

Article

# National Accounts articles: Blue Book 2019 improvements to non-profit institutions serving households (NPISH) sector

Details the improvements made to the estimates of the Non-Profit Institutions Serving Households (NPISH) sector for the years 1997 to 2016. These changes include updated data sources and methodologies. The article focuses on the impact on current price data and demonstrates the revisions to the overall size of the NPISH sector.

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# 1 . Gross domestic product improvements for Blue Book 2019

In Blue Book 2019, we have made considerable progress improving how we compile estimates of gross domestic product (GDP), and have used the [foundations of a new framework](#) to inform headline GDP estimates. It includes:

- incorporating a wider set of more appropriate product deflators for each transaction, and confronting these at a detailed level for the first time
- full integration of the institutional sectors into the balancing process of the Supply and Use framework
- improved estimates of current price GDP using new data sources to give information on the diversification of the services economy and the costs incurred by businesses

Further information outlining the [National Accounts articles: Blue Book 2019 impacts on GDP current price and chained volume measure estimates: 1997 to 2016](#) was published on 20 August 2019.

There are also a number of methodological improvements that will be incorporated into this year's Blue Book: stand-alone articles for [UK trade data impact assessment from new developments: 1997 to 2016](#), [National Accounts articles: Impact of Blue Book 2019 changes on gross fixed capital formation and business investment](#), and [National Accounts articles: Changes to the capital stock estimation methods for Blue Book 2019](#) published on 20 August 2019 provide further details of these.

## 2 . Executive summary

This article provides provisional estimates of the impact on current price (or nominal) gross domestic product (GDP) arising from Blue Book 2019 improvements to the non-profit institutions serving households (NPISH) sector up to 2016. These are consistent with the quarterly national accounts (QNA) due to be published on 30 September 2019.

The result of these improvements is a general reduction in the NPISH sector's contribution to GDP, however there is no impact on overall GDP, as this is offset in the private non-financial corporation (PNFC) sector.

The largest revisions to the NPISH sector as a result of these improvements is seen in compensation of employees (CoE).

The average annual revision to CoE for the NPISH sector between 1997 and 2016 results in a fall of £9.2 billion.

Average growth of NPISH CoE over the period from 1998 to 2016 has been revised up 0.3 percentage points to 6.0% per year.

## 3 . Introduction

This article denotes the improvements made to non-profit institutions serving households (NPISH) for the period 1997 to 2016 and their indicative impact. The data are still provisional at present and subject to final quality assurance.

A number of improvements have been implemented, with the largest revisions being caused by the methodological changes related to the processing of charities data.

Separately, improvements have been made to capital stock and research and development estimates, which feed into the output approach of the NPISH sector. More detail relating to the impacts of these changes are documented at [National Accounts articles: Impact of Blue Book 2019 changes on gross fixed capital formation and business investment](#) and [National Accounts articles: Changes to the capital stock estimation methods for Blue Book 2019](#).

The NPISH sector is described in more detail in Section 4. Section 5 explains the improvements made and Section 6 details the impact of the changes.

## 4 . NPISH sector

The European System of Accounts 2010 manual (ESA 2010) defines the non-profit institutions serving households (NPISH) sector as consisting of “non-profit institutions which are separate legal entities, which serve households and which are private non-market producers”<sup>1</sup>. Such entities are able to generate profits or surpluses, however such profits and surpluses cannot be appropriated by other institutional units<sup>2</sup>.

The NPISH sector, within the UK, includes private non-market charities, further and higher education establishments, trade unions and political parties. The non-market charities comprise approximately 32% of the sector in value terms, while the education establishments comprise approximately 59%.

For a body to be considered a market producer, its sales must cover at least 50% of its operating costs, over a multi-year period. If not, then it is considered to be a non-market producer. This quantitative approach is referred to as the “market test”<sup>3</sup>.

Private market charities are included within the private non-financial corporations (PNFCs) sector. Similarly with public non-market charities, these are included within the government sector. Neither are discussed within this article.

For more information on the composition of the NPISH sector, see article: Howe. S (2014) [Revised methodology and sources for non-profit institutions serving households \(PDF, 109.59KB\)](#).

### Notes for: NPISH sector

1. As per section 2.129 of the European System of Accounts 2010 (ESA2010) manual.
2. See section 3.31 of the ESA2010 for further detail.
3. See section 3.19 of the ESA2010 for further detail.

## 5 . Blue Book 2019 improvements

### Processing of charity data

Since Blue Book 2018, improvements have been made to the efficiency and usability of the non-profit institutions serving households (NPISH) processing system. The system processes the sample of general charities data we receive from the National Council for Voluntary Organisations (NCVO). These data feed into the NPISH sector estimates within the UK National Accounts.

The processing system applies the market test (as described in Section 4) to the general charities microdata, allocates industry classification codes to the such, aggregates data by variable, and applies weighting to the data in order to gross the sample data to the population values.

Main areas of change for Blue Book 2019 are documented below:

### **Correction for the removal of double counting of Northern Ireland and Scotland's contribution to UK totals**

During system redevelopment it was identified that data for Northern Ireland and Scotland were being accounted for twice; once during the grossing of the NCVO charities sample to the UK values, and again by being explicitly added after the grossing process. A correction has been put in place within the new process to ensure this no longer happens.

### **Refinement to the market test**

During quality assurance of the old process it was identified that our existing methods were allowing non-charitable organisations, for example, academies, to filter into the market test, and as such potentially into the dataset of non-market charities used to calculate NPISH estimates.

A more robust method ensures that only charitable organisations are now captured within our dataset.

### **Classification review**

We also took the opportunity to make smaller impacting improvements, such as a more thorough application of standard industrial classification to non-market charities which results in better industry level estimates.

Alongside the system improvements, NCVO delivered revised data for 2013 to 2015, and new estimates for 2016, which have been incorporated into the Blue Book 2019 estimates.

The cumulative impact of these changes has resulted in downward revisions in all non-market charity variables used in the production of estimates for the NPISH sector in the National Accounts.

### **Consumption of fixed capital and research and development**

For Blue Book 2019, revisions have been made to the consumption of fixed capital (CFC), which is used in the calculation of non-market output of NPISH, and is equal in value to the sector's gross operating surplus. CFC has been revised upwards for NPISH throughout 1997 to 2016. The average revision for this period is estimated at £1.9 billion for the NPISH sector.

For further detail on the improvements to CFC and Capital Stocks in general please see [National Accounts articles: Changes to the capital stock estimation methods for Blue Book 2019](#).

Smaller impacting improvements have also been made to research and development estimates for the NPISH sector. Further detail for Blue Book 2019 can be found here: [National Accounts articles: Impact of Blue Book 2019 changes on gross fixed capital formation and business investment](#).

## **Incorporation of new data**

In accordance with the Blue Book standard revision policy, more recent data and revisions for earlier years have been included. For Blue Book 2019, we have incorporated an additional year of data for further and higher education establishments, trade unions and political parties.

## **6 . Impact of improved methods**

Revisions throughout 1997 to 2016 are mainly due to the introduction of the new methods detailed in this article.

In this section the impact of the indicative revisions to non-profit institutions serving households (NPISH) data are shown.

Figure 1 shows the revisions and annual profile of compensation of employees for the NPISH sector for 1997 to 2016.

The average annual revision to CoE for the NPISH sector between 1997 and 2016 results in a fall of £9.2 billion.

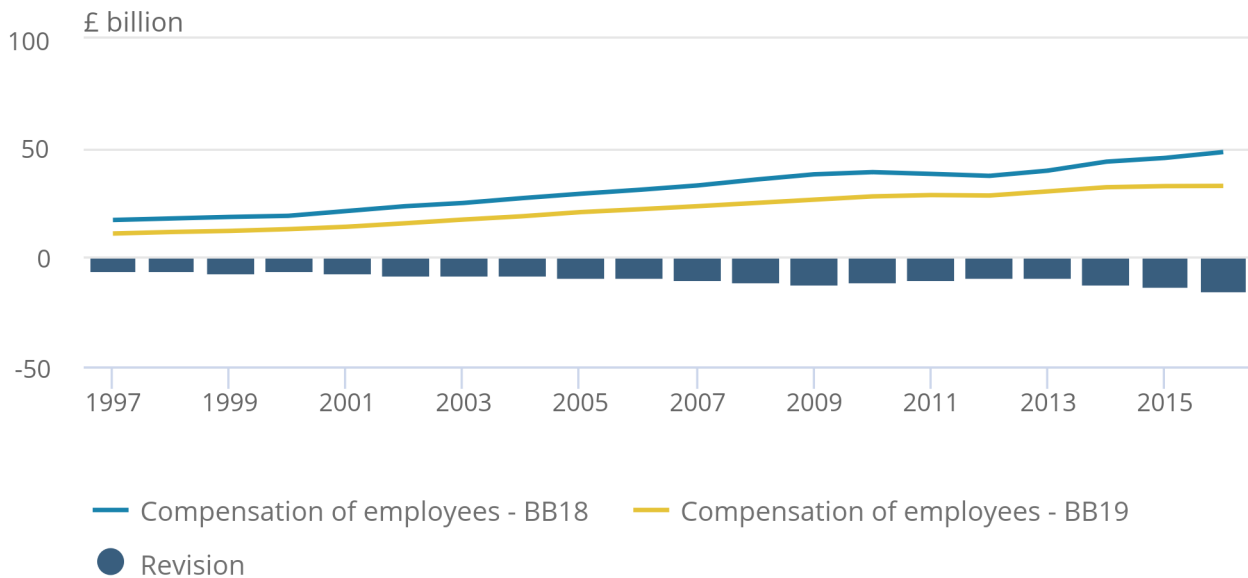
Average growth of CoE over the period from 1998 to 2016 has been revised up 0.3 percentage points to 6.0% per year.

**Figure 1: There has been a broadly consistent level shift in compensation of employees between 1997 and 2016**

Revisions to annual NPISH compensation of employees, UK, 1997 to 2016

Figure 1: There has been a broadly consistent level shift in compensation of employees between 1997 and 2016

Revisions to annual NPISH compensation of employees, UK, 1997 to 2016



Source: Office for National Statistics

The downward revision in CoE for the NPISH sector has no impact on overall GDP, as this is offset in the private non-financial corporations (PNFC) sector.

Her Majesty’s Revenue and Customs (HMRC) data are used to estimate CoE for the total UK economy and as such are seen as a reliable source for the income measure of gross domestic product (GDP). To maintain the total UK level as provided by HMRC, the change in NPISH CoE is directly offset in the private non-financial corporation (PNFC) sector, which is estimated by residual.

This change also results in an improved industry allocation for the PNFC sector.

Figure 2 below shows the revision to total output for the NPISH sector for 1997 to 2016.

The average revision to total output for the NPISH sector between 1997 and 2016 is £14.7 billion.

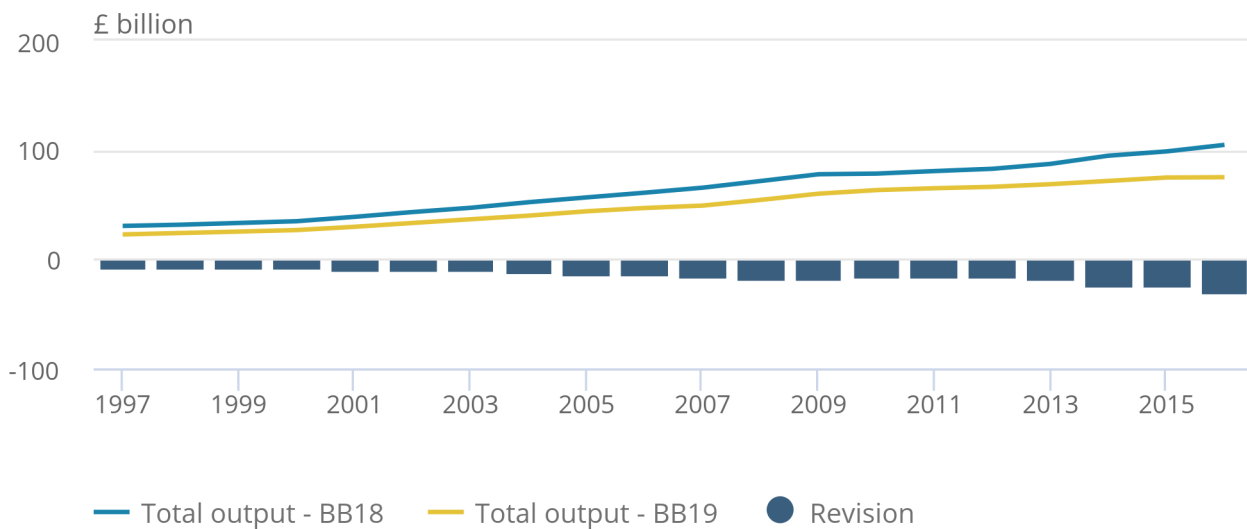
Average growth of total output over the period from 1998 to 2016 has been revised downward by 0.2 percentage points to 6.6% per year.

**Figure 2: There has been a broadly consistent level shift in total output between 1997 and 2016**

Revisions to annual NPISH total output, UK, 1997 to 2016

Figure 2: There has been a broadly consistent level shift in total output between 1997 and 2016

Revisions to annual NPISH total output, UK, 1997 to 2016



Source: Office for National Statistics

The revisions shown are the cumulative effect of all method improvements and data changes for 1997 to 2016.

## 7 . Future work

The improvements seen here build further upon those implemented in Blue Book 2017 following the split of the combined Household and NPISH sector. For details of those improvements see: Vassilev, G., Walker, C., Darke, V. (2017) [Improving the household, private non-financial corporations and non-profits institutions serving households sectors' non-financial accounts](#).

Further improvements continue to be investigated and research is ongoing into the feasibility of using administrative data to better measure the estimates of the NPISH sector across the National Accounts framework.

## 8 . Authors and acknowledgements

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- Veronique Jochum
- Marc Lawson
- Lisa Hornung

## 9 . References

Howe. S (2014) [Revised methodology and sources for non-profit institutions serving households.](#)

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