Department for Business Innovation & Skills

Monthly Statistics of Building Materials and Components

Commentary

May 2015

Coverage: UK and Great Britain
Geographical area: Country, region and county
Date of publication: 3rd June 2015

Contents

Headline results:

- *Construction material prices rose in March.* The ‘All Work’ Construction Material Price Index for April 2015 increased by 0.5% compared to the previous month.

- *Brick deliveries increased.* Seasonally adjusted deliveries of bricks rose by 6.1% in April 2015 compared to March.

- *Concrete block deliveries fell.* Seasonally adjusted deliveries of concrete blocks fell by 1.0% in April 2015 compared to March.

- *The trade gap widened in 2015Q1.* The trade gap widened by £86 million in 2015Q1, with imports rising by 2.2% and exports decreasing by 0.5%.

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 3rd June 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.

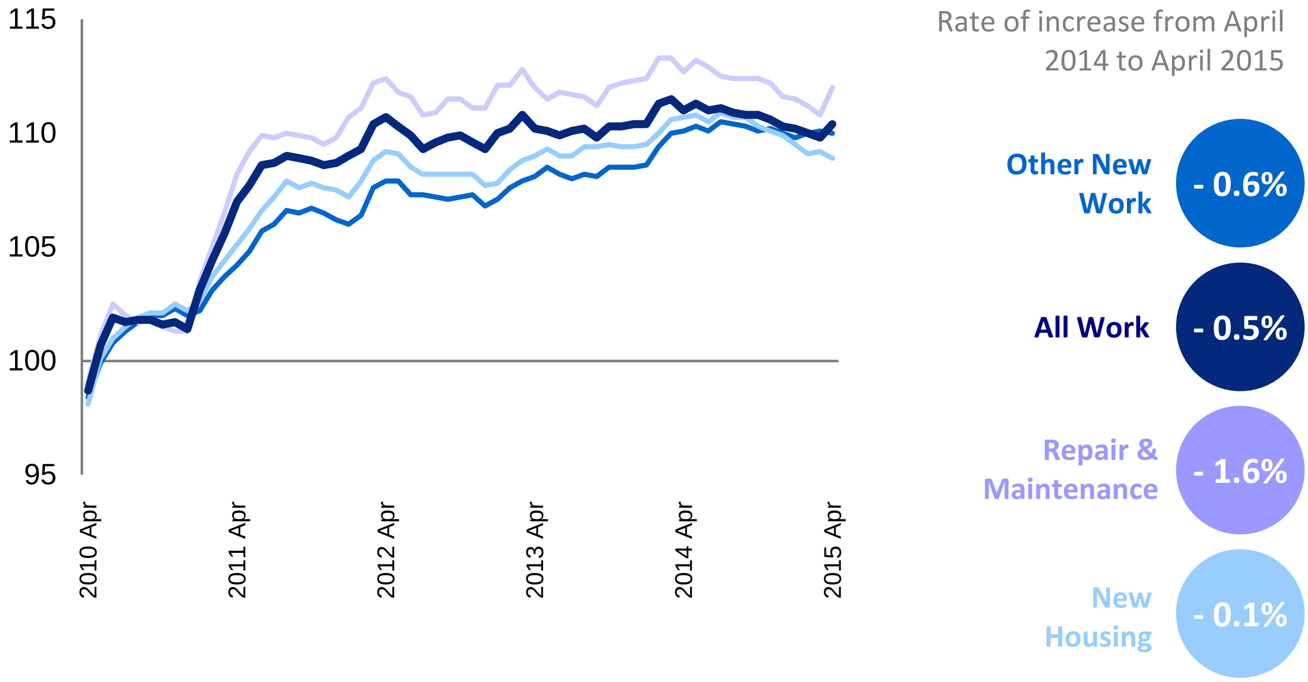
Following advice from MAS, and the results of a consultation (see the results of the BIS consultation on seasonal adjustment for more detail), BIS agreed to publish seasonally adjusted data for the following series:

- 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 increased by 0.5% in April 2015 compared to the previous month, after a 0.2% decrease in March. This monthly increase comes after 5 consecutive monthly decreases. Looking at the individual sub-sectors, 'Other New-Work' rose by 1.1% in April 2015, whilst 'New Housing' and 'Repair and Maintenance' both fell (by 0.1% and 0.3% respectively). Looking at the longer term change, the 'All Work' material price index fell by 0.5% in April 2015 compared to the same month in the previous year, following a 1.5% decrease in March. This is the 5th consecutive fall 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 1.7% 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

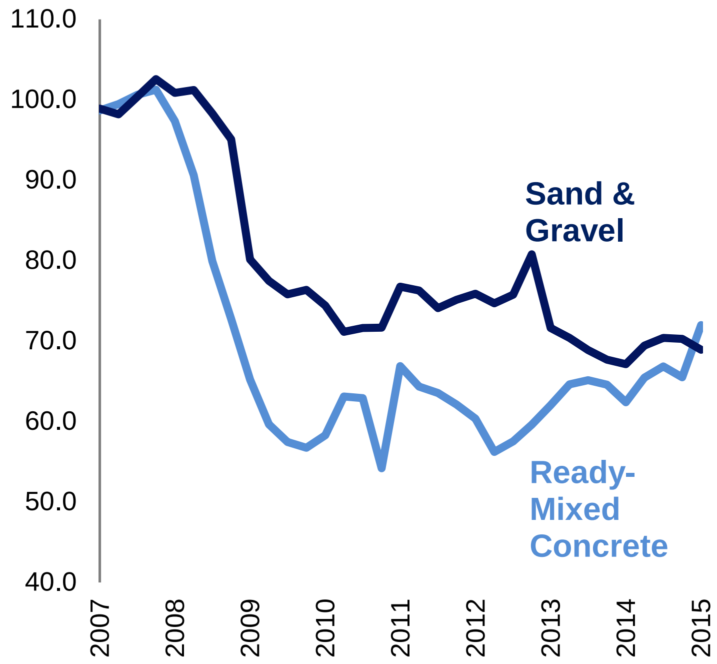
Construction Materials	% change on a year earlier
Largest price increases	
Imported Plywood	10.4
All Bricks	7.4
Particle Board	5.2
Largest price decreases	
Concrete Reinforcing Bars	-10.6
Fabricated Structural Steel	-10.1
Imported sawn or planed wood	-7.3

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 April 2015 was -0.5% (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

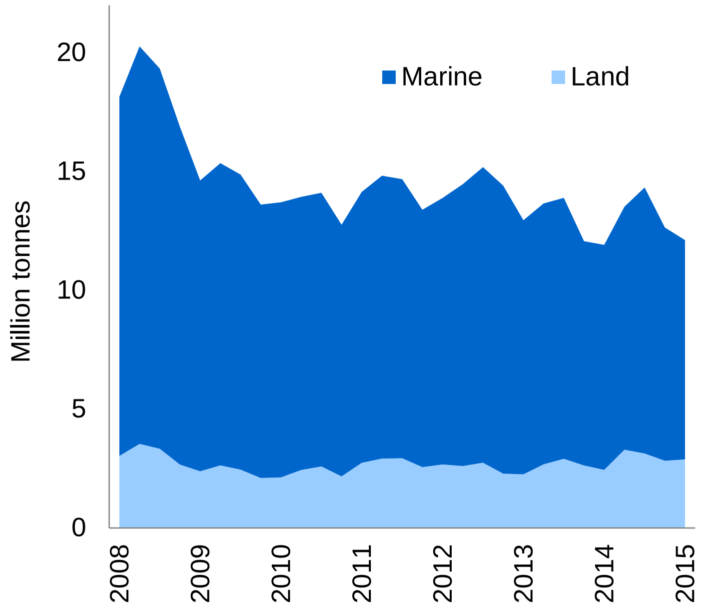


Source: Tables 4 & 13, Monthly Statistics of Building Materials and Components

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

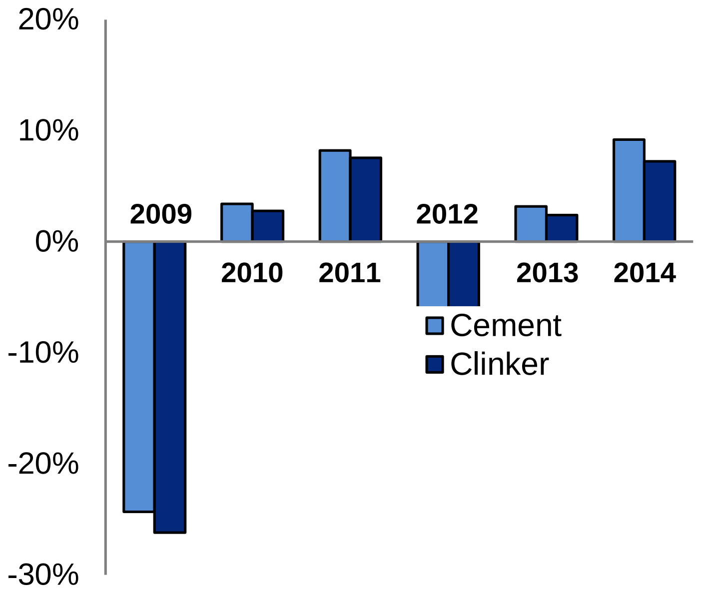


Source: Table 4, Monthly Statistics of Building Materials and Components

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 (%)

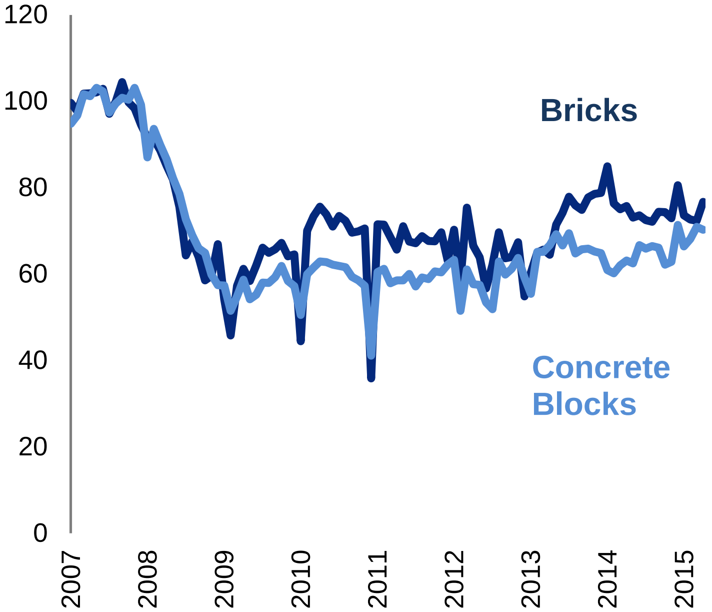


Source: Table 8, Monthly Statistics of Building Materials and Components

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



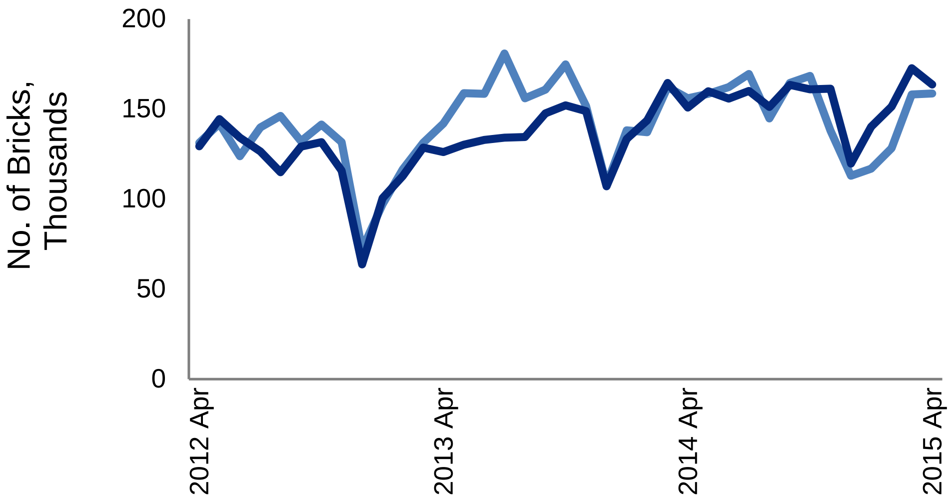
Source: Tables 9 and 11, Monthly Statistics of Building Materials and Components

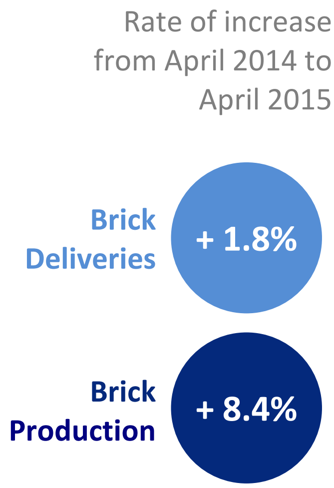
Both bricks and concrete blocks deliveries declined during the recession, and reached their lowest values during the extreme cold weather in December 2010.

Following the recession, brick deliveries have recovered more strongly than concrete blocks. The seasonally adjusted figures for April 2015 show a 1.3% increase compared with April 2014. This follows a 3.5% decrease in February, and is the 1st increase on this basis since December 2014.

For concrete blocks, the seasonally adjusted deliveries figures show an increase of 11.3% in April 2015 compared to the same month in the previous year. This follows an increase of 14.4% in March, and is the 5th consecutive increase on this basis.

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

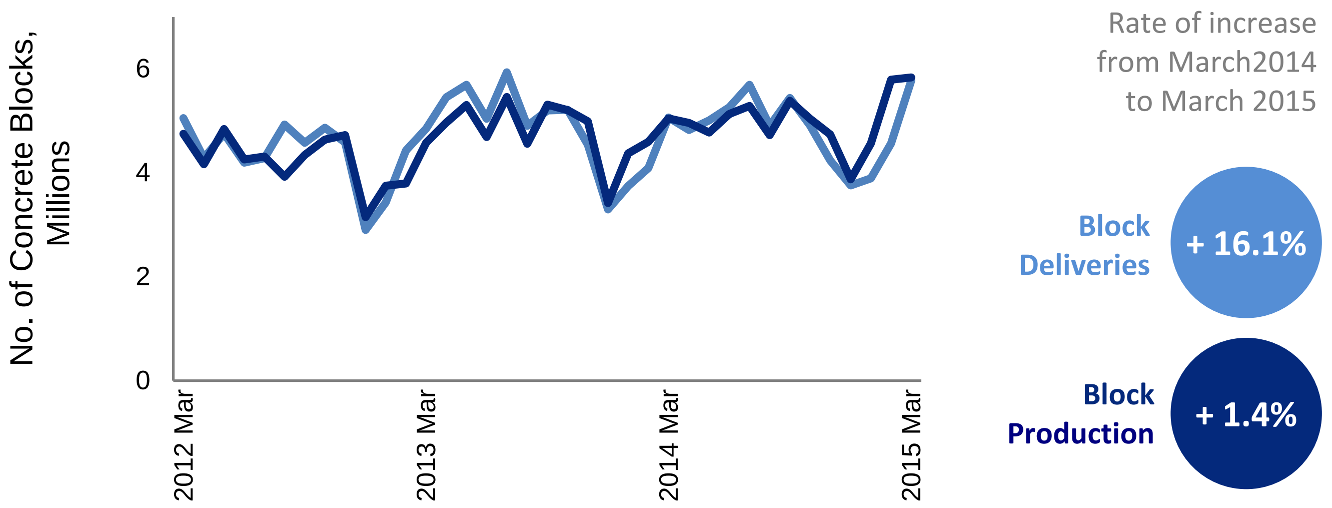




Source: Table 9, Monthly Statistics of Building Materials and Components

In the 12 months to April 2015, deliveries of bricks rose by 1.8%, following a fall of 2.5% in the 12 months to March. Brick production increased by 8.4% in the 12 months to April 2015, following an increase of 5.3% on the same basis in February. Brick deliveries were 21% lower in April 2015 than pre-recession levels in April 2007. Brick production has exceeded brick deliveries for 6 consecutive months.

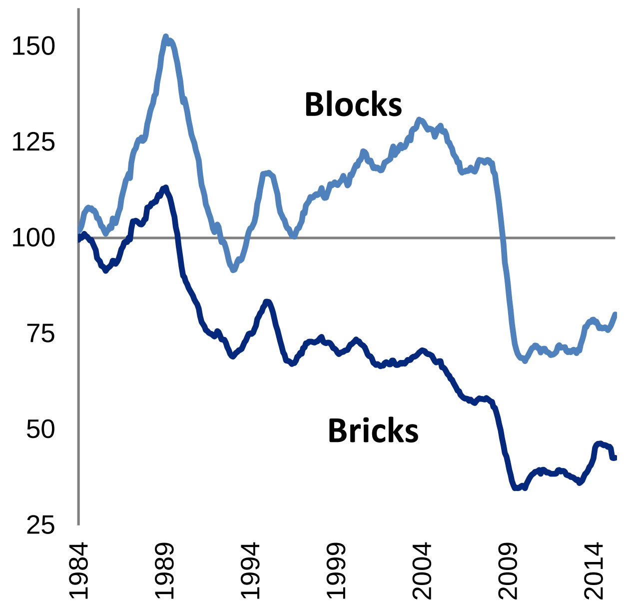
Chart 7: Non-Seasonally Adjusted Deliveries & Production of Concrete Blocks, GB
Monthly number of concrete blocks



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

Deliveries of concrete blocks increased by 16.1% in April 2015 relative to the same month a year earlier, following an increase of 14.0% in March. Concrete block production increased by 1.4% in the 12 months to April 2015, after increasing by 15.6% in February. Concrete block deliveries were 25% lower in April 2015 than pre-recession levels in April 2007.

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



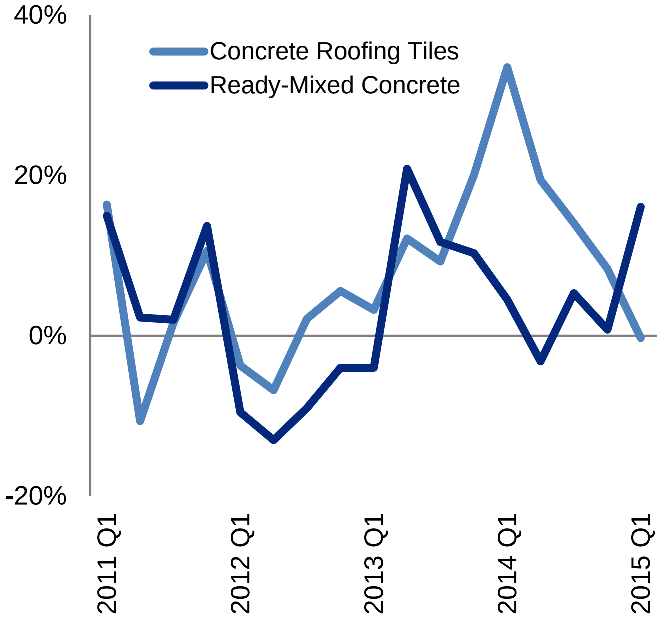
Source: Tables 9 and 11, Monthly Statistics of Building Materials and Components

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 22.8% 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 16.6% 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 (%)



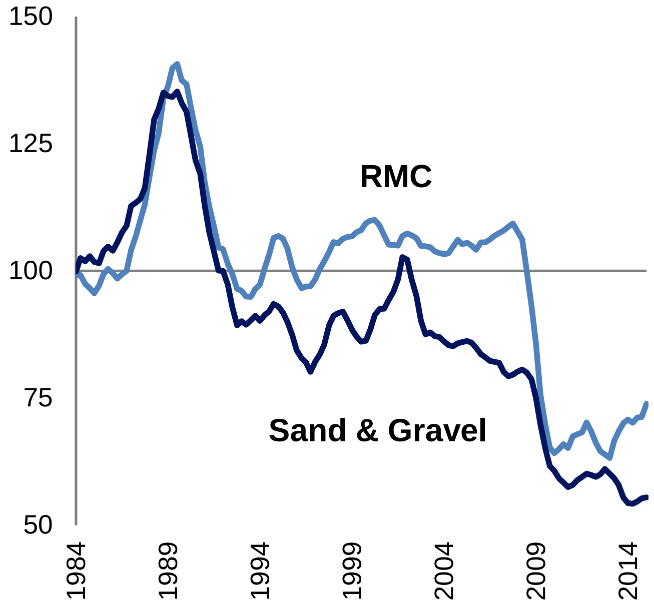
Source: Table 13, Monthly Statistics of Building Materials and Components

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

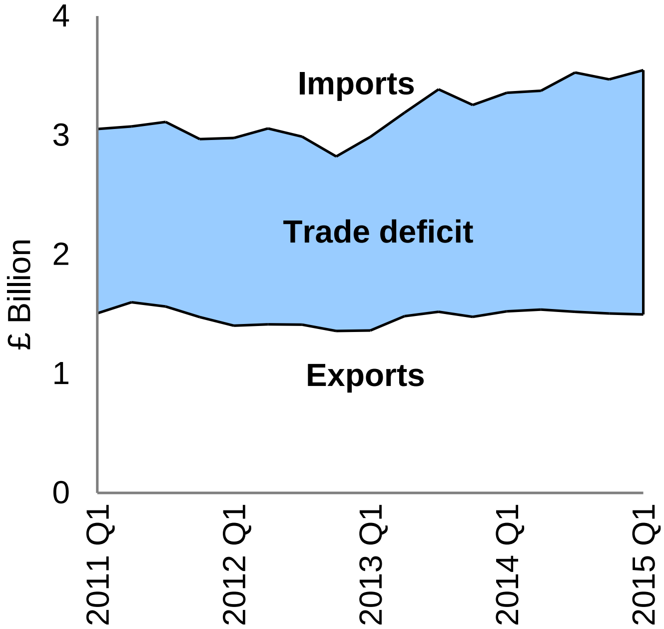


Source: Tables 4 & 13, Monthly Statistics of Building Materials and Components

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 31.8% below the 2007 mean.

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

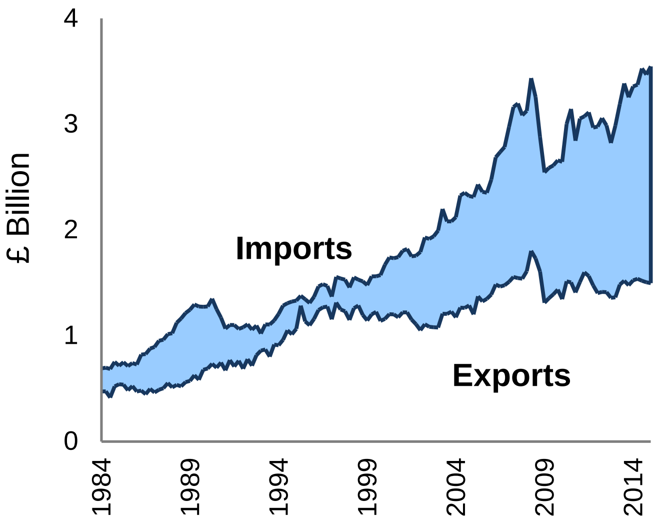


Source: Table 14, Monthly Statistics of Building Materials and Components

Exports of construction materials decreased by £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.

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.

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 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.

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*
Electrical Wires	*642*	Sawn Wood > 6mm thick	*847*
Plugs & Sockets	*290*	Lamps & Fittings	*812*
Lamps & Fittings	*283*	Central Heating Boilers	*591*
Air Conditioning Equip.	*269*	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	8,478	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	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 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 second estimate of 2015 Q1 GDP, published by the Office for National Statistics (ONS) on the 28th of May, reported that the economy grew by 0.3% compared to the previous quarter. This was unrevised from the first estimate. Growth in 2015 Q1 was limited to services and production, which increased by 0.1% and 0.4% respectively. The other two main industrial groupings fell: construction fell by 1.1%, 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. GDP was estimated to have grown by 2.8% in 2014, unrevised from the previous estimate.

The most recent construction output figures were published by the ONS on the 15th of May. The latest seasonally adjusted figures show that in 2015Q1, output in the construction industry decreased by 1.1% compared to 2014Q4. This was the second consecutive quarterly decrease, following a fall of 2.2% in 2014Q4. The main contributors to the 2015Q1 decrease were falls of 11.1% for public housing, 6.6% for other public work and 3.0% for private commercial. In the shorter term, output increased by 3.9% in March 2015, compared to February. Overwhelmingly, this rise was due to a 20.1% increase in non-housing repair and maintenance.

The latest monthly Consensus Economics forecasts in May 2015 (which uses an average of private sector forecasts) revised GDP growth expectations for 2015 down to 2.5% (previously 2.6%). 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 had again eased when compared to a year previously, but that output growth was robust overall. The slowing over the previous year was attributed in part to firms prioritising growing margins rather than output, with additional pressure from skills shortages and rising build costs. Housing market activity was lower than the year before. Commercial construction was growing, but with activity largely restricted to a few major cities.

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	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	98%
Monthly Bricks Final data	9 & 10	100%
Monthly Concrete Blocks	11	93%

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 fell by 1.5% in the 12 months to March 2015, after a rise for February of 0.1%. This is the 1st fall on this basis since May 2013. Looking beyond this single month, the industry expanded by 1.1% in 2015Q1, compared to 2014Q1. Year on year for March 2015, output in the SIC 23.5-6 industry rose by 10.1%, after a rise for February of 5.7%. This was the 16th consecutive monthly increase on a year-on-year basis. Comparing 2015Q1 with 2014Q4, output rose by 6.0%.

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: 1st July 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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