Department for Business Innovation & Skills

Monthly Statistics of Building Materials and Components

Commentary

April 2015

Coverage: UK and Great Britain
Geographical area: Country, region and county
Date of publication: 7th May 2015

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Headline results:

- *Construction material prices fell in March.* The 'All Work' Construction Material Price Index for February 2015 decreased by 0.2% compared to the previous month, and was down 1.5% compared to March 2014.
- *Brick deliveries decreased.* Seasonally adjusted deliveries of bricks fell by 4.6% in March 2015 compared to February.
- *Concrete block deliveries increased.* Seasonally adjusted deliveries of concrete blocks rose by 14.3% in March 2015 compared to February.

Correction Note

In the commentary published on the 6th of May, sand and gravel sales were not updated with 2015Q1 data, due to the late receipt of these data. This has now been updated in this corrected version.

Introduction

Please note - we have recently updated the design of many of the charts in this publication, and 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 6th May 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

The 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.

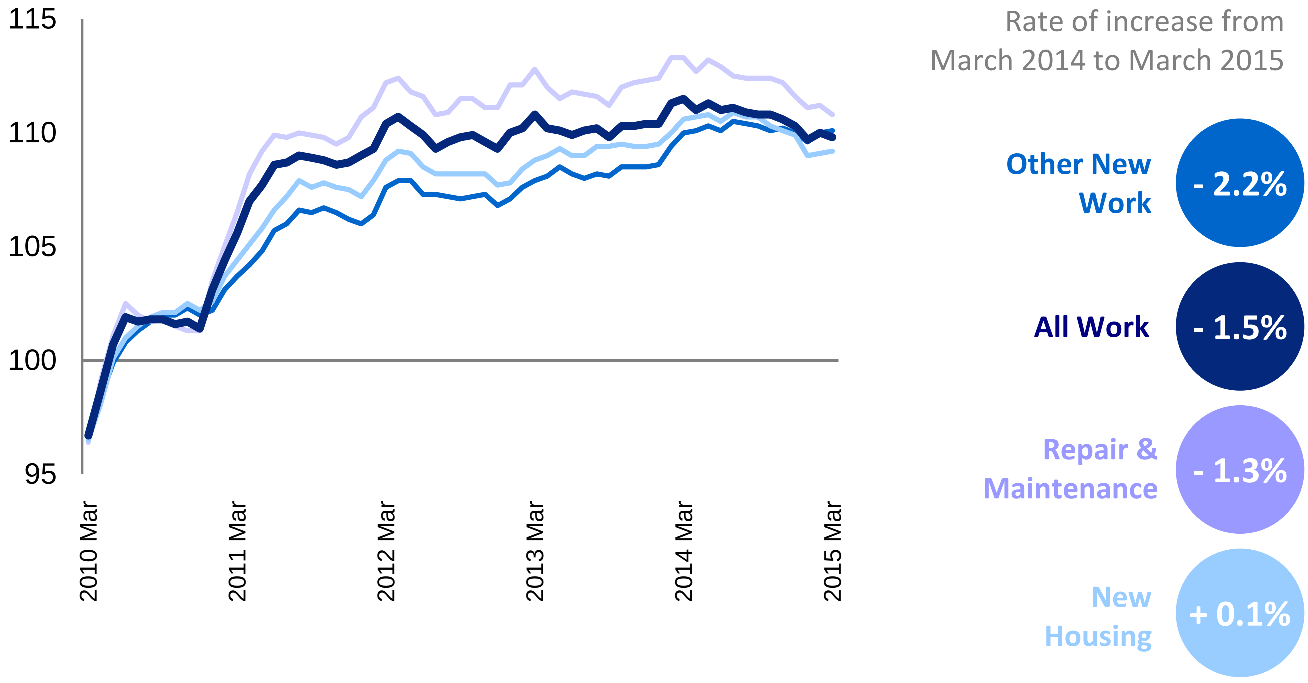
Following advice from MAS, and the results of a consultation (see the results of the BIS consultation on seasonal adjustment for more detail), BIS agreed to publish seasonally adjusted data for the following series:

- 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 date, 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 date in the tables for this publication. **The commentary will contain both seasonally-adjusted and non-seasonally adjusted charts for a period of four months (until 1st July 2015), before moving to publish only seasonally adjusted charts.**

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 0.2% in March 2015 compared to the previous month, after a 0.3% increase in January. The index has fallen in 8 out of the past 12 months. Looking at the longer term change, the 'All Work' material price index fell by 1.5% in March 2015 compared to the same month in the previous year, following a 1.2% decrease in February. This is the largest year-on-year decrease since a fall of 2.8% in October 2009. The only sub-sector to record an increase in prices compared to March 2014 was 'New Housing', at 0.1%. The rise in prices for 'New Housing' is consistent with recent increases in activity in this sub-sector.

From October 2009 to June 2011, construction material prices increased rapidly, rising by 15% over the period. The price of construction materials has increased more slowly since June 2011: by 1.1% overall for the headline 'All Work' index.

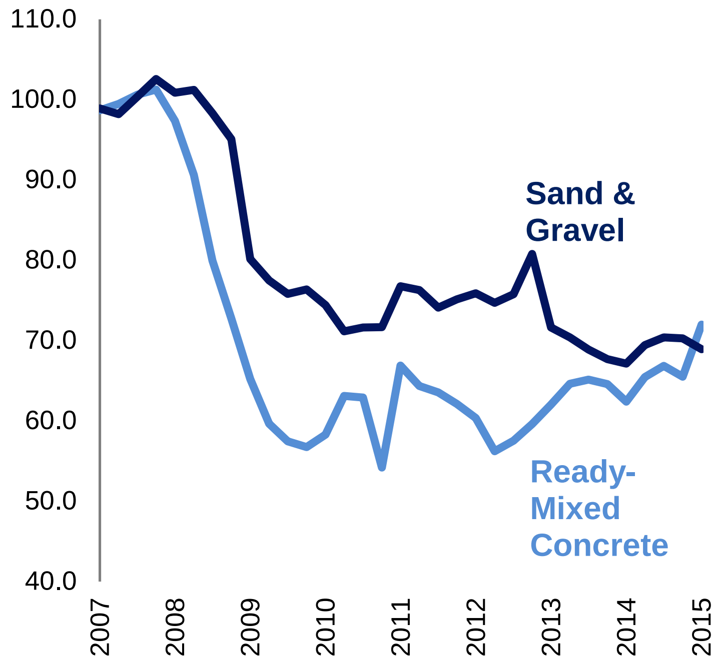
Table 1: Construction materials experiencing the largest price increases and decreases in the 12 months to March 2015, UK

Construction Materials	% change on a year earlier
Largest price increases	
Imported Plywood	8.4
All Bricks	8.2
Ready-mixed concrete	4.8
Largest price decreases	
Fabricated Structural Steel	-10.6
Concrete Reinforcing Bars	-9.9
Imported sawn or planed wood	-5.7

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 March 2015 was -1.5% (see chart 1). However, this aggregated figure hides larger price movements for some specific products and materials. The 3 largest increases and decreases are presented here.

Chart 2: Seasonally Adjusted Sales of Sand and Gravel and Ready-Mixed Concrete, GB
Index, 2007 = 100

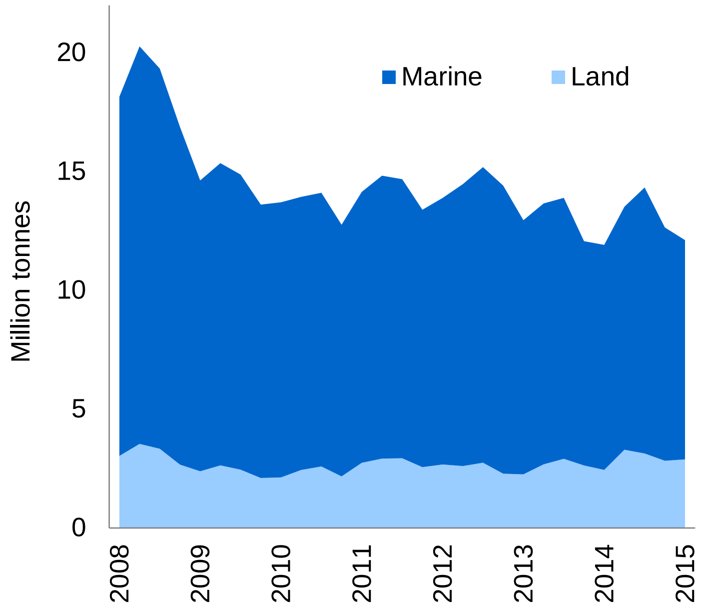


Source: Tables 4 & 13, Monthly Statistics of Building Materials and Components

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 compared to the same quarter the previous year by 15.4%. This is the ninth consecutive increases on this basis.

Chart 3: Non-Seasonally Adjusted Volumes of Total and Marine Dredged Sand and Gravel sold, GB

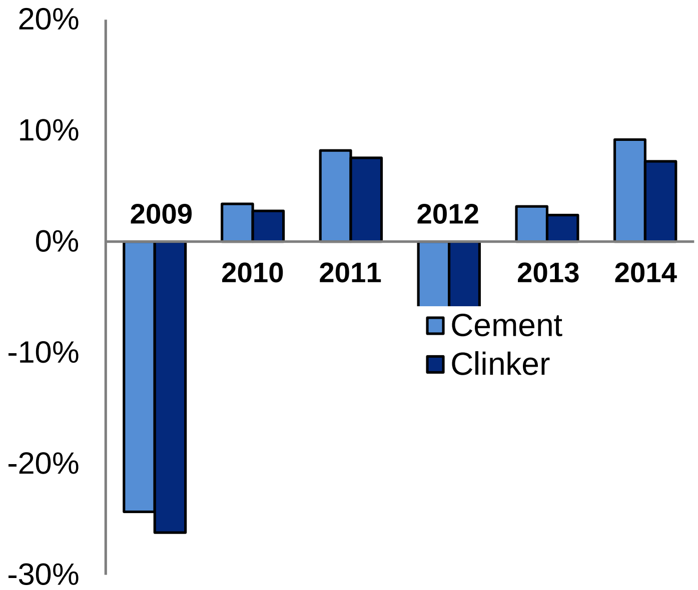


Source: Table 4, Monthly Statistics of Building Materials and Components

Volumes of sand and gravel sold in Great Britain fell by 4.2% in 2015Q1 compared to the previous quarter, with 12.1 million tonnes sold. This followed a decrease of 11.7% in 2014Q4. However, sales of sand and gravel are strongly seasonal, with volumes sold in winter typically decreasing. Chart 2 shows the seasonally adjusted sales.

The proportion of sand and gravel sold that was marine dredged was 23.8% in 2015Q1, and averaged 22.3% of total quarterly sales in 2014. This is higher than the average of 18.2% over the period 2009 to 2013.

Chart 4: Production of Cement and Clinker, GB
Percentage change over previous year (%)

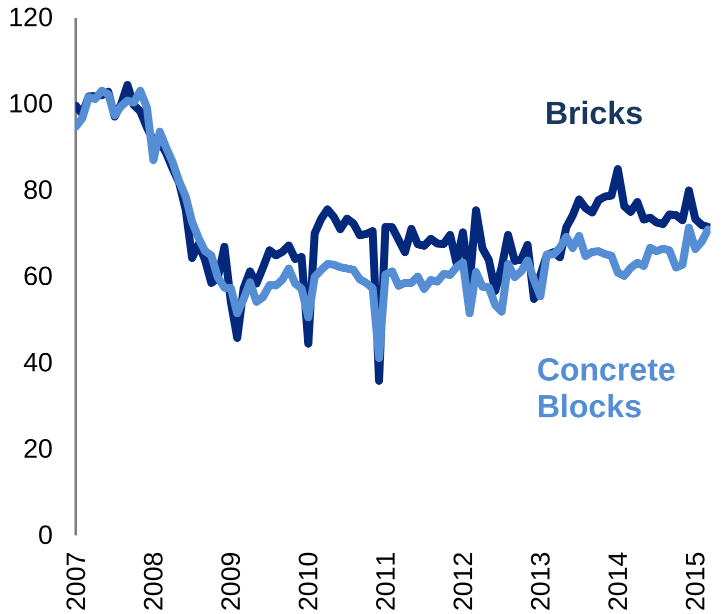


Source: Table 8, Monthly Statistics of Building Materials and Components

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 5: Seasonally Adjusted Deliveries of Bricks and Concrete Blocks, GB
Index, 2007 = 100



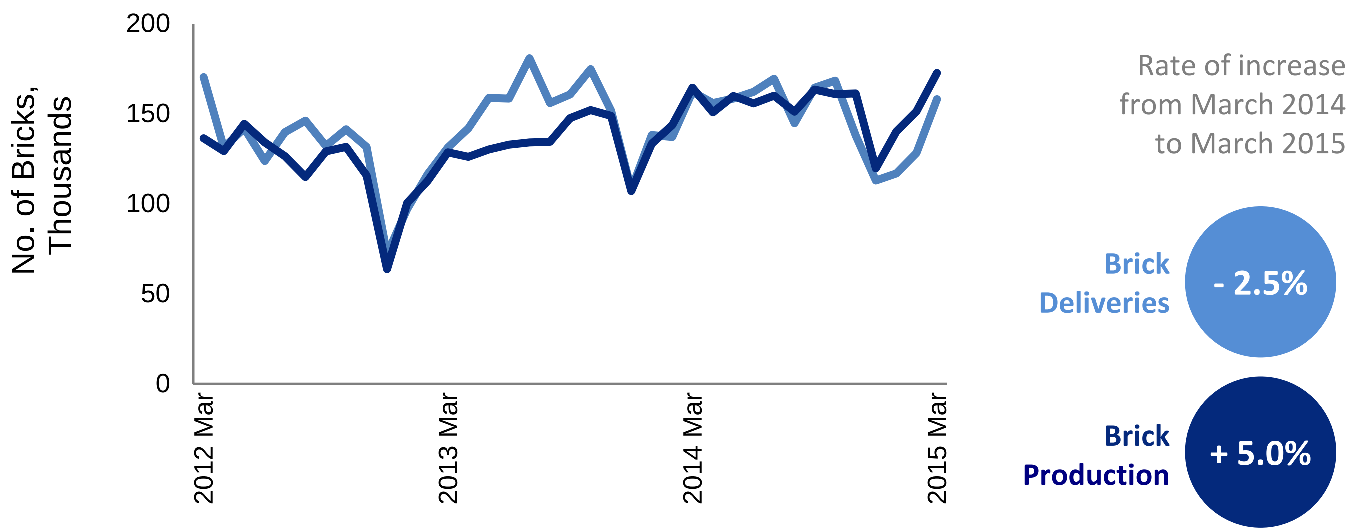
Source: Tables 9 and 11, Monthly Statistics of Building Materials and Components

Both bricks and concrete blocks deliveries declined during the recession, and reached their lowest values during the extreme cold weather in December 2010.

Following the recession, brick deliveries have recovered more strongly than concrete blocks. However, the seasonally adjusted figures for March 2015 show a 4.6% decrease compared with March 2014. This follows a 5.7% decrease in February, and is the third consecutive decrease on this basis.

For concrete blocks, the seasonally adjusted deliveries figures show an increase of 14.3% in March 2015 compared to the same month in the previous year. This follows an increase of 13.1% in February, and is the fourth consecutive increase on this basis.

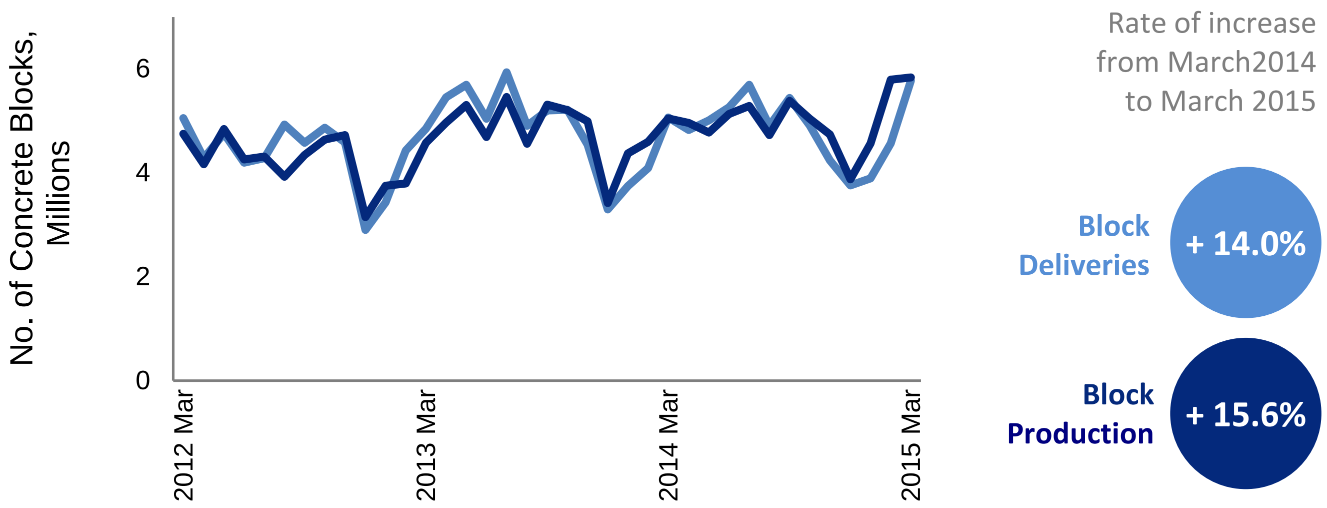
Chart 6: Non-Seasonally Adjusted Deliveries & Production of Bricks, GB
Monthly number of bricks



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

In the 12 months to March 2015, deliveries of bricks fell by 2.5%, following a fall of 6.5% in the 12 months to February. Brick production increased by 5.0% in the 12 months to March 2015, following an increase of 5.3% on the same basis in February. Brick deliveries were 34% lower in March 2015 than pre-recession levels in March 2007.

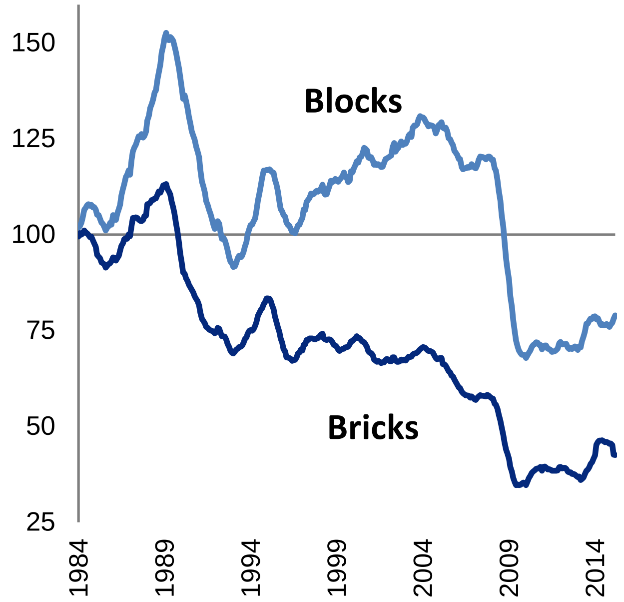
Chart 7: Non-Seasonally Adjusted Deliveries & Production of Concrete Blocks, GB
Monthly number of concrete blocks



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

Deliveries of concrete blocks increased by 14.0% in March 2015 relative to the same month a year earlier, following an increase of 11.6% in February. Concrete block production increased by 15.6% in the 12 months to March 2015, after increasing by 26.0% in February. Concrete block deliveries were 30% lower in March 2015 than pre-recession levels in March 2007.

Chart 8: Non-Seasonally Adjusted Deliveries of Bricks and Blocks, GB.
Index, 1983 = 100, 12 month moving totals



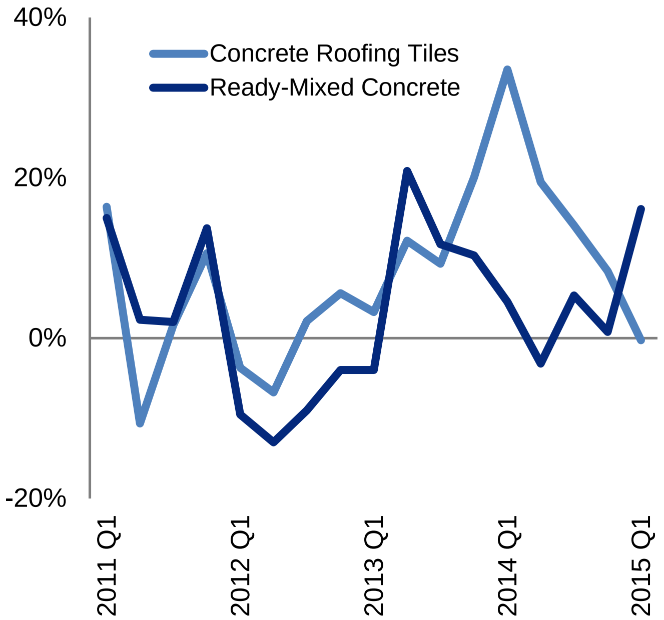
Source: Tables 9 and 11, Monthly Statistics of Building Materials and Components

Before the 2008 recession, brick deliveries were in long term decline. Brick deliveries fell sharply in the recession, with the 12 month moving total reaching a nadir in June 2009, 39.9% lower than the mean value for 2007.The subsequent recovery has seen deliveries increase by 22.6% since June 2009.

Prior to the 2008 recession, concrete block deliveries were increasing over the long term. Deliveries fell sharply in the recession, with the 12 month running total reaching a nadir in October 2009, 42.5% lower than the mean value for 2007. The subsequent recovery has seen deliveries increase by 15.0% since October 2009.

Chart 9: Non-Seasonally Adjusted Deliveries of Concrete Roofing Tiles (GB) and Ready-Mixed Concrete (UK)

Percentage change over a year earlier (%)



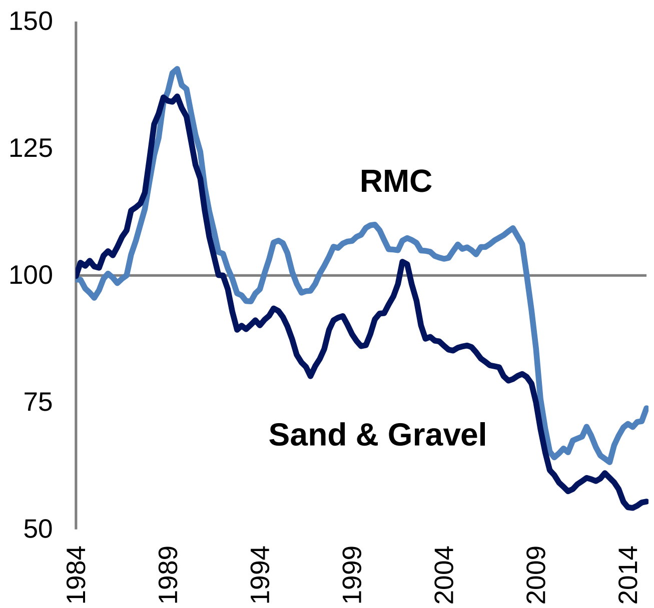
Source: Table 13, Monthly Statistics of Building Materials and Components

Deliveries of Concrete Roofing Tiles in 2015Q1 decreased by 0.3% compared to the same quarter the previous year. This followed 10 consecutive quarterly increases on this basis. Deliveries of concrete roofing tiles were 0.4% lower in 2015Q1 compared to pre-recession levels in 2008Q1.

Deliveries of Ready-Mixed Concrete rose by 16.1% in 2015Q1, compared to 2014Q1. This followed an increase of 0.8% in 2014Q4 on the same basis. Deliveries of ready-mixed concrete remain 22.3% below pre-recession levels in 2008Q1.

Chart 10: Non-Seasonally Adjusted Deliveries of Sand & Gravel (GB) and Ready-Mixed Concrete (UK)

Index, 1983 = 100, 4 quarter moving totals

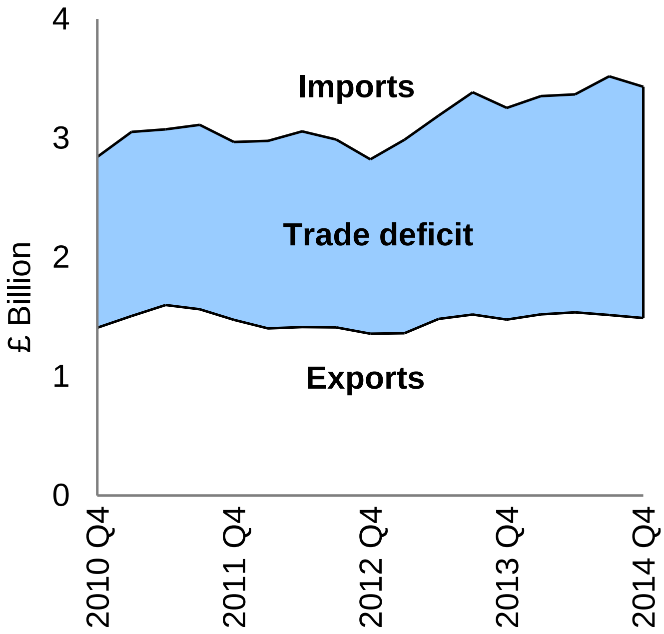


Source: Tables 4 & 13, Monthly Statistics of Building Materials and Components

Deliveries of sand & gravel declined gradually in the period before the 2008 recession. Following an initial sharp decline in 2009 and 2010, deliveries have continued to decline. In 2015Q1, deliveries were 30.9% lower than the 2007 mean.

In the period leading up to the 2008 recession, deliveries of ready-mixed concrete were broadly stable. Deliveries fell sharply in 2008/9: by 2010Q1 they were 40.8% below the 2007 mean. There has been a modest recovery since, with deliveries in 2015Q1 now 22.3% below the 2007 mean.

Chart 11: Exports and Imports of Construction Materials, UK
£ Billion

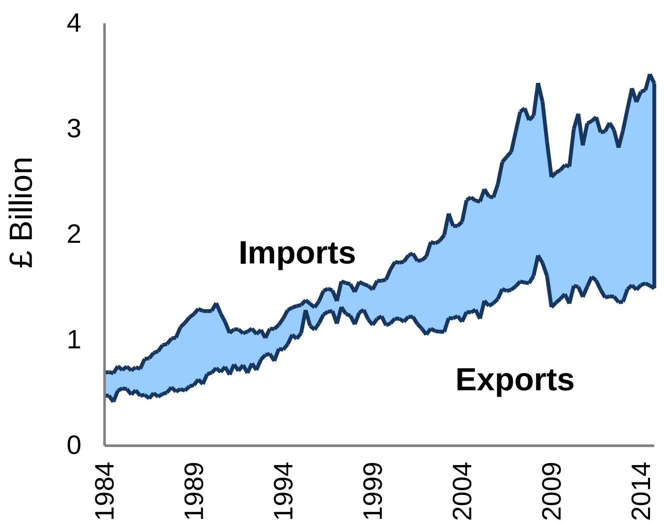


Source: Table 14, Monthly Statistics of Building Materials and Components

Exports of construction materials decreased by £25 million in the fourth quarter of 2014 (to £1,490 million), a decrease of 1.7% on the previous quarter. Imports also decreased, by £88 million (to £3,432 million), a 2.5% decrease. As a result, the trade deficit decreased by £62 million, to £1,942 million, in 2014Q4.

The decrease of the trade deficit in 2014Q4 was largely due to a decrease in the trade deficit for semi-manufactures of £34 million. For products and components, the trade deficit decreased by £25 million. The raw materials trade deficit also decreased, by £3 million.

Chart 12: 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 2014Q4, construction materials imports have increased, on average, by 3.2% 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 (2014Q4) the trade deficit is £1.9 billion, 57% 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	*669*	Electrical Wires	*1,571*
Electrical Wires	*641*	Sawn Wood > 6mm thick	*845*
Plugs & Sockets	*290*	Lamps & Fittings	*812*
Lamps & Fittings	*280*	Central Heating Boilers	*585*
Air Conditioning Equip.	*265*	Air Conditioning Equip.	*533*

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

The top five exported materials in 2013 accounted for 34% 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	8,478	5,194
	62%	*38%*
Exports	3,574	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	
Ireland	780	China	2,171
Germany	575	Germany	2.034
France	524	Italy	893
USA	474	Spain	712
Netherlands	442	Netherlands	654

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 first estimate of 2015 Q1 GDP, published by the Office for National Statistics (ONS) on the 28th of April, reported that the economy grew by 0.3% compared to the previous quarter. Growth in 2015 Q1 was limited to services, which increased by 0.5%. The other three main industrial groupings fell: construction fell by 1.6%, production decreased by 0.1%, and agriculture decreased by 0.2%. 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. The 1.6% decrease in construction output contributed -0.1 percentage points to overall GDP growth.

The most recent construction output figures were published by the ONS on the 10th of April. The latest seasonally adjusted figures show that output decreased by 0.9% in February 2015, compared to the previous month. This followed an decrease of 2.5% in January. February's decrease was largely driven by decreases in private housing repair and maintenance (-2.7%), infrastructure (-2.5%), and private new housing (-1.6%). Comparing the most recent 3 months with the previous 3 months (a less volatile measure than a single month), construction output fell by 3.2%. The volume of construction new orders fell by 2.9% in 2014 Q4 compared to Q3. Overall, new orders rose by 0.4% in 2014.

The latest monthly Consensus Economics forecasts in April 2015 (which uses an average of private sector forecasts) revised GDP growth expectations for 2015 down to 2.6% (previously 2.7%). The forecast for 2016 remained at 2.5%. The 2015 forecast is similar to those produced in March 2015 by the Office for Budget Responsibility (OBR) and by the Organisation for Economic Co-operation and Development (OECD) who forecast GDP growth in 2015 of 2.5 and 2.6%, respectively.

The latest reports from the Bank of England's regional agents state that growth in construction was robust, but had eased slightly compared to one year ago. Growth in private housebuilding had slowed compared to a year ago, which was attributed to skills shortages and house builders concentrating on improving margins. Speculative development has been largely restricted to London.

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 *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.

Latest data used in December 2014 edition	**Bulletin table number**	**Response rate**
Quarterly Sand and Gravel	4, 5 & 6	89%
Quarterly Sand and Gravel – Land Won	4, 5 & 6	86%
Quarterly Sand and Gravel – Marine Dredged	4, 5 & 6	100%
Quarterly Slate	7	90%
Monthly Bricks Provisional data	9	97%
Monthly Bricks Final data	9 & 10	100%
Monthly Concrete Blocks	11	97%

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 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 rose by 0.5% in the 12 months to February 2015, after a rise for January of 4.8%. This is the 21st consecutive rise on this basis. In 2014, the industry expanded by 11.7%, after an increase of 4.5% in 2013. Year on year for February 2015, output in the SIC 23.5-6 industry rose by 4.9%, after a rise for January 2015 of 1.9%. This was the 15th consecutive monthly increase on a year-on-year basis. The past 15 months of year on year increases follow a long period characterised predominantly by declines: 20 months in the past 36-month period have recorded year-on-year declines. In 2014 as a whole, the sector increased output by 21.0%, following a contraction of 7.7% in output recorded in 2013.

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: 3rd June 2015

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Website: BIS Building Materials Construction Statistics, https://www.gov.uk/government/organisations/department-for-business-innovation-skills/series/building-materials-and-components-monthly-statistics-2012

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