Office for National Statistics

Article

# National Accounts articles: Latest developments to UK National Accounts and Balance of Payments – changes to be implemented for Blue Book and Pink Book 2018

Planned scope and content of the UK National Accounts, The Blue Book: 2018 edition, and the UK Balance of Payments, The Pink Book: 2018 edition.

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# 1 . Executive summary

This article describes the planned scope and content of the "UK National Accounts, The Blue Book: 2018 edition", and the "UK Balance of Payments, The Pink Book: 2018 edition", that will be be published on 31 July 2018.

Our prioritised strategy for improving economic statistics is set out in the Economic Statistics and Analysis Strategy (ESAS). This is an update to the strategy that was first published in 2016 providing users, stakeholders and researchers clarity on how we are working to improve UK economic statistics. As important publications of UK economic statistics, Blue Book and Pink Book 2018 will implement further improvements consistent with this strategy.

We will publish the details on the impacts of particular improvements in a series of articles in the lead-up to the publication; a provisional communication schedule is presented in Table 1.

# 2 . Introduction

Every year the Office for National Statistics (ONS) updates the sources and methods for the UK National Accounts and publishes the latest estimates (including revisions to past periods) in the annual Blue Book. A regular part of these updates is annual supply and use balancing, which brings together detailed data on the three approaches (production, income and expenditure) to measuring gross domestic product (GDP) and balances them by product. In addition, volume series are updated so their reference and base years are moved forward. In the UK, the national accounts and balance of payments are fully integrated and coherent; therefore, a parallel process is followed for the balance of payments.

The annual Balance of Payments publication, known as the Pink Book, is published at the same time as the Blue Book and includes detailed balance of payments statistics including geographical breakdowns of the current account and international investment position.

The Quarterly national accounts, Quarterly sector accounts and the Balance of payments quarterly release that will be published on 29 June 2018 will be consistent with the Blue Book and Pink Book 2018 that will be published on 31 July 2018.

The UK National Accounts must adhere to international standards, specifically the European System of Accounts and Balance of Payments Manuals, to ensure international comparability. In September 2014, we published the first set of UK National Accounts incorporating methods improvements to bring them in line with the European System of Accounts 2010 (ESA2010), which replaced the European System of Accounts 1995 (ESA1995). The Balance of Payments (BoP) was published in line with the Balance of Payments and International Investment Position Manual sixth edition (BPM6). The majority of improvements to bring the UK National Accounts into line with ESA2010 have now been completed, so the focus of the development work for Blue Book and Pink Book 2018 is on implementing improvements considered important by ONS and our users. Given the early timing of Blue Book and Pink Book 2018 relative to their 2017 editions, the scale and scope of the improvements will be smaller than in previous years, but this still represents an ambitious package of change in the time available.

Reflecting the shorter window between annual publications, we are changing our usual process of separate production for "early" years and "later" years and will process the annual Blue Book and Pink Book time series (to 2016) in one go. This will have two impacts on users:

- some data sources that are only available later in the Blue Book and Pink Book production process may not be available in time to be processed for the Blue Book and Pink Book 2018 dataset

- there will not be separate impact articles for earlier and later time periods; instead we will cover 1997 to 2016 in combined articles

We are also currently planning the scope of the improvements to be made for the Blue Book and Pink Books in 2019, with a working assumption that these will be published in October 2019. The 2019 Blue Book and Pink Book are expected to focus on improved methods and data sources for compilation of GDP and addressing a number of areas for further improvement identified following a comprehensive audit of the methods used across EU countries.

# 3 . Scope of Blue Book 2018 and Pink Book 2018

This section briefly explains the main methodological improvements to be implemented in the Blue Book and Pink Book 2018.

## New trade processing systems

Blue Book and Pink Book 2018 will include enhancements to the processing of UK trade data. As outlined in the UK Trade Development Plan, new processing systems for trade in goods and services data have been developed. The new systems have been built to provide faster and more streamlined processing for the monthly UK trade statistics, as well as the production of quarterly and annual trade statistics for other national account publications. They will also enable more detailed analysis of trade statistics; in particularly, the new trade in goods system will provide more granular data for analysis – commodity by country on a balance of payments basis. The systems will also be flexible to support future improvements to methods and data sources.

To allow this granularity in trade in goods data, we will be changing the level at which we process the input data from HMRC, including the way we apply conceptual adjustments to move from overseas trade statistics basis (the physical movement of goods measured by HMRC) to the balance of payments basis (which measures change of ownership). These adjustments will now be applied to each commodity by country combination, rather than for country and commodity separately, as currently processed.

For trade in services, we have taken the opportunity to streamline the processing of several source data, and reduce the amount of formatting and processing required in Excel. Both new systems will use the updated statistical functions available in our national accounts time series processing system. These changes to processing, and use of improved statistical functions, will lead to revisions in both trade in goods and services published time series.

## Pensions

Improvements will be 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 the ONS Economic Statistics Classification Committee and improve the method for calculating employer imputed social contributions, as defined in the ESA2010. Employer imputed social contributions refer to any additional contributions required to balance the accounts in defined benefit pension schemes if there is a deficit building up during the year. The improved method will calculate employer 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 current method involves modelling them as a percentage of wages and salaries.

These improvements to funded public sector employee pension schemes were implemented in September 2017 to the Public Sector Finances, and described more fully in a related article. However, further quality improvements since September are likely to mean there will be some differences between the pension figures currently in Public Sector Finances and those published in Blue Book 2018.

Further explanation of the treatment of pensions in the National Accounts and related terminology are described in this article.

# Net spread earnings[1]

Since its introduction in 2004, the Bank of England's Profit and Loss (PL) form has collected net spread earnings (NSE) generated from trading in foreign exchange, securities and derivatives. Reporting of NSE has always proved challenging as it is not something the reporting institutions are required to identify within their own accounts as it is an implicit part of trading profits. As such, some of the larger reporting institutions omitted NSE from their PL submission. In recent periods the Bank has emphasised the importance of these data and targeted some of the key non-reporters to ensure more comprehensive coverage. Reporting coverage is now more complete and the Bank has reassessed some of the previous estimates in light of new data. This improved dataset will be incorporated into the national accounts.

## Recoding of Gross fixed capital formation (GFCF) in telecommunications equipment

In Quarter 1 (Jan to Mar) 2015, we introduced the Quarterly Acquisitions and Disposals of Capital Asset survey (QCAS) which replaced the Capital Expenditure (CAPEX) survey in order to incorporate ESA2010 changes. In QCAS, respondents are asked to separately identify "computer hardware", "telecommunications equipment", and "other machinery or equipment" whereas the CAPEX survey only asked them to provide "computer hardware" and "other capital equipment". It had historically been assumed that respondents had included telecommunications equipment in the computer hardware category. Quality assurance of responses to the new questions have highlighted that this was actually unlikely to be the case, and telecommunications equipment was allocated by respondents under "other capital equipment" and not "computer hardware" as previously thought. As a result, in Blue Book 2018 we will revise the allocation of telecommunications equipment to reflect this misallocation. This will not impact total GFCF in current prices, but the use of different deflators for these two assets means there will be some volume impact.

## Utilising new data sources

Gross value added (GVA) is calculated as the sum of all output, less costs of intermediate inputs, or, in national accounts terms, intermediate consumption. We have introduced a new survey to collect purchases data, this data will be used to update the supply and use framework with new weights used to derive estimates of intermediate consumption and therefore estimates of GVA by industry. Where possible, estimates from the new survey will be used to inform Blue Book 2018 and our intention is for the data to be used in full in the compilation of Blue Book 2019.

As noted in the Quarterly national accounts: April to June 2017 provisional real-time HM Revenue and Customs (HMRC) estimates of Pay-As-You-Earn (PAYE) total pay were used to help guide the growth of the wages and salaries component. In Blue Book 2018 this administrative source will be further used to inform estimates of wages and salaries over a longer time span. Our intention is for the data to be used in full in the compilation of Blue Book 2020.

Other highlights of the main improvements to be incorporated in Blue Book 2018 and Pink Book 2018 include:

- [continued reconciliation work between the public sector finance statistics and the national accounts](#); notably the move away from a pure cash recording for corporation tax and its replacement with [a time-adjusted cash approach](#) which better aligns the recording of when tax is deemed to be payable with the timing of the economic activity underlying the tax liability

- continued commitment to publish historic datasets (that is, data for the period prior to 1997) alongside the Blue and Pink Book consistent datasets

- inclusion of [VAT turnover data](#) into Blue Book – consistent with the planned implementation in a number of industries in the Quarterly national accounts: Quarter 3 (Oct to Dec) 2017 due for publication on the 22 December 2017; and potentially an increase in the use of these data across a number of additional industries

- potential further improvements to construction prices from Quarter 1 2017

- improved processing systems for government data and the incorporation of semi-automated balancing for supply and use, these changes will not impact published data

**Notes for Scope of Blue Book 2018 and Pink Book 2018**

1. Some companies make a return by trading in financial assets. They buy assets at a price that is typically lower than the prevailing market price, and sell them at a price that is typically above the market price. These margins together are referred to as net spread earnings.

# 4 . Revisions

These improvements will lead to revisions throughout the published time series. Revisions between 1997 and 2013 will mainly be due to methods changes, whilst the years 2014 to 2016 will also be fully open for revision to allow the incorporation of new data from sources such as the Annual Business Survey.

# 5 . Communications

To keep you informed on all changes to the national accounts, we will adopt a similar approach to that taken in previous Blue and Pink Books. We will publish a series of articles in the lead up to the publication, supported by news releases, highlighting the main changes detailed in this article. The changes will also be presented at various seminars and user groups. As previously stated, due to changes in the way we will be processing the 2018 Blue Book and Pink Book datasets, there will not be separate articles for earlier and later time periods, instead we will cover all time periods in combined articles.

Table 1 gives a provisional schedule for the articles leading up to the publication of Blue Book and Pink Book 2018 on 31 July 2018. Final dates will be announced at least one month before each publication.

**Table 1: Provisional publication schedule for Blue Book and Pink Book 2018**

| Content of article | Provisional date of publication |
|---|---|
| Impact of Blue Book 2018 changes on annual current price gross domestic product estimates, 1997 to 2016 | Mar-18 |
| Impact of Blue Book 2018 changes on GDP current price and chained volume measure annual and quarterly estimates: 1997 to 2016 and associated methods articles | Apr-18 |
| Detailed assessment of changes to Sector and Financial Accounts, 1997 to 2016 | May-18 |
| Detailed assessment of changes to Balance of Payments annual estimates, 1997 to 2016 | May-18 |
| Publication of Blue Book and Pink Book 2018 consistent Quarterly National Accounts, Quarterly Sector Accounts and Balance of Payments | 29-Jun-18 |
| Alignment between public sector finances and national accounts article: June 2018 | 29-Jun-18 |
| Publication of Blue Book 2018 and Pink Book 2018 | 31-Jul-18 |