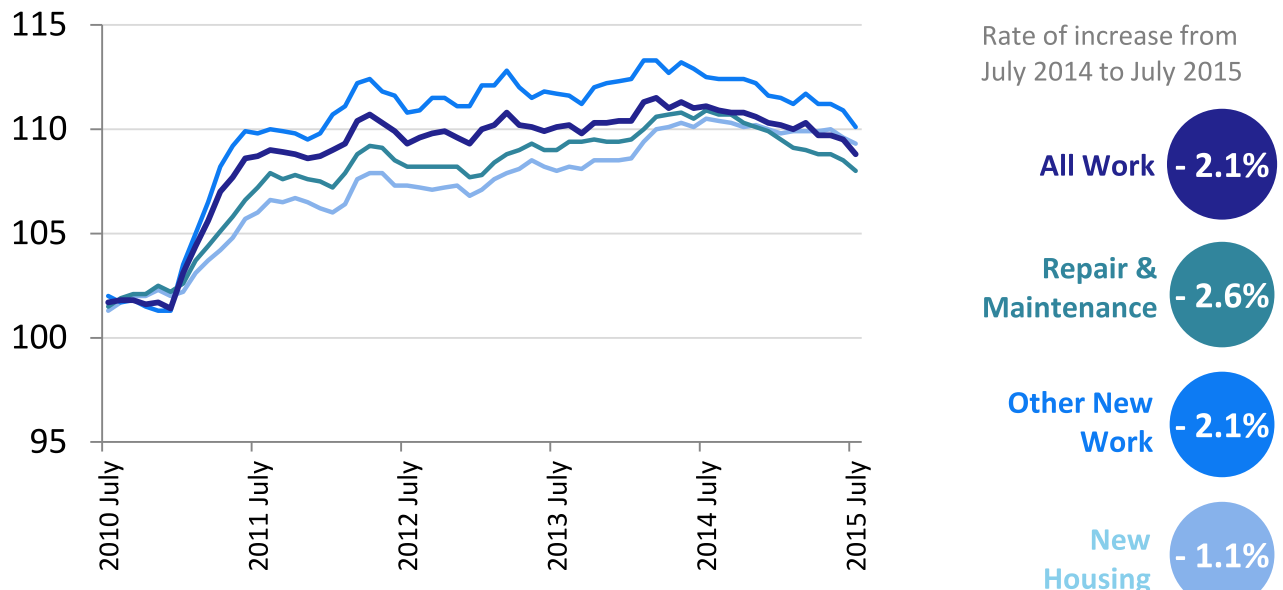
Following advice from the MAS, and the results of a consultation (see the results of the BIS consultation on seasonal adjustment for more detail), BIS agreed to publish seasonally adjusted data for the following series:

- 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 July 2015 compared to the previous month, following a 0.2% decrease in June. In July, 'New Housing', 'Other New-Work' and 'Repair and Maintenance' all decreased by 0.3%, 0.7% and 0.5% respectively. Looking at the longer term change, the 'All Work' material price index fell by 2.1% in July 2015 compared to the same month in the previous year. This is the 8th 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 0.2% overall for the headline 'All Work' index.

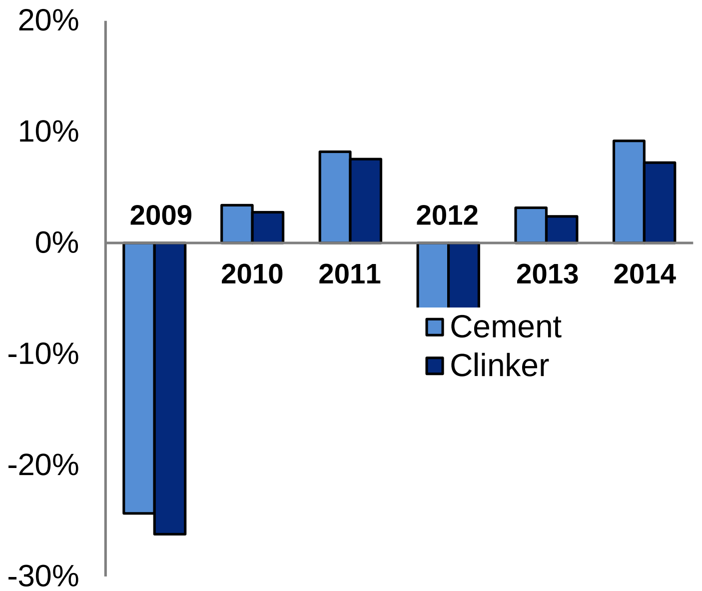
**Table 1: Construction materials experiencing the greatest price increases and decreases in the 12 months to July 2015, UK**

| Construction Materials | % change on a year earlier |
|---|---|
| Greatest price increases | |
| Other builders ironmongery | 12.3 |
| All bricks | 6.7 |
| Insulating materials (thermal or acoustic) | 5.5 |
| Greatest price decreases | |
| Concrete reinforcing bars | -13.8 |
| Fabricated structural steel | -11.2 |
| Imported sawn or planed wood | -8.6 |

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

The ‘All Work’ Construction Material Price Index shows that the year on year change in material costs for July 2015 was -2.1% (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.

**Chart 2: Production of Cement and Clinker, GB**
Percentage change over previous year (%)

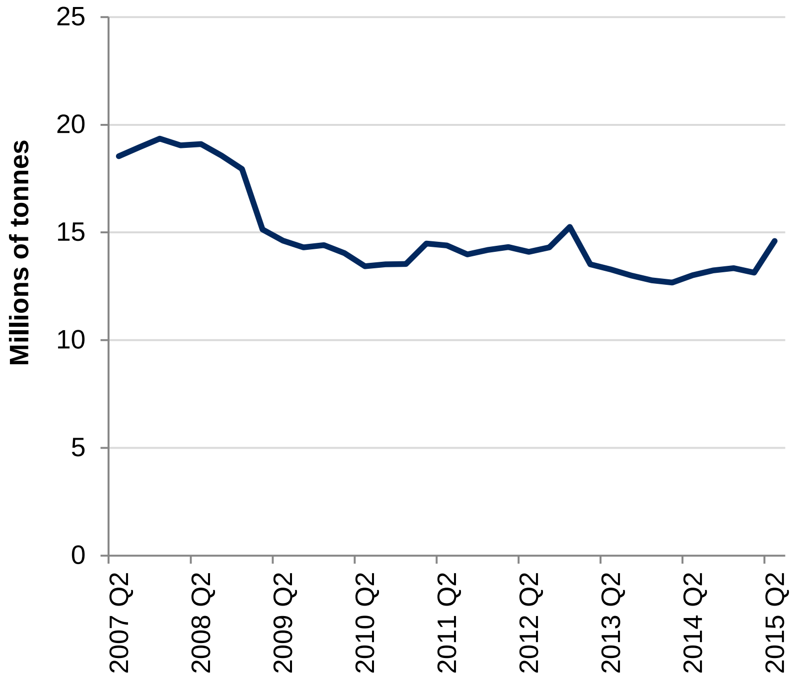



*Source: Table 8, Monthly Statistics of Building Materials and Components*

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 3: Seasonally Adjusted Sales of Sand & Gravel, GB**
weight of sand & gravel



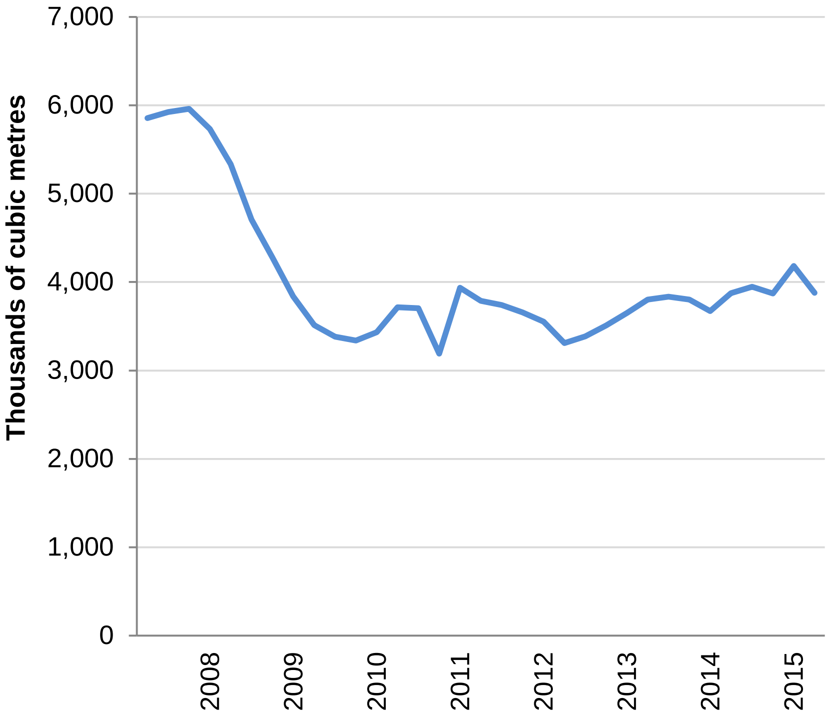

*Source: Table 4, Monthly Statistics of Building Materials and Components*

Seasonally adjusted sales of sand & gravel have declined since the recession, reaching their lowest in 2014Q1.

Since then, sales have begun to recover. Sales of sand & gravel increased 11.2% in 2015Q2 compared to 2015Q1, following a decrease of 1.6% in 2015Q1.

Comparing 2015Q2 to the same quarter in the previous year, sales have increased by 12.2%.

**Chart 4: Seasonally Adjusted Sales of Ready-Mixed Concrete, GB**
volume of concrete

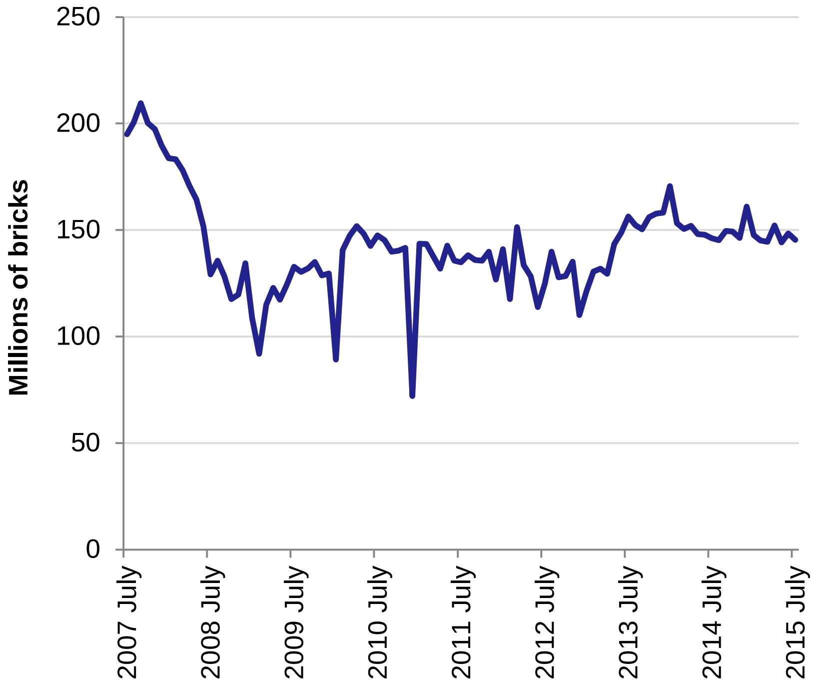



*Source: Table 13, Monthly Statistics of Building Materials and Components*

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. Sales fell 7.3% in 2015Q2 compared to 2015Q1, following an 8.1% increase in 2015Q1. Sales in 2015Q2 increased by 0.2% compared to the same quarter in the previous year. This is the tenth consecutive increase on this basis.

**Chart 5: Seasonally Adjusted Deliveries of Bricks, GB**
number of bricks

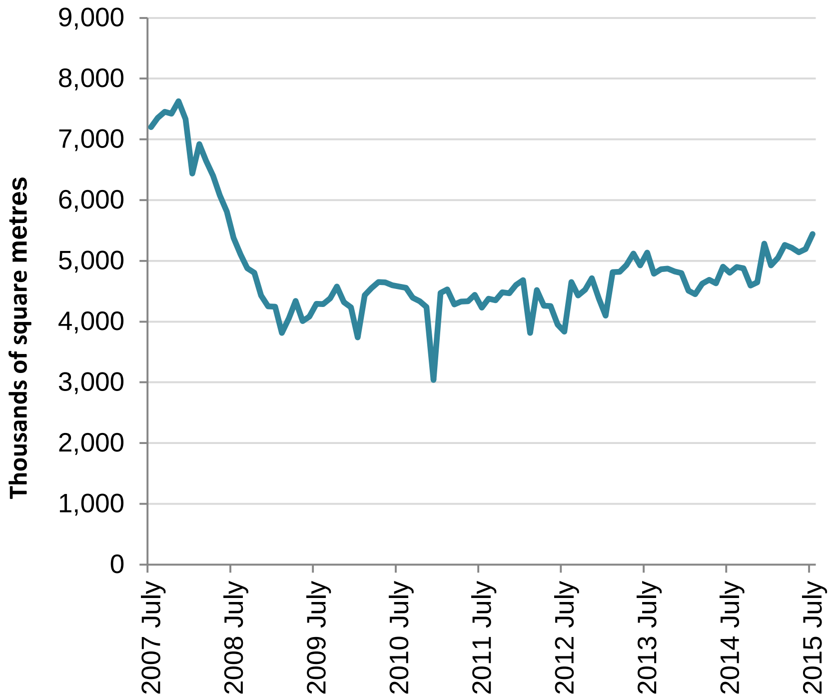



*Source: Table 9, Monthly Statistics of Building Materials and Components*

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

The seasonally adjusted figures for July 2015 show a 0.5% decrease in deliveries of bricks compared with July 2014. This follows a 0.4% increase in June, on the same basis. The month-on-month change shows a 2.0% decrease in July, following a 3.0% increase in June.

**Chart 6: Seasonally Adjusted Deliveries of Concrete Blocks, GB**
area of concrete blocks

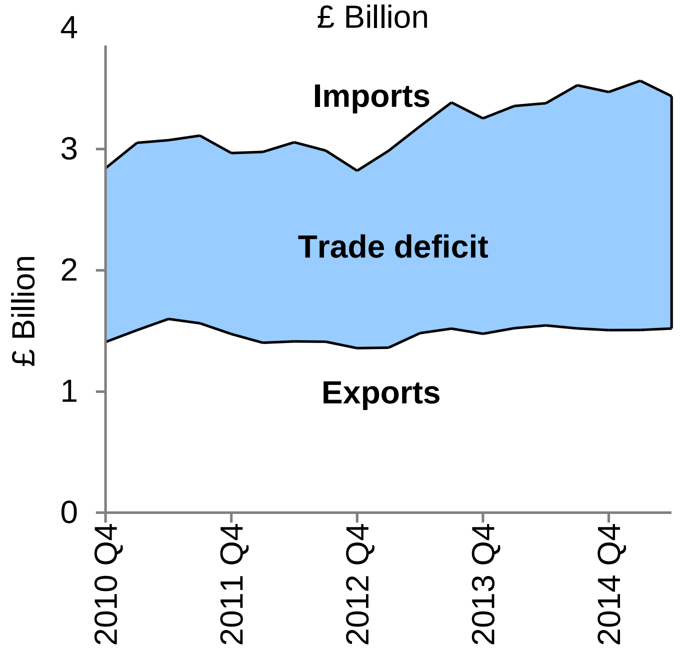



*Source: Table 11, Monthly Statistics of Building Materials and Components*

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

The seasonally adjusted deliveries figures show an increase of 13.3% in July 2015 compared to the same month in the previous year. This is the 8th consecutive increase on this basis, and follows an increase of 5.9% in June 2015 on the same basis. The month-on-month change shows an increase of 4.8% in July, following an increase of 1.1% in June.

**Chart 7: Exports and Imports of Construction Materials, UK**
£ Billion



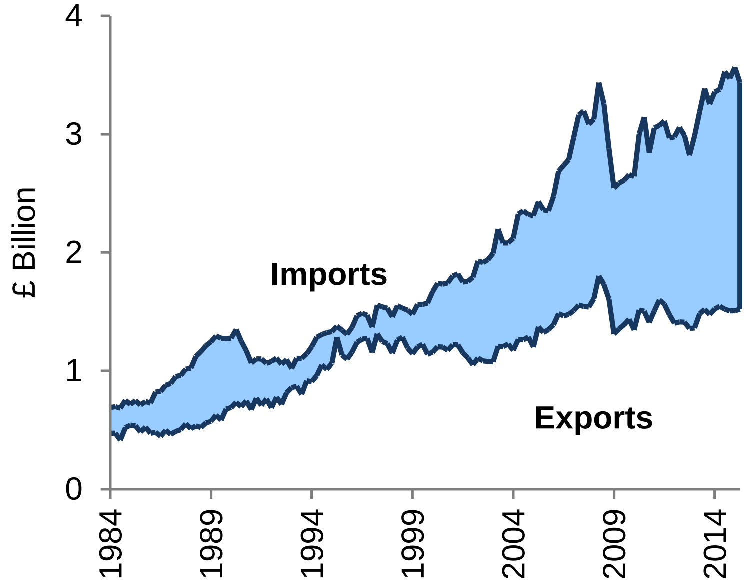

*Source: Table 14, Monthly Statistics of Building Materials and Components*

Exports of construction materials increased by £12.2 million in the second quarter of 2015 (to £1,520 million) compared to the previous quarter, an increase of 0.8%.

Imports decreased in the second quarter of 2015 by £127 million (to £3,437 million), a 3.6% decrease. As a result, the trade deficit decreased by £139 million to £1,917 million in 2015Q2.

The decrease of the trade deficit in 2015Q2 was largely due to a decrease in the trade deficit for products and components of £135 million. For semi-manufactures, the trade deficit decreased by £12 million. The raw materials trade deficit increased, by £7.0 million.

**Chart 8: Exports and Imports of Construction Materials, UK. 1984 to present.**
£ Billion




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

Over the period 1984Q1 to 2015Q2, construction materials imports have increased, on average, by 3.2% per quarter. Over the same period, exports increased by an average of 1.8% 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 (2015Q2), the trade deficit is £1.9 billion, 56% of the value of imports.

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

*£ Million*

| Top-5 Exported Materials | | Top-5 Imported Materials | |
|---|---|---|---|
| Paints & Varnishes | *670* | Electrical Wires | *1,574* |
| Electrical Wires | *644* | Sawn Wood > 6mm thick | *847* |
| Plugs & Sockets | *290* | Lamps & Fittings | *813* |
| Lamps & Fittings | *283* | Central Heating Boilers | *591* |
| Air Conditioning Equip. | *270* | Air Conditioning Equip. | *534* |

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

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

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

**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 | 8,534 | 5,194 |
| | *62%* | *38%* |
| Exports | 3,601 | 2,489 |
| | *59%* | *41%* |

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

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%.

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

*£ Million*

| Top-5 Export Markets | | Top-5 Import Markets | |
|---|---|---|---|
| Republic of Ireland | 784 | China | 2,171 |
| Germany | 579 | Germany | 2,052 |
| France | 529 | Italy | 896 |
| USA | 474 | Spain | 715 |
| Netherlands | 443 | Netherlands | 657 |

*Source: HMRC Overseas Trade Statistics*

The top five export markets comprised 46% of total construction materials exports in 2014. The Republic of 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 most recent construction output figures for June and Quarter 2 2015 were published by the **Office for National Statistics** (ONS) on the 14th of August 2015. Output is estimated to have increased by 0.2% in 2015Q2 compared to 2015Q1. The increase was driven by All New Work, which rose by 1.0% as Repair & Maintenance fell by 1.2%. The biggest contributors to the rise in growth were Public New Housing, Infrastructure and Public Other New Work which rose by 3.9%, 1.2% and 0.5% respectively. Compared with June 2014, output in the construction industry shows an increase of 2.6%. This is the 25th consecutive month of year-on-year growth.

The **ONS** published a second estimate to GDP for 2015Q2 on the 28th of August 2015. An increase in GDP of 0.7% from 2015Q1 to 2015Q2 was reported. This figure is unrevised from their previous estimate published on the 28th of July. Construction growth was revised upwards by 0.2 percentage points to 0.2%, following a decrease of 0.2% from 2014Q4 to 2015Q1.

The latest monthly **Consensus Economics** forecasts in August 2015 (which uses an average of private sector forecasts) revised GDP growth expectations for 2015 up to 2.6% (previously 2.5%). The forecast for 2016 was revised up to 2.5%.

In July 2015, the **Office for Budget Responsibility** revised its GDP growth expectation down to 2.4% (previously 2.5%). The forecast for 2016 remains unrevised at 2.3% growth.

The latest reports from the **Bank of England**'s Regional Agents stated that construction output growth had edged up slightly. Commercial activity had continued to strengthen, particularly warehouse construction. New office building was increasingly reported in regional centres. The number of infrastructure projects was increasing and set to rise further, despite some concerns about delays to major rail infrastructure projects. Steady growth in private house building had continued. Manufacturers of construction materials were able to achieve price rises, but the rate of inflation had fallen.

This summer, **Experian** revised their expectations for the construction sector. Their prediction for 2015 was revised downwards, to 3.9% growth, a fall of 1.6 percentage points compared to their previous estimate. Growth in 2015 is expected to be more balanced than in 2014, with expansion predicted for most sectors. Expectations for 2016 were revised upwards, to 3.7%, with a further 4.2% forecast for 2017. Strong growth is predicted in 2015 for new work, though not as strong as previously forecast. Most notably, there are forecasts of 8.0% growth for private housing, 7.0 % for infrastructure and 5.0% for private commercial. Growth in Repair & Maintenance is predicted to be more subdued, at 1.6%.

The **Construction Products Association** forecasts published this summer reported that the construction sector is expected to grow by 4.9% in 2015, revised downwards from 5.5% in their spring forecast. Output is expected to rise a further 4.2% in 2016. Overall, output is forecast to grow by 21.7% between 2015 and 2019. Growth in 2015 is expected to be driven by rising output in private housing (+9.0%), commercial offices (+7.0%), and industrial (+9.1%) 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 report, 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 report 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 interim report. In July 2012, MAS published their final report. 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 Statement of Administrative Sources used to compile construction material trade statistics is available on the BIS *Building Materials and Components* webpage:

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

5. The pre-announcement of any major changes to samples or methodology 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 | 88% |
| Quarterly Sand and Gravel – Land Won | 4, 5 & 6 | 85% |
| Quarterly Sand and Gravel – Marine Dredged | 4, 5 & 6 | 98% |
| Quarterly Slate | 7 | 100% |
| Quarterly Concrete Roofing Tiles | 13 | 100% |
| Monthly Bricks Provisional data | 9 | 94% |
| Monthly Bricks Final data | 9 & 10 | 100% |
| Monthly Concrete Blocks | 11 | 96% |

## 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. Construction Statistics: Sources and Outputs 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 Construction Statistics Annual 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 **Index of Production** data show that output in the SIC 23.1-4/7-9 industry grew by 5.0% in 2015Q2, when compared to the same quarter in the previous year. This is the 8$^{th}$ consecutive quarterly increase on this basis. Comparing June 2015 with June 2014, the index grew by 6.7% in the 12 months to June 2015, following a rise in May of 5.6% on the same basis.

Output in the SIC 23.5-6 industry grew by 3.9% in 2015Q2, compared to 2014Q2. This was the 6$^{th}$ consecutive increase on this basis. Comparing June 2015 with June 2014, the index grew by 5.1%, following a rise of 0.1% in May on the same basis. The index has now recorded 19 consecutive monthly rises.

## Revisions

11. Our revisions policy can be found on the BIS Building Materials webpage.

12. The pre-announcement of any major changes to samples or methodology and Summary of Revisions 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.*

**Next publication:** 7th October 2015

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