Article

National Accounts articles: Alignment between public sector finances and national accounts, June 2018

An explanation of the differences between public sector net borrowing estimates published in the public sector finances and those in the national accounts.

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1 . Executive summary

This article compares the estimates of public sector net borrowing published in the monthly public sector finances (PSF), on 21 June 2018, Quarterly National Accounts (QNA), published on 29 June 2018, and summarises the reasons for the differences identified.

The largest differences are due to the change in the treatment of both nuclear decommissioning costs and gross fixed capital formation transfer costs, plus the reclassification of London and Continental Railways, all of which are already implemented in the PSF but have yet to be implemented into the national accounts (NA). The article also sets out other differences between the PSF and NA datasets due to methodological improvements and the impact of both classification and reclassification decisions.

This article provides a snapshot of differences between public sector finances and national accounts as of June 2018. The two datasets are now more closely aligned than when they were last compared in September 2017. As explained in the article, we aim to resolve the current differences between the statistics, but new areas of divergence will undoubtedly emerge between national accounts publications and public sector finances releases as a result of the different revisions policies for each area. Therefore, work to align the two datasets is not a one-off exercise but something we work on regularly. We aim to minimise differences, while ensuring the public sector finances provide the most up-to-date picture of government finances.

2 . Introduction

The core UK national accounts (NA), as published in outputs such as the UK National Accounts: The Blue Book, Quarterly National Accounts and UK Economic Accounts, are not fully consistent with data published in the UK public sector finances (PSF) and related outputs. Differences between the outputs are not a new phenomenon, rather they have existed for many years and are the result of different revisions policies in the NA and the PSF. The NA statistics are necessarily revised less frequently than the PSF due to the added complexity and integrated nature of the NA, which need to balance across all sectors of the economy and not just the public sector.

It is important to note that the differences do not reflect conceptual differences in the compilation of the outputs. All NA and PSF publications are based on the national accounts framework and are compiled in accordance with the standards set out in the European System of Accounts 2010 (ESA 2010) under European law.

This article is an update to similar articles published alongside the Blue Book 2017 and Blue Book 2016. The article presents some of the reasons behind the differences in the NA and the PSF datasets. The article is structured as follows:

- Section 3 provides background on the NA and the PSF outputs and the reasons why they differ

- Section 4 provides detail on the main alignment differences between the NA and the PSF as at June 2018

- Section 5 describes the changes made in Blue Book 2018 that affect the alignment position

- Section 6 provides information on the plans for future alignment work

- Appendix A illustrates the extent of differences between the NA and the PSF datasets in June 2018

3 . Background

3.1 National accounts

The term national accounts (NA) in this article refers to those integrated outputs and datasets which form the core national accounts. The outputs include (but are not limited to) the annual Blue Book and annual UK Balance of Payments (Pink Book), the Quarterly National Accounts, the UK Economic Accounts and gross domestic product (GDP). Specifically, the NA dataset used in this article is that of the Quarterly National Accounts published on 29 June 2018 and the related Blue Book 2018 dataset.

The primary purpose of the NA is to provide an integrated description of all economic activity within the UK. It is used heavily by policy makers and analysts to provide a coherent macro-economic picture of the UK through important measures such as GDP, household saving ratio and the balance of trade. The integrated nature of NA means that there is less flexibility for taking on revisions, and so the data published in the NA are open for revision only in specific periods. The detail of which periods are open for revision varies by quarter.

3.2 Public sector finances

The term public sector finances (PSF) in this article refers to those outputs and datasets which form the suite of public sector finance statistics. The outputs include (but are not limited to) the monthly public sector finances, the quarterly government deficit and debt (under the Maastricht Treaty) bulletin and the related international transmissions of government finance statistics. Specifically, the PSF dataset used in this article is that published on 21 June 2018.

The primary purpose of the PSF is to inform its users of the state of the public sector finances and the fiscal position. To do this, it is important that the latest events and statistical classifications are reflected in the data and so the data published in the PSF are open for comprehensive revision every month, for all time periods.

3.3 Revisions policies

The inconsistencies between NA and the PSF are not conceptual in nature but are the result of the application of different revisions policies. The revisions policies and data compilation processes for NA and the PSF were deliberately separated from July 2004 to better meet the needs of the users of government finance statistics, as recommended by a 2002 National Statistics Quality Review. As noted above, the PSF Revisions Policy allows revisions to be taken on in any publication and for all time periods, but the NA Revisions Policy is much more restrictive due to the integrated nature of the accounts, generally only allowing long time series revisions at a single point in the year. This means that the PSF usually incorporates data and methodological revisions affecting the public finances ahead of the NA.

Although the original intention was that the NA would come into alignment with the PSF at the earliest opportunity, differences between the two datasets built up over a number of years. Over the last few years, work has been undertaken to bring the datasets back into closer alignment, although at any one point in time there are always likely to be some differences due to the different revisions policies. This article summarises the main reasons for differences between the two datasets as at June 2018.
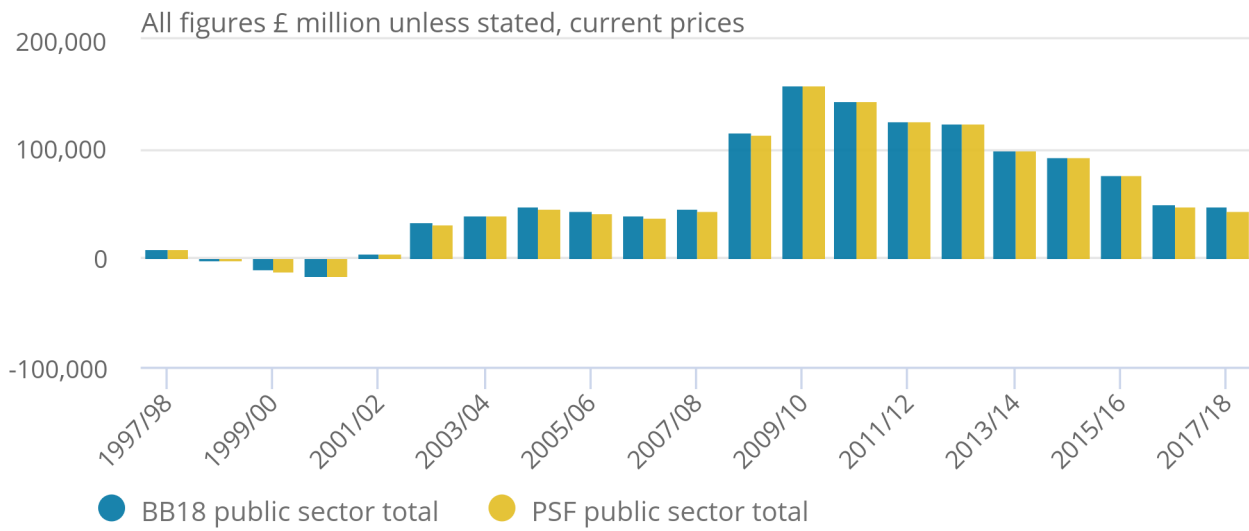
4 . National accounts and public sector finances differences

4.1 Differences in public sector net borrowing

Figure 1 compares public sector net borrowing as published in the national accounts (NA) and in the public sector finances (PSF) in June 2018, while Figure 2 compares the alignment differences between NA and PSF at September 2017 and at June 2018.

Figure 1: Comparison of public sector net borrowing[1] between Blue Book 2018 and public sector finances as at June 2018 UK, financial year ending March 1998 to March 2018

Figure 1: Comparison of public sector net borrowing^1^ between Blue Book 2018 and public sector finances as at June 2018 UK, financial year ending March 1998 to March 2018
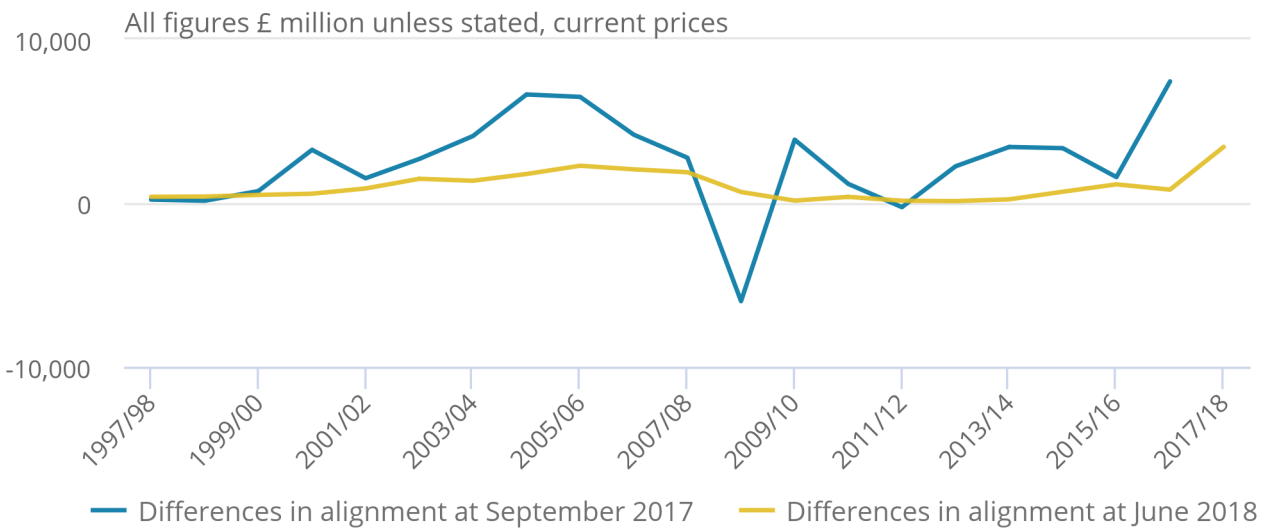

Source: Office for National Statistics

Notes:

1. Public sector net borrowing excluding public sector banks and the Bank of England.

Figure 2: Comparison of public sector net borrowing alignment differences between national accounts and public sector finances at September 2017 and June 2018 UK, financial year ending March 1998 to March 2017

Figure 2: Comparison of public sector net borrowing alignment differences between national accounts and public sector finances at September 2017 and June 2018 UK, financial year ending March 1998 to March 2017


All figures £ million unless stated, current prices

Legend:
- Differences in alignment at September 2017
- Differences in alignment at June 2018

Source: Office for National Statistics

It can be seen that there has been closer alignment of the PSF and NA datasets relative to the alignment position as described in the [previous article in September 2017](#). This improvement of the position is mainly due to the number of methodological and classification changes that are now implemented in Blue Book 2018. At Blue Book 2017 these changes were already present in the PSF, which affected the historic time period as well as the latest quarters.

Figure 3: Breakdown of central government net borrowing differences between Blue Book 2018 and public sector finances as at June 2018 UK, financial year ending March 1998 to March 2018
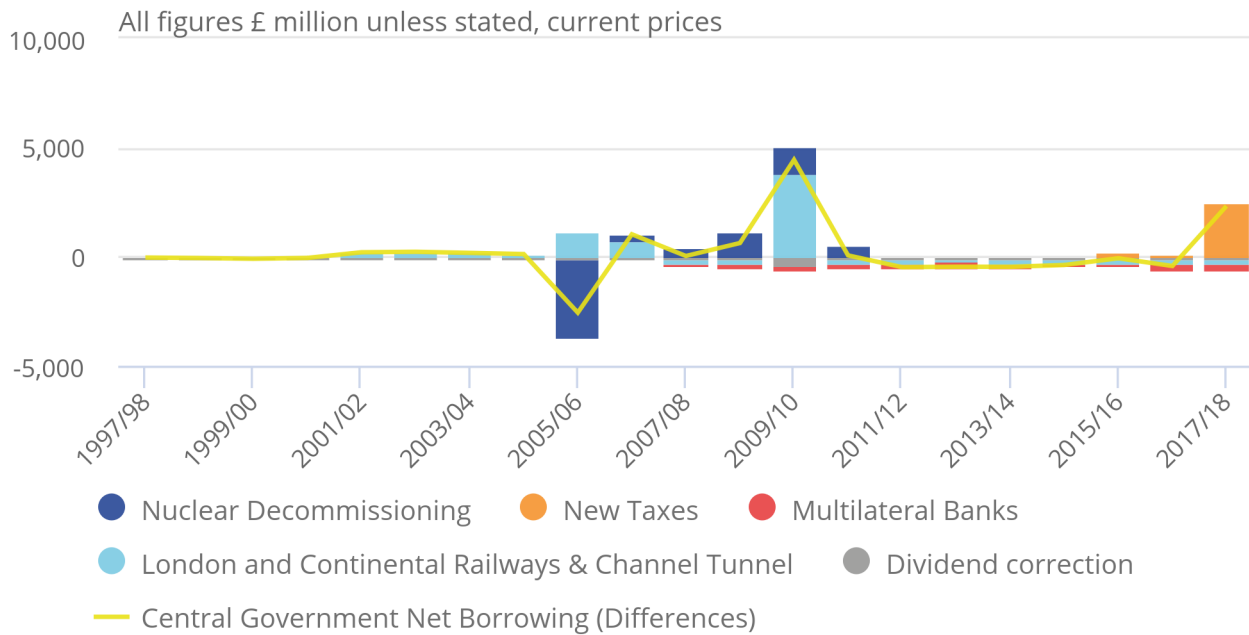
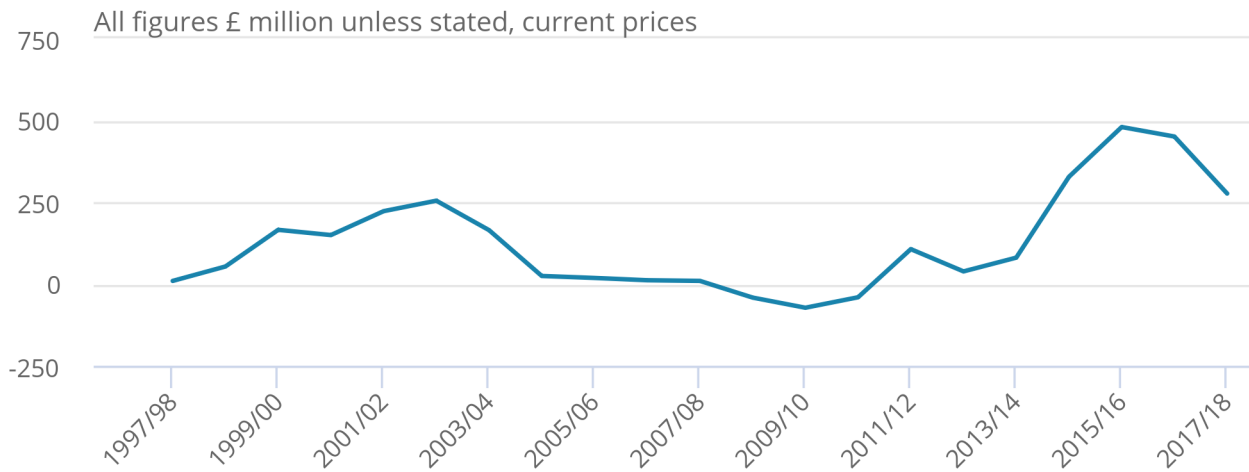**Source: Office for National Statistics**

Figure 3 demonstrates that the differences in central government net borrowing are mainly explained by:

- the treatment of the transfer of nuclear assets for the purposes of their decommissioning

- historic transactions related to London and Continental Railways

- new taxes introduced in the most recent year

Section 4 describes these factors in more detail.

Figure 4: Breakdown of local government net borrowing differences between Blue Book 2018 and public sector finances as at June 2018 UK, financial year ending March 1998 to March 2018

Figure 4: Breakdown of local government net borrowing differences between Blue Book 2018 and public sector finances as at June 2018 UK, financial year ending March 1998 to March 2018

All figures £ million unless stated, current prices

Source: Office for National Statistics

Figure 4 shows that the difference in local government net borrowing is relatively minor, and that unlike central government and public corporations there are no major sources of alignment differences, but instead a number of smaller issues which continue to be investigated. The total differences are much smaller than at the time of the publication of Blue Book 2017, due to the implementation in Blue Book 2018 of funded public sector pension schemes and the reclassification of Rail for London. Both of these had already been implemented in the PSF when Blue Book 2017 was published, and were the principal cause of local government alignment differences at the time.

Figure 5: Breakdown of public corporations' net borrowing differences between Blue Book 2018 and public sector finances as at June 2018 UK, financial year ending March 1998 to March 2018

Figure 5: Breakdown of public corporations' net borrowing differences between Blue Book 2018 and public sector finances as at June 2018 UK, financial year ending March 1998 to March 2018
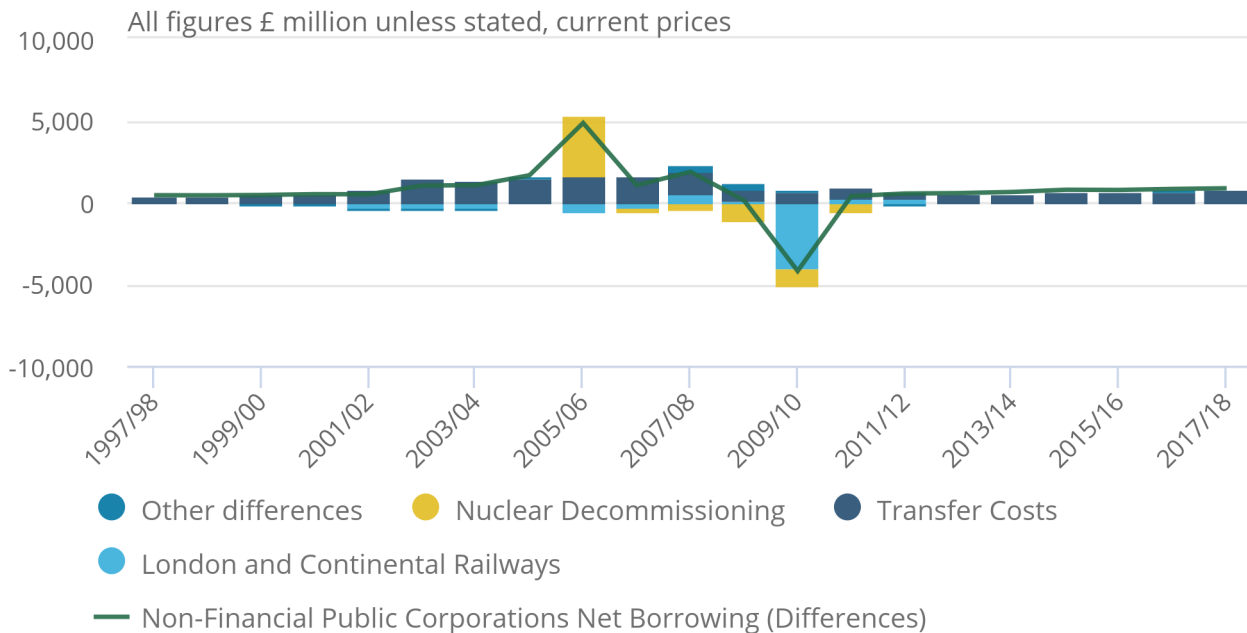
Source: Office for National Statistics

Finally, it can be seen from Figure 5 that the difference in net borrowing of the public corporations sub-sector is also improved. Again, these differences are smaller than at the time of the publication of Blue Book 2017, mainly as a result the classification of the devolved housing associations which are now implemented in Blue Book 2018, in addition to the changes relating to the reclassification of Rail for London. Work on implementing both nuclear decommissioning and the reclassification of London and Continental Railways is continuing, and these account for the majority of the remaining differences between the two datasets.

To summarise, the following changes to the PSF during 2017, which are now implemented in NA as of Blue Book 2018, explain much of the improvement in alignment:

- reclassification to the public sector of registered providers of social housing in Scotland, Wales and Northern Ireland implemented in PSF in January 2017

- improvements to accruals methodology for Corporation Tax, Bank Corporation Tax Surcharge and the Bank Levy implemented in PSF in February 2017

- revisions to Transport for London data implemented in PSF in August 2017

- funded public sector pension schemes implemented in PSF in August 2017

- partial implementation of Value Added Tax on electronic services (see section 4.2.4)

Most of these methodological and classification changes affected not only the latest years but also the data in the earlier time periods, and are detailed in Section 5 below. Appendix A shows, in tabular format, the differences in central government net borrowing, local government net borrowing and non-financial public corporations' net borrowing. The main drivers behind the remaining differences are:

- the reclassification of London and Continental Railways

- the change in treatment of nuclear decommissioning

- improvements to gross fixed capital formation transfer costs

- changes to Value Added Tax on electronic services

The above changes are covered in further detail in Section 4.2. The remaining alignment differences not mentioned above are the sum of a number of much smaller issues which we continue to investigate.

4.2 Remaining methodological and classification differences

This sub-section describes methodological and classification changes implemented in the PSF that are yet to be incorporated in the NA dataset.

4.2.1 Reclassification of London and Continental Railways

In 2009, ONS classified London and Continental Railways (LCR) to the central government sub-sector, effective from 1999. Following a review of the treatment of LCR, we identified some transactions, including liabilities relating to bonds and loans, which required further reclassification work to bring recording into line with the 2009 classification decision.

These changes led to revisions to central government current expenditure within interest payable, interest receivable and subsidies, and revisions to central government capital expenditure within capital transfers from central government. These changes were largely, but not entirely, offset by equal and opposite changes in the public corporations' accounts.

The improvements to the LCR data were implemented in the August 2016 PSF statistical bulletin.

4.2.2 Nuclear decommissioning

Eurostat, in its 2016 version of the Manual on Government Deficit and Debt, introduced new statistical rules on the transfer to government of an asset nearing the end of its life cycle. Such a transfer took place in the UK in 2005 when British Nuclear Fuels plc (BNFL), then a public corporation, transferred all of its nuclear sites to the Nuclear Decommissioning Authority, a central government body. The restructuring involved the surrender of financial assets held by BNFL's Nuclear Liabilities Investment Portfolio (NLIP) to the UK Government.

The transition to the new statistical approach of accounting for decommissioning costs brings two principal changes. Firstly, the value of the power stations transferred in 2005 no longer implicitly includes the provisional cost of their future decommissioning, implying a transfer of an asset with a positive residual value. Secondly, the transfer of NLIP is considered an advance for future work. There is no impact on public sector fiscal aggregates as the amended transactions recorded are between the central government and public corporations' sub-sectors.

The new treatment of nuclear decommissioning was introduced in the February 2017 PSF statistical bulletin.

4.2.3 Gross fixed capital formation transfer costs

Transfer costs are the fees and taxes incurred as a result of the ownership of an asset being transferred from one owner to another. We improved the estimates of transfer costs to take advantage of the best available data, specifically taking into account the floor space of properties. Such data uses the House Price Index (HPI) as part of the calculation of current price transfer costs data. A new HPI (with an associated back series) was introduced in 2016 and data based on this new methodology was used in the compilation of gross fixed capital formation (GFCF) for Blue Book 2017.

We also strengthened the breakdown of transfer costs by institutional sector, replacing the current method, which is based on historical proportions. The new method assumes that those components where administrative sources are used (for example, Land Registry fees and Stamp Duty) are proportionally assigned to institutional sectors based on the pattern of acquisitions of dwellings and other buildings and structures.

In addition to strengthening our own methodology for estimating transfer costs, we verified that our source data for many public corporations' capital formation already include transfer costs calculated on a different basis, in accordance with the International Accounting Standard 16 – Property, Plant and Equipment. We have applied an additional adjustment to prevent double-counting transfer costs. This adjustment is not, at present, applied to the NA dataset.

The improved estimates of transfer costs were introduced in the August 2017 PSF statistical bulletin.

4.2.4 Value added tax on electronic services

On 1 January 2015, Value Added Tax (VAT) rules relating to the supply of telecommunications, radio and television broadcasting and electronically-supplied services changed.

Prior to 1 January 2015, supplies made by EU businesses to EU-resident customers were subject to VAT in the country where the suppliers were established; from 1 January 2015, the supplies have been subject to VAT in the country where the customer is resident. The tax changes are as a result of European legislation.

The legislation provides for a transition period of four years, during which the tax authority in the country where the supplier is located can retain a part of the VAT collected prior to passing on the remainder of the collected tax to the country where the customer is resident. From 1 January 2019, all collected tax must be transferred to the tax authority in the appropriate country.

Previously, the VAT on electronic services collected for the UK was recorded net of retained amounts; however, to comply with international guidance these collection fees are no longer recorded as tax but as current transfers between countries.

The accrued measure of VAT recorded in public sector finances has increased by an amount equal to the VAT retained by other EU countries (as an administration fee). This increase in accrued VAT is offset in central government expenditure as a current transfer. The money that the UK retains will be recorded as a current transfer between countries.

This change has been implemented in both the NA and PSF from 2017 onwards, but in PSF for a longer period, from the financial year ending March 2016.

4.2.5 Apprenticeship levy

In April 2017, the government introduced an Apprenticeship Levy, payable by any employer with a pay bill over £3 million each year. This levy is paid to central government, was included in the PSF in June 2017, but is yet to be introduced to the NA dataset.

5 . Methodological improvements and classifications implemented in Blue Book 2018

In The UK National Accounts, Blue Book: 2018, and the related Quarterly National Accounts, we implemented a number of improvements which impact on public sector statistics. These improvements had previously been included in the public sector finances (PSF) and are being included in national accounts (NA) for the first time in June 2018. The improvements have led to a vast improvement in the alignment position since September 2017, and so the main changes are detailed here for information.

5.1 Housing associations

In Blue Book 2018, we implemented the reclassification of registered social landlords and housing associations in Scotland, Northern Ireland and Wales ("devolved housing associations") from the private non-financial corporations sector to the public corporations sector. This reclassification has been applied from July 2008.

In Blue Book 2017, we implemented the reclassification of "private registered providers" of social housing in England ("English housing associations") to the public corporations sector. In November 2017, following changes to the regulation of social housing in England, English housing associations were reclassified back into the private non-financial corporations sector. This reclassification has been implemented in Blue Book 2018 from November 2017, the date the regulations came into force.

These changes bring NA into alignment with the PSF, which implemented the reclassification of devolved housing associations in the January 2017 PSF statistical bulletin and English housing associations in the November 2017 PSF statistical Bulletin.

5.2 Revisions to Transport for London data

In 2017 we revisited the statistical classification of Rail for London Limited (RfL), a company that operates as part of the Transport for London (TfL) group. In Blue Book 2015, the recording of the group was aligned with the statistical classification of individual subsidiaries. At the time, RfL possessed certain characteristics of a non-market producer; hence it was classified to the local government sub-sector. Based on the recent performance of RfL, it was judged that it should be considered a market producer, and therefore a public non-financial corporation, for the purposes of NA and other economic statistics. RfL were therefore reclassified, effective from April 2011 and introduced in the PSF in September 2017.

In addition to the implementation of the reclassification of RfL, in Blue Book 2018 we have made other improvements to the data relating to the Transport for London group. Notably revenue received by Tube Lines Ltd, which is classified to the local government sector, is now included in the category payments for non-market output. During a review of Transport for London data it was identified that this revenue was not previously included.

5.3 Classification of funded pension schemes

Improvements have been made to the data and methods used to calculate figures for funded public sector employee pensions in the financial corporations sector, where the employer or "pension manager" is in local government or central government. These changes follow on from decisions made by our economic statistics classifications committee (ESCC) and improve the method for calculating employers' imputed social contributions, as defined in the European System of Accounts 2010: ESA 2010.

Employers' imputed social contributions reflect any shortfall in actual contributions received as well as possible experience effects, where the outcome differs from the modelling assumptions. The improved method calculates employers' imputed social contributions to funded defined benefit pension schemes as a residual after accounting for balances, transactions and other flows on an actuarial basis, whereas the previous method involved modelling them as a percentage of wages and salaries.

As a result of these changes, the estimate of compensation of employees has changed and therefore net borrowing has been revised.

These improvements to funded public sector employee pension schemes were implemented in the public sector finances (PSF) in September 2017.

5.4 Improvements to accruals methodology for Corporation Tax and Bank Corporation Tax Surcharge

Historically, we have been using cash receipts for the Corporation Tax and the Bank Corporation Tax Surcharge as a proxy for accrued revenue. Improved methodology introduced in Blue Book 2018 derives accrued revenue figures by adjusting cash receipts to more accurately reflect the time at which the economic activity took place, in line with international guidance.

The improvements were implemented in the February 2017 PSF statistical bulletin. More information about this change is available in the methodological article Improvements to accruals methodology for Corporation Tax, Bank Corporation Tax Surcharge and the Bank Levy: 2017 .

5.5 Other alignment improvements

Further data updates have been introduced in national accounts in Blue Book 2018. These include changes in payments to the Financial Services Compensation Scheme and updated figures for payments of National Non-Domestic Rates. Payments of Motor Vehicle Duty have been revised further following changes implemented in Blue Book 2017.

6 . Future planned alignment work

Section 4 sets out the main differences between the public sector finances (PSF) and national accounts (NA) datasets at the end of June 2018. Work will continue over the coming years to remove these differences and bring the two datasets into closer alignment. More widely, we will continue addressing the recommendations of the Independent review of UK Economic Statistics (Bean Review) and focusing on providing decision-makers with information on important issues in the wake of the EU referendum. The approach is summarised in the ONS Economic Statistics and Analysis Strategy (ESAS). While we aim to further reduce the existing differences between NA and PSF in future Blue Books, the exact NA implementation dates for each of the changes will be decided with consideration of the wider strategy and priorities.

Although we will be addressing the existing differences, it is to be expected that the PSF dataset will further diverge from the NA dataset as other classifications and methodological improvements are implemented in the PSF that, due to the NA Revisions Policy, cannot be implemented in the Quarterly National Accounts (QNA) publications. Where possible these changes will be reflected in Blue Book 2019 and Blue Book 2020, but there are always likely to be some differences between the PSF and NA datasets. By its nature, the process of alignment between the NA and the PSF is not a one-off activity but something that needs to happen at frequent intervals to avoid widening divergence.