

# Impact of Blue Book 2015 Changes on Current Price Gross Domestic Product Estimates, 1997 to 2010

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## Executive summary

This article details estimates of the total impact of all the improvements to current price Gross Domestic Product (GDP) planned for September 2015.

Some of these have already been announced in the article [Impact of ESA 1995 Changes on Current Price Gross National Income Estimates, 2002 to 2010](#), published on 19 May. This article brings together these changes and all the other improvements which impact on current price GDP, and also extends the period being presented to 1997 to 2010. The improvements described in this article will also be applicable to subsequent years, but these later years are additionally subject to regular data updates and other methodological developments, which will be presented in future articles as detailed in Table 1.

The package of current price GDP changes being presented today, over the period 1997 to 2010, have the combined impact of reducing the level of current price GDP in 2010 by approximately £2.8 billion, around 0.2%. Average annual current price GDP growth between 1997 and 2010 remains unrevised at 4.5% per year.

## Introduction

This article is part of a series describing [changes to National Accounts](#), detailing the improvements which will be made in September 2015 to ensure that the UK National Accounts continue to provide the best possible framework for analysing the UK economy and for comparing it with those of other countries.

The previous article of 19 May, [Impact of ESA 1995 Changes on Current Price Gross National Income Estimates, 2002 to 2010](#), described improvements being made to the UK National Accounts to address the remaining outstanding Gross National Income (GNI) reservations on a European System of Accounts 1995 (ESA 1995) basis, as required under European Union (EU) budgeting

regulations. Some of the changes described in that article will also have an impact on current price GDP on an ESA 2010 basis, and additionally there are some other improvements which are being made as part of the regular annual update of the UK National Accounts (Blue Book). The full dataset will be published as part of the September 2015 Quarterly National Accounts update.

This article provides a summary of each of the ESA 2010 improvements being implemented in Blue Book 2015 along with the estimated impact on current price GDP between 1997 and 2010. The total impacts of the ESA 1995 GNI reservations which impact on GDP are also included in the Annex A table for completeness, but descriptions of these changes will not be repeated here. For the first time the impacts of the ESA 1995 GNI reservations for the periods 1997 to 2001 can also be shown. However, for EU budget purposes the period from 1997 to 2001 is closed to revision so these changes will not affect the UK's contribution to the EU budget for that period. Figures quoted in this article for the ESA 1995 GNI reservations may differ from those in the 19 May article for two main reasons:

1. This article focuses on the impact on current price GDP rather than current price GNI (see 19 May article for a description of the difference).
2. This article describes revisions to the UK published figures which, for reasons of timing and different revisions periods, will not exactly match the figures provided to the European Union Statistical Office (Eurostat) as part of the formal GNI submission – for instance, some of the changes to the treatment of consumption of fixed capital on roads were already published as part of Blue Book 2014, but were not included in the 2014 GNI submission to Eurostat as the reservation work will not be completed until the 2015 Blue Book and the 2015 GNI submission. The 19 May article described changes to the GNI submission data rather than the UK published figures which are the focus of this article.

For each ESA 2010 change the range of impacts and the approximate impact on annual current price GDP growth rates across all years from 1997 to 2010 is provided in the summary, with the full detail for each change shown to the nearest £0.1 billion in Annex A. The total impacts on annual current price GDP growth are shown in Annex B.

These figures are still indicative at this stage and final quality assurance is currently being undertaken. A finalised version of these data will be provided in an updated article during July 2015 ahead of publication in the UK National Accounts in September 2015.

Figures for 2011 and more recent periods, and figures on a Chained Volume Measure (CVM) basis are not yet available. CVM data are adjusted so that the effects of price changes are removed, and these data are not processed until closer to the time of publication in order to take account of new data in the usual manner. Plans are to publish both current price and CVM data for 2011 to 2013 on 5 August 2015 as set out in Table 1.

## Summary

The Blue Book 2015 changes being announced today, when combined with the already announced ESA 1995 GNI reservation changes, have the combined impact of reducing the level of current price GDP in 2010 by approximately £2.8 billion - around 0.2%. Average annual current price GDP growth between 1997 and 2010 remains unrevised at 4.5% per year.

However, the changes do impact on the current price GDP growth rates in individual years (see Annex A for more details). Revisions to the growth rate of annual current price GDP range from -0.4 percentage points in 2003 and 2010, to +0.3 percentage points in 2005 (see Annex B for more details). The main driver of these revisions comes from the improved estimates of Gross Fixed Capital Formation (GFCF).

The following section provides more details on the individual ESA 2010 improvements.

## Methodological Improvements to Current Price GDP

### Gross Fixed Capital Formation

In Blue Books 2013 and 2014, estimates of investment in new and major repairs to buildings included a component of costs associated with the transfer of land. In Blue Book 2015, this element of double counting will be removed. In addition, estimates of the costs of the transfer of ownership of land will be improved, with real data replacing modelled estimates for stamp duty, a key component of the costs of transfer, from 2009. Further details will be provided in an article on 17 July.

The impact on current price GDP from the GFCF changes ranges from a decrease of £3.6 billion in 2010 to an increase of £2.7 billion in 2007. With the impact varying in sign between years, this is the single biggest contributor to the revisions in annual current price GDP growth rates in Annex B.

### Reclassifications

The Office for National Statistics (ONS) National Accounts Classifications Committee is responsible for establishing the correct classification of units and transactions in the National Accounts. The ONS classifications process is detailed on the [ONS website](#).

Typically reclassifications of units between sectors would not have an impact on current price UK GDP, but when a unit is reclassified from a market body to a non-market body there is an impact on GDP as the output of a market body and a non-market body are measured differently in National Accounts. Two units are being reclassified between institutional sectors in Blue Book 2015:

1. In accordance with new rules in ESA 2010 regarding the recording of holding companies, head offices, and special purpose entities some of the subsidiaries of Transport for London previously recorded as Public Non-Financial Corporations have been reclassified as Local Government bodies. The work to implement this classification decision has identified some areas to make improvements in data coverage and data quality. The impact on current price GDP is partly a result of the classification change and partly a result of these data improvements.
2. As a result of new rules in ESA 2010, **Network Rail** has been reclassified from the Private Non-Financial Corporations subsector to the Central Government subsector with effect from April 2004. More information on this classification decision is available in [an article published on 17 December 2013](#).

Further detail on these classification changes will be provided in an article on 11 September.

The Transport for London change has increased current price GDP by between £0.1 billion and £0.2 billion for all years from 2007 to 2010 but has no impact before 2007. There is no material impact on corresponding annual growth from this reclassification.

The Network Rail reclassification applies from 2004 onwards and the impact on current price GDP ranges from an increase of £0.5 billion (in 2007) to an increase of £1.5 billion (in 2010). The impact on annual current price GDP growth between 2004 and 2010 is less than +/- 0.1 percentage points in any year.

## Local Government Pensions

ESA 2010 introduced new concepts and transactions in the National Accounts in relation to pensions. ONS implemented these methodological changes in September 2014, as part of the Blue Book 2014, and explained the changes made in a series of published articles:

[Detailed explanation of the impact of the changes to the treatment of pensions in the National Accounts](#)

[Developments to the treatment of pensions in the National Accounts \(258.8 Kb Pdf\)](#)

One of the impacts of the pension changes was to increase general government net borrowing as a result of the recording of employers' imputed contributions as payable by the local government sector. This was as a result of the local government sector being classified, in National Accounts, as the pension manager of the local government pension scheme (LGPS) and so liable for any imputed contributions and for any deficit in the LGPS. These changes in general government net borrowing were explained last year in an article on the [impact of ESA2010 on the public sector finances \(138 Kb Pdf\)](#). At the time it was recognised that work was still needed to further improve the quality of estimates of local government compensation of employees, which includes employers' imputed contributions. These improvements to compensation of employees' estimates have now been implemented leading to downward revisions to local government (and so general government) net borrowing from 2002 onwards. These methodological improvements have already been implemented in the monthly public sector finances and so these revisions bring the National Accounts into alignment with the published [Public Sector Finances](#).

The impact on current price GDP ranges from a decrease of £1.3 billion in 2003 to an increase of £0.7 billion in 1998. The contributions to revisions in annual growth rates (Annex B) are a maximum of +/- 0.1 percentage points in any year.

## Alcohol and Tobacco in Household Final Consumption Expenditure

In the first step to enhance coherence with relevant Her Majesty's Revenue and Customs (HMRC) data, adjustments previously applied to household final consumption expenditure (HHFCE) on alcohol and tobacco have been removed for Blue Book 2015. These historic adjustments were applied to assist GDP balancing for previous Blue Book publications.

The impacts on current price GDP range from a decrease of £0.2 billion in 1998 to an increase of £0.9 billion in 2010. The equivalent impact on annual growth between 1997 and 2010 is a maximum of +/- 0.1 percentage points in any year.

## **Narcotics**

Further quality assurance work following the introduction of narcotics in Blue Book 2014 has revealed an error in the implementation of the price information. Within the calculation of current price data for HHFCE and output for narcotics, street prices for each narcotic are measured by the United Nations (UN) World Drug report in dollars. This price series was incorrectly not being converted to a sterling value before being used to re-inflate the volume data. This correction will convert the dollar value to a sterling value using an exchange rate conversion calculation and the fluctuations seen in the time-series for this revision are as a result of exchange rate fluctuations.

The range of impacts on current price GDP ranges from a decrease of £1.0 billion in 2007 to an increase of £0.7 billion in 2001. The impact on annual GDP growth between 1997 and 2010 is a maximum of +/- 0.1 percentage points in any year.

## **Smuggling**

Updated data on prices of smuggled alcohol and tobacco has led to minor revisions.

These reduce current price GDP by a maximum decrease of £0.1 billion in 2008, 2009 and 2010, but there is no material impact on annual growth in any year.

## **Consumer Price Index including Housing (CPIH) Alignment**

With the publication of the Second Estimate of GDP in Q4 2013, the ONS introduced a new method for deriving rental data for use in the calculation of HHFCE. This was in order to more closely align the annual growth (quarter on corresponding quarter of the previous year) of household expenditure on actual and imputed rentals with the annual growth of comparable CPIH data series – CPIH is a measure of consumer price inflation that includes Owner Occupiers' Housing costs (OOH).

Following the removal of the National Statistics status of CPIH and the subsequent remit to investigate and improve the method for measuring OOH in this index, improvements from the resulting development work were introduced as part of the February 2015 CPIH dataset. This has led to revisions in the comparable CPIH data series for imputed rentals. In order to maintain alignment, revisions to current price estimates of HHFCE on imputed rentals have been made from 2010.

The CPIH alignment impacts on current price GDP only in 2010, where it reduces the level of GDP by £1.7 billion and the corresponding annual growth rate by -0.1 percentage points.

## **Insurance Industry Measurement**

Further quality assurance of the annual insurance benchmark process identified an error with input data from regulatory insurance data returns. This affected insurance estimates for the calculation of output and the subsequent consumption of that output, for the periods 2009 onwards only, lowering GDP in 2009 and 2010. This has been corrected as part of the Blue Book 2015 process.

The resulting impact on current price GDP is a decrease of £0.7 billion in 2009 and a decrease of £3.5 billion in 2010. The impact on the corresponding growth rates are decreases of less than 0.1 percentage points and of around -0.1 percentage points, in the 2 respective years.

## Plans for Future Updates

This article is the second in a series of impact articles ahead of the Quarterly National Accounts consistent with Blue Book 2015 publication on 30 September 2015. The focus here is on the years 1997 to 2010 for current price GDP changes. The improvements described in this article will often also be applicable to subsequent years, but these years are additionally subject to regular data updates and other methodological changes which will be presented in future articles. The outline for the full publication timetable is as follows.

As well as the first impact article for Blue Book 2015, 4 detailed methodological articles were also published on 19 May 2015 and links to these articles can be found in Section 7. Table 1 gives a draft schedule for the remaining articles leading up to the publication of Blue Book 2015 on 30 October 2015. These dates are provisional. Final dates will be announced at least 1 month before each publication.

**Table 1: Provisional publication schedule for Blue Book and Pink Book 2015**

| <b>Content of Article</b>   | <b>Provisional date of publication</b> |
|---|--|
| Impact on GDP Chained Volume Measure annual estimates 1997-2010                                     | Friday 17 July 2015                    |
| Methodological Improvements to Gross Fixed Capital Formation for Blue Book 2015                     | Friday 17 July 2015                    |
| Methodological Improvements to Inventories for Blue Book 2015                                       | Friday 17 July 2015                    |
| Impact on GDP Current Price and Chained Volume Measure quarterly and annual estimates 1997-2013     | Wednesday 5 August 2015                |
| Detailed assesment of changes to Sector and Financial Accounts 1997-2013                            | Friday 11 September 2015               |
| Detailed assesment of changes to Balance of Payments 1997-2013                                      | Friday 11 September 2015               |
| Methodological Improvements to Non-monetary gold for Pink Book 2015                                 | Friday 11 September 2015               |
| Classification Changes to National Accounts for Blue Book 2015                                      | Friday 11 September 2015               |
| Methodological changes to the estimation of Capital Stocks and Consumption of Fixed Capital         | Friday 11 September 2015               |
| Quarterly National Accounts Q2 2015 (consistent with Blue Book 2015)                                | Wednesday 30 September 2015            |
| Balance of Payments Q2 2015 (consistent with Pink Book 2015)  | Wednesday 30 September 2015            |
| Impact of changes in the national accounts and economic commentary for 2015 Quarter 2 (Apr to June) | Wednesday 30 September 2015            |
| GDP(Output) improvement project report  | Wednesday 30 September 2015            |
| Blue Book 2015  | Friday 30 October 2015                 |
| Pink Book 2015  | Friday 30 October 2015                 |

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## References

[Changes to the Blue Book and Pink Book 2015](#), various articles, Office for National Statistics, 2015.

## Background notes

1. A list of those given [pre-publication access](#) to the contents of this article is published as part of this release.
2. Details of the policy governing the release of new data are available by visiting [www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html](http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html) or from the Media Relations Office email: [media.relations@ons.gsi.gov.uk](mailto:media.relations@ons.gsi.gov.uk)

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