

Monthly statistics on the public sector finances: a methodological guide

This methodological guide provides comprehensive contextual and methodological information on the monthly Public sector finances (PSF) statistical bulletin, which is jointly produced by the Office for National Statistics (ONS) and HM Treasury (HMT).

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1 . Summary and structure of this guide

This methodological guide provides comprehensive contextual and methodological information concerning the monthly Public sector finances (PSF) statistical bulletin, which is jointly produced by the Office for National Statistics (ONS) and HM Treasury (HMT). The guide sets out the conceptual and fiscal policy context for the bulletin, identifies the main fiscal measures and details how these are derived and inter-related. Additionally, it details the data sources used to compile the monthly estimates of the fiscal position.

This guide updates and summarises the content of a range of published articles, including the [previous version of the PSF methodology guide \(PDF, 361KB\)](#) published in August 2012.

Section 2 introduces the bulletin and the main fiscal aggregates that it provides. It also provides summary information on a range of users and uses of PSF statistics and related data.

Section 3 explains how PSF statistics are compiled according to national accounting rules, which determine the composition and the boundaries of the public sector and the categorisation of transactions undertaken by public sector bodies. It also refers to several alternative accounting and expenditure monitoring systems that are applied to underlying data sources, such as government departments' annual financial statements.

Section 4 introduces the fiscal policy context around PSF statistics. It describes the various fiscal frameworks and targets that the current and previous governments have adopted.

Subsequent sections are structured as follows:

- Section 5 outlines the main fiscal aggregates reported in the PSF bulletin and their inter-relationships
- Section 6 documents the sources of the data brought together to produce the main aggregates and discusses certain data quality issues
- Section 7 outlines the relationship between the public sector finances and the UK National Accounts
- Section 8 lists the main acronyms and abbreviations used in this guide
- Section 9 provides contact details for anyone seeking further information or to provide comments
- Several annexes provide supplementary information

2 . Introduction to public sector finances statistics

2.1 About the public sector finances

Public sector finance (PSF) statistics for the UK are compiled and published monthly in the [Public sector finances statistical bulletin](#), which aims to provide users with an indication of the current state of the UK's fiscal position.

PSF statistics are published jointly by the Office for National Statistics (ONS) and HM Treasury (HMT). Details of each organisation's [responsibilities and accountabilities \(PDF, 154KB\)](#) are available.

The statistics in the PSF bulletin are designated as [UK National Statistics](#), which signifies that they are produced, managed and disseminated in accordance with the [Code of Practice for Statistics](#).

The [UK Statistics Authority](#) has a statutory duty to assess (and periodically reassess) all designated National Statistics against its Code of Practice. The Authority published an [assessment report for the PSF bulletin](#) in October 2015.

2.2 Main measures of the state of the public sector finances

While the Public sector finances (PSF) bulletin presents a wealth of data on the public finances, prominence is given to a set of main aggregate measures.

All statistical aggregates published in the bulletin are defined using national accounts concepts and rules. The Office for National Statistics (ONS) produces the UK National Accounts on an internationally comparable basis, in accordance with the [System of National Accounts 2008: SNA 2008](#) and the [European System of Accounts 2010: ESA 2010](#). The SNA and ESA guidelines are updated periodically and since 2014 we have compiled PSF data with reference to the most recent guidance, [ESA 2010](#), which is supplemented by the [Manual on Government Deficit and Debt \(MGDD\)](#). These European texts are consistent with the United Nations [System of National Accounts: SNA 2008](#).

The main fiscal measures reported each month in the bulletin are summarised in this section and discussed further in Section 5 of this guide.

The first seven measures or aggregates detailed in this section have figured prominently in the bulletin for several years and can be regarded as headline aggregates.

It should be noted that these seven main aggregates are all "ex-measures", which signifies that the impact or contribution of any public sector banks has been excluded from the relevant calculations. There is currently just one banking group within the public sector, NatWest Group plc (formerly known as the Royal Bank of Scotland Group), although several other banks were formerly classified to the public sector in the wake of the financial crisis that began in 2007. More details of the effects and impact of the crisis are provided in Section 4.

Public sector current budget deficit (PSCB ex)

The public sector current budget deficit (PSCB ex) is the amount by which current expenditure and depreciation on capital assets together exceed current receipts. For months or other periods in which receipts exceed current expenditure and depreciation combined, there is a PSCB surplus rather than a deficit. The deficit or surplus is calculated on an accruals basis in accordance with ESA 2010. Accrual accounting is described in more detail in Section 3.

Public sector net borrowing (PSNB ex)

Public sector net borrowing (PSNB ex) is the amount by which total spending (current expenditure plus net investment) exceeds total receipts (including net capital transfers). Many commentators refer to the level of PSNB as "the deficit". As with PSCB, measurement of PSNB is on an accruals basis consistent with ESA 2010.

Public sector net cash requirement (PSNCR ex)

The public sector net cash requirement (PSNCR ex) is a cash measure closely related to PSNB (an accrued measure). It measures the public sector's need to raise cash by, for example, issuing gilts or running down liquid assets.

Until 1998, there was a broadly equivalent cash-based measure known as the public sector borrowing requirement (PSBR). The PSNCR name was introduced in 1998 to avoid possible confusion with PSNB. The PSNCR ex provides information on the cash demands of the public sector. However, most users of the public sector finances who are interested in cash data focus their attention on the central government net cash requirement (CGNCR). This is because the CGNCR provides a better metric of the amount of gilts and Treasury Bills that the UK government needs to issue. In contrast, PSNCR ex includes cash transactions that have no direct impact on the government's financing needs.

Public sector net debt (PSND ex)

Public sector net debt (PSND ex) comprises the excess of the public sector's financial liabilities (in the form of loans, debt securities, deposit holdings and currency) over its liquid financial assets (mainly foreign exchange reserves and cash deposits), with both measured at face or nominal value. It is often presented as a percentage of gross domestic product (GDP), which makes comparisons over time and with different countries more meaningful and is derived in accordance with ESA 2010 principles.

Public sector net debt (PSND ex BoE)

Introduced in the 2016 Autumn Statement, public sector net debt excluding the Bank of England (PSND ex BoE), removes the assets and liabilities held on the BoE's balance sheet from PSND ex. In the 2022 Autumn Statement, PSND ex BoE was mandated in the [Charter for Budget Responsibility: Autumn 2022](#).

Public Sector Net Financial Liabilities (PSNFL ex)

Published for the first time in our December 2016 PSF bulletin, PSNFL ex is a broader fiscal aggregate than PSND because it includes all public sector financial assets and liabilities recognised by the national accounts. In the 2016 Autumn Statement, the UK government selected PSNFL ex as a new supplementary fiscal aggregate because it provides additional information concerning the public sector balance sheet.

Public Sector Net Worth (PSNW ex)

In April 2023, we introduced a new fiscal aggregate, public sector net worth (PSNW), in the PSF bulletin. PSNW summarises the value of both non-financial and financial assets, as well as considering the liabilities held by the public sector. It is more comprehensive than either the headline balance sheet aggregate, PSND or the supplementary aggregate, PSNFL. The new PSNW measure is on a comparable basis with existing metrics published in the PSF bulletin, but there are differences with other published versions of PSNW (explained in Section 5).

While the ex-measures are the government's preferred measures of the fiscal position and are used to set fiscal policy, the PSF bulletin also provides versions of each of the aggregates that encompass all public sector entities including public sector banks.

The composition and calculation of the aggregates introduced in this section and their inter-relationships are discussed in more detail in Section 5.

Various additional sources of official data complement the statistics provided in the PSF bulletin. Some provide more detail on components within the underlying data (such as receipts or expenditure), whilst others focus on alternative measures of the state of the public sector finances. These sources are detailed in Annex 1.

2.3 Supplementary presentation of public sector finances

In June 2019, we supplemented ESA 2010-based fiscal statistics with a [dataset produced in accordance with the International Monetary Fund's Government Finance Statistics Manual \(GFSM\) 2014](#), enhancing transparency of our fiscal statistics and offering an alternative data presentation.

The Government Finance Statistics (GFS) framework described by GFSM 2014 differs marginally to ESA 2010 because of their different purposes. ESA 2010 provides guidance on the production of an integrated set of accounts for the whole economy. The GFS framework focuses on impacts of economic events on the government finances and wider public sector, in a way that allows fiscal analysis.

The addition of these GFS statistics widens the coverage and valuation basis of our fiscal statistics. They present information currently not included in the ESA 2010-based statistics, for example, unfunded pension schemes and some [public-private partnerships](#) (PPPs). The new datasets also bring together statistics that are compiled under ESA 2010, but not included in the public sector finances data, for example, contingent liabilities.

The supplementary tables we started producing in June 2019 are compliant with statements in the GFS framework, specifically, the balance sheet, statement of operations, and statement of other economic flows. Each statement contains aggregates useful for fiscal analysis, which are similar to the main public sector finances aggregates but may differ as a result of presentation or methodological differences. Table 1 lists these aggregates as well as their ESA 2010-based equivalents. More detailed explanations of the GFS framework and differences to ESA 2010 are available in a [separate methodology guide](#).

Table 1: Government Finance Statistics Manual 2014 aggregates and public sector finances fiscal aggregate equivalents

Statement Aggregate Definition			ESA 2010-based equivalent and differences
Balance Sheet	Net Worth	Total value of assets (financial and non-financial) minus total value of liabilities, measured at market value	Public sector net worth Differences in coverage and valuation as net worth includes liabilities of unfunded employment-related pensions and assets associated with additional public-private partnerships, as well as valuing debt securities at market value.
	Net Financial Worth	Total value of assets minus total value of liabilities, measured at market value	Public sector net financial liabilities Differences in coverage and valuation as net financial worth includes liabilities of unfunded employment-related pensions as well as valuing debt securities at market value.
	Gross debt	All liabilities that are debt instruments, that is, liabilities in all financial instruments except equity and investment fund shares; and financial derivatives and employee stock options, measured at market value Gross debt is also presented with debt securities at nominal and face values	Gross debt Differences in coverage and valuation – ESA 2010-based gross debt only includes liabilities in currency and deposits; loans; and debt securities at face value
	Net debt	Gross debt minus financial assets corresponding to debt instruments	Public sector net debt Differences in coverage and valuation – public sector net debt includes only liabilities in currency and deposits; loans; and debt securities at face value, while only netting off liquid assets
Statement of operations	Gross operating balance	Revenue minus expense, when consumption of fixed capital is not included as an expense item	Saving, gross plus capital taxes Differences resulting from treatment of unfunded employment-related pensions, coverage of PPPs as well as the exclusion of capital grants in Savings, gross plus capital taxes
	Net operating balance	Revenue minus expense, when consumption of fixed capital is included as an expense item	Current budget deficit Differences resulting from treatment of unfunded employment-related pensions, coverage of PPPs as well as the exclusion of capital grants in current budget deficit
	Net investment in non-financial assets	Acquisitions less disposals of non-financial assets	Net investment Differences resulting from the inclusion of capital grants in PSF
	Net borrowing/lending	All revenue minus all expenditure (net operating balance minus net acquisition of non-financial assets)	Net borrowing/lending Differences resulting from treatment of unfunded employment-related pensions, coverage of PPPs

Source: Office for National Statistics

2.4 Users and uses of public sector finances statistics and related data

Public sector finances (PSF) statistics and related data on government finances are vital inputs to the policy and forecasting work of HM Treasury (HMT) and the Bank of England (BoE), as well as the official forecasts produced by the Office for Budget Responsibility (OBR). In particular, the main fiscal aggregates introduced in Subsection 2.2 are used by HMT and OBR to monitor progress against fiscal forecasts and provide the baseline for the OBR's forecast.

The Debt Management Office (DMO) is both a supplier of data inputs and a user of public sector finance's statistics. Its responsibilities include debt and cash management for the UK government, lending to local authorities and managing certain public sector funds. It monitors main fiscal measures presented in the PSF bulletin, principally CGNCR, to inform its decisions relating to debt and cash management.

The public sector finances also provide related deficit and debt statistics to the International Monetary Fund (IMF) and the Organisation for Economic Cooperation and Development (OECD) on both an annual and quarterly basis. These organisations assess the performance of national economies and make policy recommendations to foster global growth and economic stability.

Through research and feedback, we have also been able to identify a broad range of additional users and uses of public sector finances statistics. Examples include:

- UK-based research and analytical organisations such as: the Institute for Fiscal Studies (IFS) and the National Institute for Economic and Social Research (NIESR), which use the data as input into their assessments of economic performance and sustainability; and the House of Commons Library, which provides impartial information and research services for Members of Parliament and their staff in support of their parliamentary duties
- members of the general public, who may use the (headline) statistics to assess UK fiscal performance and the implications for their own well-being and investment decisions
- commercial analysis and research bodies, such as CEIC Data Co. Limited, FactSet and Timetric, who analyse data on behalf of their clients
- news-focused media organisations, such as Thomson Reuters, Bloomberg, the Economist and the national newspapers, which use the statistics and associated commentary to deliver headlines and underlying narratives
- rating agencies such as Standard and Poor's, Moody's and Fitch, which issue credit ratings for the debt of governments and both private and public corporations; additionally, they use public sector finances statistics in risk analysis to provide investment advice to clients
- academics, who use data primarily for economic and financial analyses, which typically underpin articles for academic journals or other publications

3 . Concepts

3.1 What is the public sector?

In economic statistics, bodies and transactions are recorded according to their economic substance, which may sometimes differ from their legal form. This means that a prerequisite for compiling fiscal statistics is to determine the composition and statistical boundary of the public sector.

The Office for National Statistics (ONS) has [documented procedures](#) to determine which entities should be classified within the public sector. We make classification decisions in accordance with the legally-binding [European System of Accounts 2010: ESA 2010](#) and supplementary guidance, in particular the [Manual on Government Deficit and Debt \(MGDD\)](#). These documents set out the rules for producing national accounts and fiscal statistics.

The broad sectoral breakdown of the UK public sector published in the Public sector finances (PSF) bulletin is:

- central government
- local government
- public corporations

The central government and local government sectors are, from an ESA 2010 perspective, subsectors of the general government sector. The public corporations sector does not directly map to a single institutional sector in ESA 2010 and instead comprises publicly-controlled entities from various subsectors of non-financial and financial corporations. For analytical purposes and to produce the main fiscal aggregates, we split public corporations into the following components:

- Bank of England
- public sector banking groups
- public sector pension funds
- other public corporations (mainly non-financial corporations)

Further information on these subsectors follows.

The central government subsector

The central government subsector includes all administrative departments of the state and other government agencies whose competence extends over the whole country, or large parts of the country. This subsector includes, amongst others, entities dealing with taxation, defence as well as public units in the health and education sectors.

Central government also includes publicly-controlled bodies with a corporate structure that are considered non-market producers for statistical purposes (in other words, bodies that do not operate like typical commercial enterprises in the market economy). NHS Trusts and Academy Schools are part of central government, as are, for example, Network Rail Limited and UK Asset Resolution Limited.

ESA 2010 specifies separate subsectors for state government and social security funds. Following a classification review, we concluded that the UK does not have any entities that fully meet the criteria for inclusion in these subsectors. For example, the state government subsector is more common under the federal structure, which is not present in the UK. Neither are the National Insurance funds sufficiently removed from the government departments to form a separate institutional sector. Bodies such as the devolved administrations and the National Insurance funds are therefore all included within the central government subsector.

The local government subsector

The local government subsector comprises administrative bodies, such as local authorities, whose competence extends only to particular localities within the economic territory of the UK. The subsector also includes the police forces, the fire and rescue forces and non-profit institutions that are under the control of a local authority or other local government body. The local authority Housing Revenue Account, which is the account that relates to most local authority-controlled housing, is excluded from the local government sector and is treated as a public corporation.

The public corporations subsector

Generally speaking, public corporations are publicly-controlled enterprises that are considered market producers for statistical purposes. This broad category includes both non-financial and financial corporations. Historically, the former had a significant impact on the public finances but this declined following the privatisations of the 1980s and early 1990s. The latter category had been less prominent historically but has since increased in size and impact.

Most changes to the composition of the sector have been caused by economic events. The financial crisis of 2007 prompted the UK government to take control of several commercial banks and building societies. Most have since been sold back to the private sector. As of 2019, NatWest Group plc is the sole remaining government-controlled bank within the public corporations subsector after Lloyds Banking Group reverted to private sector control in 2014.

The Bank of England (BoE), which fulfils the functions of a central bank, is also necessarily classified to the public corporations subsector. Data for the BoE have been presented separately within the PSF bulletin since January 2011 and comprise ONS estimates derived from the BoE's published accounts. Prior to January 2011, in the PSF bulletin data for the BoE were incorporated within time series for the entire public corporations subsector.

The changes to the international statistical framework and the associated methodological and classification decisions taken by the ONS also contributed to the evolution of the sector. For example, pension funds had not been included in the statistical boundary for the public sector until September 2019, with the liability for potential underfunding recorded in the government sector (in its capacity as employer) instead. This has changed with the [transition to the gross recording of funded public pensions](#). The large amounts of assets and liabilities associated with funded pensions now have a very significant impact on the public sector data.

The composition of the UK public sector is illustrated in Table 2 in Section 3.2.

3.2 Sector classification

It is important to have clearly defined boundaries between the public and private sectors, and between subsectors. While a member of the EU, the UK developed comprehensive criteria for making classification decisions in conjunction with the Statistical Office of the European Union (Eurostat). Following the UK's exit from the EU, new governance arrangements are being put in place that will support the adoption and implementation of high-quality standards for UK economic statistics. These governance arrangements will promote international comparability and add to the credibility and independence of the UK's statistical system.

We routinely examine new units with public sector involvement to establish the appropriate statistical classification. Sometimes, we review the units that have existed for a long time and had been classified in the past. This can happen for a number of reasons, most commonly as a result of changes in governance or funding of those units (for example, a higher amount of fees collected by a body may reduce the need for grant funding and lead to a reclassification from general government to the public corporations subsector), or developments in the international statistical guidance. We therefore publish a [forward work plan](#).

Table 2: Composition of the UK public sector

Public sector		
Public sector (excluding public sector banks)		Public sector banks
General government		
Public corporations		
Central government	Bank of England	(from March 2014 onwards, this sector consists solely of The Royal Bank of Scotland Group and its subsidiaries)
Local government	Other public corporations (mainly non-financial corporations)	
	Public pension funds	

Source: Office for National Statistics

3.3 Alternative accounting systems – financial reporting versus statistical reporting

The national accounts summarise economic activity within the UK economy over a given period and enable the generation of economic indicators, such as gross domestic product (GDP). They also present information on lending and borrowing by different sectors (including households and the private sector, in addition to the public sector) in the capital account and the financial account; and the balance between assets and liabilities, termed net worth, for sectors and the UK overall, in the balance sheets account.

National accounts must be compiled in accordance with the global statistical framework, described in the United Nations' [System of National Accounts 2008: SNA 2008](#). The UK adheres to the European version of the SNA 2008, the [European System of Accounts 2010: ESA 2010](#), to produce the UK National Accounts. The principles underlying ESA 2010 are also applied to the production of most datasets included in the Public sector finance (PSF) bulletins, as successive UK governments have chosen to frame fiscal policy on ESA concepts.

ESA 2010 was adopted in the UK in 2014, replacing its predecessor, the [European System of Accounts 1995: ESA 1995](#). SNA 2008 and ESA 2010 (as well as the earlier ESA 1995) are founded on the accruals approach to accounting, as are most modern business accounting standards. This means that transactions and associated claims and obligations are recorded in the period that they are agreed via formal contracts or otherwise, regardless of when payments are made.

Unlike most business-oriented accounting systems, ESA 2010 does not generally recognise accounting provisions (apart from standardised guarantees), nor contingent assets or liabilities. Nevertheless, [EU Council Directive 2011/85/EU](#) includes statistical requirements for the publication of specific contingent liabilities and other potential liabilities. We expect that some data will also be available in the Government Finance Statistics Manual (GFSM) 2014-based statistics.

Eurostat's [Manual on Government Deficit and Debt \(MGDD\)](#) gives supplementary guidance concerning the application and interpretation of ESA 2010 with regard to the public sector, although its primary focus is on general government.

MGDD and ESA 2010, like most modern accounting frameworks, focus primarily on economic substance rather than merely on legal form. Often, such an approach requires an analysis of which party bears the risks and rewards associated with an asset, liability, or transaction.

In addition to the main statistical datasets compiled on the basis of ESA 2010, we publish supplementary fiscal statistics based on [International Monetary Fund's GFSM 2014](#), which is another framework derived from the SNA 2008. While mostly consistent with ESA 2010, it prescribes a different treatment for a number of economic activities such as unfunded pensions and coverage of [public-private partnerships](#) (PPPs), offering an alternative presentation of the PSF data.

Although the production of PSF statistics is consistent with ESA 2010 (or GFSM 2014), some of the underlying source data are derived from reported data on cash flows and from business-oriented accounting systems, which are discussed in this section.

Given that some accounting systems, such as ESA, are designed for statistical purposes while others focus on financial reporting, issues of non-alignment and inconsistency may arise if data produced for the latter purpose are required as inputs to statistical products. In the preparation of PSF statistics, care is taken to ensure that the source data derived from public sector accounting systems are, where necessary, transformed to achieve consistency with the statistical rules. PSF data sources and the adjustments made to transform input data into an ESA-consistent form (or GFSM-consistent in the case of the supplementary GFSM 2014-compliant statistics), are discussed in Section 6.

3.3.1 Cash management systems

The concept of cash is widely understood and accepted. Cash comprises notes and coins, together with holdings in accounts with banks or other financial institutions and can be readily accessed or transferred by electronic or other means. Cash is the quintessential liquid asset and can be used to settle any financial obligations. Other assets, be they financial or non-financial, can only be deemed to be liquid if they can easily and speedily be converted to cash with negligible impact on their value.

Tax authorities in many countries, including HM Revenue and Customs in the UK, allow small businesses to report their finances on a cash basis, as this is generally easier and less time-consuming. Cash payments are recorded when they are made or received, regardless of when the associated transactions or economic activities are undertaken. However, corporations are obliged to use accruals-based accounting systems, which are acknowledged as providing a better guide to the financial performance and position of a business than cash-based recording. Nevertheless, it is important for companies to carefully monitor cash flows to ensure that they can meet short-term financial obligations. The same is true for government.

HM Treasury (HMT) has a cash management and forecasting system, which is the primary source of monthly cash data that feed into the public sector finances and underlie some of the main statistics presented in the PSF bulletin (in particular the net cash requirement aggregates).

Another source is the Debt Management Office (DMO), which is an executive agency of HMT and is responsible for government (Exchequer) debt management and cash management. It conducts auctions of gilts to raise funds on a long-term basis and of Treasury Bills, which are a form of short-term funding (with maturities ranging from 1 to 12 months).

The DMO's debt management remit is published annually by HMT as part of the Debt Management Report. The debt management objective is "to minimise, over the long-term, the costs of meeting the government's financing needs, taking into account risk, while ensuring that debt management policy is consistent with the aims of monetary policy." Its cash management objective is to ensure that sufficient funds are always available to meet any net daily central government cash shortfall and minimise the cost of offsetting the government's net cash flows over time, within a risk framework approved by ministers. The DMO carries out market operations in light of forecasts of daily net cash flows into or out of the National Loans Fund (NLF), provided by HMT.

While the Exchequer's cash flow has a regular seasonal and monthly pattern, it is also subject to uncertainty with regards to the timing of some tax and expenditure flows. DMO achieves these net cash flow requirements for the government through a combination of bilateral dealing with market counterparties and Treasury Bill issuance. The range of instruments and operations that the DMO may use for cash management purposes is set out in its published Operational Notice.

The DMO also has operational responsibility for the Public Works Loan Board (PWLb), which is responsible for lending money from the National Loans Fund to local authorities and collecting the repayments. However, the policy framework is set by the Treasury.

In addition to its role in conducting monetary policy, the Bank of England (BoE) provides banking services for government and other financial institutions within and beyond the UK. It provides government with foreign currency accounts and payment services, securities custody and settlement services. It also acts as the DMO's settlement agent and as HMT's agent in the day-to-day management of the Exchange Equalisation Account, which holds the UK's official reserves (consisting of reserves of gold, foreign currency assets and International Monetary Fund Special Drawing Rights). Consequently, BoE is also an important supplier of monthly cash data, which relate primarily to earnings and flows.

While HMT, the DMO and BoE are the primary sources of cash data, there are various additional sources. The most significant of these are National Savings and Investments (NS&I) and UK Asset Resolution Limited (UKAR). NS&I is a government department that provides financing to government by issuing and selling retail savings and investment products to the public. UKAR is the holding company for Bradford and Bingley plc (B&B) and NRAM Limited, and is responsible for the orderly management of the closed mortgage books of both B&B and NRAM.

3.3.2 Financial reporting and business accounting

While cash data are essential to the production of monthly PSF statistics, comprehensive statistics on the state of the public finances also require the extraction of relevant data from financial reports (typically produced annually or bi-annually). For published PSF statistics, much of the required basic data is sourced from the financial reporting systems of public sector bodies, such as central government departments, local authorities, health trusts and public corporations.

These bodies maintain accounting systems for two main purposes: internal reporting (budgeting and performance measurement) and external financial reporting. For external reporting, data must conform to, or be converted into, a form that is compatible with the legally required accounting framework. For internal reporting, data may be held in more flexible forms that satisfy alternative categorisations and accounting rules.

Government departments have prepared annual accounts since 1866. Until financial year ending (FYE) 2000, the accounts were reported on a cash basis. By the late 1990s, it had become evident that the perceived advantages of cash accounting (namely the availability of timely and accurate estimates) were outweighed by some serious drawbacks. As cash measures reflect the timing of payments rather than underlying transactions, they are more prone to erratic and volatile movements. Hence, on balance, accruals-based reporting offers a better guide to the performance of individual entities and to the underlying fiscal position of the public sector than an exclusively or primarily cash-based approach.

Accruals-based accounting standards have been developed primarily as guidelines for financial reporting by private sector corporations. Consequently, when the public sector utilises such accounting standards, issues of compatibility and practical applicability may arise. Hence, financial reporting standards sometimes need to be adapted or interpreted in novel ways for use by public sector bodies.

3.3.3 The Financial Reporting Advisory Board (FRAB), and resource accounting and budgeting (RAB)

The role of ensuring that public sector financial reporting is as consistent as possible with that of the private sector is undertaken by the independent [Financial Reporting Advisory Board \(FRAB\)](#).

The FRAB, which was established in 1996, aims "to promote the highest possible standards in government reporting". It advises on reporting across government departments and on the implementation of public sector accounting policies. Each year the FRAB updates the [Government financial reporting manual](#) (FReM), which is the technical accounting guide for the preparation of financial statements of central government entities. The FRAB also oversees the financial reporting rules applied within the local government and health sectors. The ONS and HMT are represented on the FRAB.

The financial year ending (FYE) 1998 saw the start of major changes in public sector financial reporting in the UK with the adoption of [resource accounting and budgeting](#) (RAB), which aimed to align accounts and budgets more closely with government policy priorities and facilitate the shift to an accruals basis. Implementation was finally completed in FYE 2000.

The implementation of RAB in 1998 coincided with the adoption of the ESA 95 statistical framework for national accounts. These developments were reflected in the PSF bulletin, which gave greater prominence to accrued fiscal measures than traditional cash measures. Since 1998, governments' fiscal targets and rules have also been framed in terms of accrued measures.

3.3.4 IFRS

[International Financial Reporting Standards](#) (IFRS) are financial reporting standards developed by the [International Accounting Standards Board](#) (IASB), whose purpose is to develop and maintain a set of consistent global accounting standards. The Council of the European Union has adopted certain IASB standards. As such, EU-listed corporate groups, including banks and insurance companies, have been obliged to prepare their consolidated accounts in accordance with IFRS since 1 January 2005. IFRS was implemented and adopted for the UK private corporate sector from 1 January 2005, in accordance with [EU Regulation 1606/2002 \(PDF, 112KB\)](#).

FRAB has interpreted and adapted IFRS for use in the FReM and associated public sector financial reporting manuals. Central government departments adopted IFRS (via the FReM) from FYE 2010 and local government from FYE 2011. The first set of audited IFRS-based [Whole of Government Accounts](#) (WGA) was published in December 2011, for FYE 2010.

3.3.5 UK generally accepted accounting practice

[UK generally accepted accounting practice \(PDF, 1.6MB\)](#) (UK GAAP) represents the collected body of UK accounting standards (as issued by the UK Financial Reporting Council), supplemented by guidance published by acknowledged accounting experts. These standards were used by government departments as the basis of reporting their financial accounts on an accruals basis between FYE 2000 and FYE 2009.

3.4 Public expenditure frameworks

Over time, multiple accounting frameworks have developed to measure UK government spending. Each has been tailored to meet the requirements of one or more of the following diverse financial management purposes:

- budgeting – used by HM Treasury (HMT) to control government spending and overall public expenditure
- producing estimates, which are the means via which Parliamentary approval is obtained for departmental spending
- monitoring the overall fiscal position by tracking the main aggregates presented in the PSF bulletin
- preparing resource accounts (the annual financial accounts and reports of public sector bodies) in accordance with commercial accounting principles (IFRS) adapted for use in the public sector
- producing the Whole of Government Accounts (WGA), a consolidated set of commercial accounts prepared by HMT for the whole of the public sector

HMT's budgeting system aims to control public expenditure to support the government's fiscal framework. It also seeks to provide incentives for departments to manage spending, deliver high-quality public services and offer value for money to taxpayers. Underpinning this is a measurement framework, defined by HMT and explained in detail in the [consolidated budgeting guidance](#). The framework is in some areas aligned more closely with national accounts concepts and principles than underlying departmental resource accounts.

Government departments have separate "resource" budgets (encompassing current expenditure such as pay or procurement) and "capital" budgets (covering new investment and net policy lending). Each budget is then subdivided into spending that scores either as departmental expenditure limits (DEL), or as annually managed expenditure (AME). DEL spending encompasses items that HMT expects departments to manage and predict quite accurately (for example, staff costs, consultancy services and most grant payments). AME comprises spending that HMT recognises is more difficult to forecast. Typically, this comprises elements that are demand-led and can be volatile, such as benefit payments and tax credits.

Each department's budget (that is, the amount available to spend) is set for a period of multiple years during the Spending Review process, in accordance with government priorities. For example, in autumn 2015, HMT carried out a [Spending Review](#) for the period from financial year ending (FYE) 2016 to FYE 2020 (and, for some departments, up to FYE 2021).

DEL totals are fixed at the review and departments may not exceed them. AME totals are necessarily more challenging to manage, so departments are expected to monitor them closely and inform HMT if spending rises significantly above forecast levels.

Government needs Parliamentary approval for departments' annual budgets. Estimates are the Parliamentary means of granting this authority. The main estimates, normally published around the start of the financial year, are the starting point of the supply procedure. In approving the estimates, Parliament grants statutory authority for the consumption of resources and capital by government, and for cash to be drawn from the [Consolidated Fund \(PDF, 310KB\)](#) (the government's main current account held at the Bank of England). Around January or February, new or revised estimates are presented to Parliament, updating the earlier requests for supply. These estimates are generally referred to as supplementary estimates. Once approved by Parliament, the estimates become firm expenditure limits that cannot be exceeded by departments. Extensive guidance on the production of estimates is available on the [HMT website](#).

In the late 2000s, it became clear that the use of multiple spending frameworks was unnecessarily complex, hindering scrutiny and accountability, whilst increasing burdens and reducing efficiency. [The Clear Line of Sight Project](#) was set up to address these weaknesses through:

- aligning the budgets, estimates and accounts frameworks as closely as possible
- reducing the number of spending publications
- bringing forward the publication of departmental financial reports and accounts by one month to June

Consequently, from FYE 2012 estimates have been produced on essentially the same basis as HMT's budgeting framework.

4 . The UK fiscal framework

4.1 Fiscal policy and the public sector finances statistics

While it is intended to assist a diverse range of users, the primary function of the Public sector finances (PSF) bulletin is to provide statistics that enable government and bodies such as the Office for Budget Responsibility (OBR) to monitor and analyse the UK fiscal position (that is, the state of the public finances). These analyses may in turn inform fiscal policy decisions, such as how much government should spend and how this expenditure should be financed (by taxation, by borrowing, or a combination of these). This section of the guide describes the policy context around the bulletin and the various rules and targets that have been set by successive governments in recent decades.

Fiscal policy and monetary policy are the main tools available to steer the UK economy at a macro level.

In the [2022](#) Autumn Budget and Spending Review, the UK Government published its [Charter for Budget Responsibility: autumn 2022 update](#). This document presents the fiscal mandate by which its performance will be assessed, to:

- have public sector net debt (excluding the Bank of England) as a percentage of GDP falling by the fifth year of the rolling forecast period.

The fiscal mandate is supplemented a target to:

- ensure public sector net borrowing does not exceed 3% of GDP by the fifth year of the rolling forecast period

There is a further supplementary target to ensure that expenditure on welfare is contained within a predetermined cap and margin set by the Treasury. However, this target is not defined by data that are part of the ONS' public sector finance dataset.

Fiscal policy is typically complex. The same overall fiscal position could be reached using numerous and diverse policy interventions. For example, government could fund additional public spending either via increases in taxes or extra borrowing, or a combination of both. Nevertheless, governments generally aim to be transparent and stable in their conduct of fiscal policy, often working within a published framework with a specified set of overall targets.

The Charter also states an aim to strengthen over time a range of measures of the public sector balance sheet such as public sector net debt, public sector net financial liabilities and public sector net worth through effective management of assets, liabilities and risks.

Currently, the primary goal of UK monetary policy is to maintain stable prices. This involves controlling inflation by adjusting short-term interest rates. Responsibility for overseeing monetary policy was assigned to the [Monetary Policy Committee](#) (MPC) of the [Bank of England \(BoE\)](#) in May 1997. The MPC is operationally independent of government and each month it convenes to decide whether to adjust the Bank Rate, an important short-term interest rate, which influences interest rates charged by commercial banks and other financial institutions. Successive governments have set an [inflation target](#) for the annual increase in the [Consumer Prices Index \(CPI\)](#) not to exceed 2%. If this target is consistently exceeded the MPC is likely to raise the Bank Rate. The [BoE](#)'s secondary monetary policy goal is to support government's other economic objectives, including those for growth and employment.

4.2 Former fiscal frameworks

4.2.1 Fiscal targets prior to 1997

For around 30 years prior to 1997, fiscal targets were generally expressed in relation to the public sector borrowing requirement (PSBR). A balanced budget had a nil PSBR. As noted in Section 2, the current equivalent of the PSBR is the public sector net cash requirement (PSNCR).

Over the course of the 1980s, governments frequently adjusted their targets for the PSBR, often aiming to reduce it over the medium-term or maintain it at modest levels. The surplus in financial year ending (FYE) 1988 (the first for nearly 20 years) prompted tax cuts and the adoption of a balanced budget as a medium-term objective.

By the early 1990s, the budget surplus had disappeared, although budget balance remained the medium-term objective. The eventual return to balance followed a period of persistent budget deficits. From a peak deficit in FYE 1994, the PSBR was reduced to around 1% of gross domestic product (GDP) in 1997 through strict fiscal control of public expenditure.

4.2.2 The golden rule and framework for fiscal policy (1997 to 2008)

In 1997, as part of its wider macroeconomic reforms, government laid out a new [framework for fiscal policy \(PDF, 516KB\)](#) that included delegating responsibility for monetary policy to the Bank of England (BoE) and for debt and cash management to the Debt Management Office (DMO).

The reforms were intended to alleviate the greater macroeconomic instability of the UK economy compared with other G7 countries, which had become apparent over several decades. Frequent changes to the conduct of fiscal and monetary policy had contributed to this problem.

The new framework was formally introduced at Budget 1998 with a legislated [Code for Fiscal Stability](#), which set out main principles for fiscal management and enhanced reporting requirements. It also prescribed a new role for the National Audit Office (NAO) to audit the assumptions underpinning the public finance projections. It provided for flexibility in responding to unforeseen developments by reformulating fiscal rules and objectives.

In 1997, the government established two fiscal policy objectives with different time horizons:

- over the medium-term, public finances had to be sound, and spending and taxation had to impact fairly within and between generations
- over the short-term, automatic stabilisers (see Annex 2) were to be used to help smooth the path of the economy and to complement monetary policy

In 1998, the government established two fiscal rules:

- the golden rule stated that over the economic cycle the government would borrow only to invest and not to fund current spending
- the sustainable investment rule stated that public sector net debt (PSND) as a proportion of GDP would be held at a stable and prudent level over the economic cycle; other things being equal, net debt would not exceed 40% of GDP over the course of the economic cycle

In practice, conformance to the golden rule requires a public sector current budget (PSCB) balance or surplus over the duration of the economic cycle. The sustainable investment rule, when applied in conjunction with the golden rule, imposes constraints on levels of capital expenditure by the public sector.

An [assessment by HMT](#) in 2008 judged that the government had met its fiscal rules over the economic cycle that had begun in FYE 1998 and had concluded in FYE 2007.

4.2.3 The financial crisis and the introduction, and subsequent modification, of PSF measures excluding financial interventions (2008)

The onset of the financial crisis and associated shocks that began to hit the UK economy in financial year ending (FYE) 2008 led the government to make exceptional interventions in the financial sector. This included taking control of several commercial banks. The Chancellor, in a [lecture delivered in November 2008 \(PDF, 2.1MB\)](#), signalled that the government would temporarily depart from the fiscal rules, asserting that "to apply these rules rigidly in today's changed conditions would be perverse."

New concepts and aggregates for measuring the fiscal position were introduced in the PSF bulletin around this time. These comprised measures of public sector net debt (PSND) and public sector net borrowing (PSNB) that excluded the temporary impacts of financial interventions. These so-called ex-measures were typically abbreviated to PSND ex and PSNB ex respectively.

The rationale for this change in focus was that the conventional measures would be distorted by the impacts of these interventions and would not reflect the true, underlying position of the public finances (given that government's intention was to eventually return control of the banks to the private sector and terminate other special schemes supporting the financial system). Since August 2008 in the case of PSND ex and since December 2009 for PSNB ex, the ex-measures have been reported alongside their longer-established and fully inclusive counterparts in the PSF bulletin.

The 2010 article, [Public sector finances excluding financial interventions \(PDF, 167KB\)](#), explained the underlying rationale and policy context for the ex-measures and how they were derived. Since 2009, the aggregates used for setting fiscal targets have been ex-measures. However, as explained in this section, the definitions of PSNB ex and PSND ex were modified in 2014.

The initial intervention in financial markets that prompted the introduction of the ex-measures was the taking into temporary public ownership of Northern Rock in October 2007. This was triggered by Northern Rock's precarious financial state, which had obliged it to seek emergency funding from the BoE, precipitating the first run on a British bank in more than a century. The ONS Classification Committee ruled that the public sector had the power to control Northern Rock's corporate policy and consequently it was classified as a public financial corporation for national accounts and PSF purposes.

Northern Rock's gross liabilities (net of liquid assets) increased PSND from the point of its entry into the public sector. As the government's stated intention was to return Northern Rock to private ownership, Northern Rock's finances were excluded from the public sector, for the purposes of calculating the ex-measures. This meant that Northern Rock's debt was excluded from PSND ex and its transactions with the private sector were excluded from PSNB ex. Furthermore, it implied that government's transactions with Northern Rock would affect PSNB ex.

The same rationale and methodology was applied to subsequent interventions relating to other public sector banks, including Bradford and Bingley, Lloyds Banking Group and the Royal Bank of Scotland Group (now known as the NatWest Group plc), each of which was taken under government control. The impacts of certain additional interventions were also initially excluded from the ex-measures.

These interventions principally comprised the establishment of the Asset Purchase Facility (APF) and the [Special Liquidity Scheme \(PDF, 89KB\)](#) (SLS). These schemes were designed to underpin the financial sector, improving liquidity and strengthening banks' balance sheets, and were operated by the BoE. The SLS allowed banks to swap illiquid mortgage-backed and other securities for specially issued Treasury Bills. The APF was the body set up to carry out the BoE's quantitative easing scheme, mainly by purchasing gilts financed by a loan from the BoE, created by increasing reserves. They were not intended to have extended lifespans and hence they could be regarded as temporary. The SLS was established in 2008 and terminated in 2012, but the APF which was set up in January 2009 is still functioning.

[Annex 4: Asset Purchase Facility in the fiscal aggregates](#), presents further information on the recording of the APF scheme within the public sector finances.

The APF was established as a wholly-owned subsidiary of the BoE. It is fully indemnified by HM Treasury (HMT): any financial losses resulting from the asset purchases are borne by HMT and any gains are owed to HMT.

Originally, it was envisaged that payments due to or from HMT would be settled when the scheme ended. But the scale and likely duration of the scheme were extended and, in November 2012, HMT [announced changes to the cash management arrangements](#) for the APF. This provided for cash surpluses held in the APF to be transferred to HMT on a quarterly basis. Initially these changes did not impact on the treatment of the APF in the ex-measures. However following a [UK Statistics Authority review \(PDF, 473KB\)](#) of the treatment of the transactions, and an Office for National Statistics (ONS) [consultation exercise \(PDF, 192KB\)](#) and [review \(PDF, 129KB\)](#) of the ex-measures, the ONS decided in 2014 that only public sector banks would be excluded from the ex-measures.

As part of the consultation and review, the ONS developed the following principles to inform the composition of the current (and any future) ex-measures. The ONS concluded that they should:

1. Be as inclusive as possible, whilst avoiding manifest distortions (such as, for example, those from public sector banks) so that they:
 - ensure that the full range of public sector liabilities (on a national accounts basis) are reported as transparently as possible
 - do not intrinsically create one-off factors in their design without justification; the previous method of excluding some indemnified schemes until they came to an end when there was a balancing transaction intrinsically creates one-off transactions, these can then cause further issues for users in assessing underlying trends; for example, when the Special Liquidity Scheme ended there was a one-off impact on net borrowing of £2.3 billion
 - allow transactions or classifications to be excluded if they create distortions that clearly impair the understanding of public sector finances because of their size and their lack of correlation with their effects on the government's need to issue gilts
2. Be consistent in their effect on debt and borrowing.
3. Respect the building block for national accounts: the institutional unit (institutional units have autonomy of decision-making and file their accounts); this means that any ex-measures should not sub-divide institutional units.
4. Apply the European System of Accounts (ESA) boundary rules for central, local and general government:
 - this ensures that the government net borrowing and gross debt measures in the public sector finances are aligned with the Maastricht definitions of government deficit and debt
 - it means that no ex-measure should exclude any bodies that are categorised in the government sector and so ex-measures should only look to sub-divide the public corporations sector
5. Be wholly consistent with the ESA guidance on transactions and stocks:
 - this ensures that measures in the public sector finances are calculated in the same way as in international measures and prevents ex-measures being developed that are not consistent with national accounts and Maastricht debt and deficit
 - it further ensures that any ex-measures exclude public sector bodies and then record their transactions and stocks in accordance with national accounts principles, preventing inconsistent treatment in ex-measures of individual transactions and stocks
 - in this way we are ensuring that the measures are based on sound internationally-agreed concepts and definitions
6. Be created alongside a publication strategy that maximises the transparency of factors that impact on the public sector finances with details published below institutional unit level described fully in terms of the framework outlined previously.

4.2.4 Relaxation of fiscal rules in response to the financial crisis (2008 to 2010)

In its [Pre-Budget November 2008 report, Facing global challenges: supporting people through difficult times \(PDF, 1.2MB\)](#), the government formally announced that in light of the ongoing financial crisis it would temporarily depart from the fiscal rules. This relaxation was intended to allow fiscal policy to shore-up aggregate demand in the economy and reduce the likelihood of a deep recession. Adherence to the golden rule requirement to balance the current budget over the cycle would have required a huge amount of fiscal tightening, which would have exacerbated the economic slowdown.

The government indicated that it was content to allow public sector debt to rise to absorb the immediate shocks, with fiscal policy set to support both the financial sector and the broader economy. The Pre-Budget report detailed a temporary fiscal stimulus package, worth 1% of GDP in financial year ending (FYE) March 2010. This included an immediate, temporary reduction in the rate of VAT to 15% until the end of the 2009 calendar year and the bringing forward of £3 billion of capital spending from the following financial year. The fiscal relaxation was reflected in sharp rises in current budget deficit, net borrowing and net debt for central government and the public sector for FYE 2010.

At the [Budget March 2010](#), preceding the dissolution of Parliament in May, a consolidation plan was presented with the following targets for borrowing and debt:

- PSNB ex to more than halve from a projected level of 11.8% of gross domestic product (GDP) to 5.5% of GDP or less by FYE 2014
- PSNB ex to be reduced as a share of GDP in each year from FYE 2010 to FYE 2016
- PSND ex to be falling as a share of GDP in FYE 2016

4.2.5 The coalition government's fiscal framework and mandate (2010 to 2015) and the role of the Office for Budget Responsibility

A reformed fiscal framework was established following the formation of the coalition government in May 2010. The new framework was written into legislation via the [Budget Responsibility and National Audit Act 2011](#).

The Act requires governments to lay a [Charter for Budget Responsibility \(PDF, 259KB\)](#) (the Charter) before Parliament. The Charter sets out the government's fiscal policy framework, which includes HM Treasury (HMT) objectives for fiscal policy, as set by government and HMT's fiscal mandate (the government's main fiscal targets). The Charter was initially published in April 2011 but has since been revised and updated on several occasions to reflect modifications made to the framework.

The fiscal policy objectives detailed in the initial 2011 version of the Charter were to:

- ensure sustainable public finances that support confidence in the economy, promote intergenerational fairness and ensure the effectiveness of wider government policy
- support and improve the effectiveness of monetary policy in stabilising economic fluctuations

The Charter also presented HMT's mandate for fiscal policy over the 2010 to 2015 Parliament, which was:

- a forward-looking target to achieve cyclically-adjusted current balance by the end of the rolling, five-year forecast period

The mandate was supplemented by:

- a target for public sector net debt as a percentage of GDP to be falling by a fixed date of FYE 2016, ensuring the public finances were restored to a sustainable path

The Charter also set out HMT's objective in relation to debt management policy, which was:

- to minimise, over the long-term, the costs of meeting the government's financing needs; this was to be done whilst considering risk and ensuring that debt management policy was consistent with the aims of monetary policy

This mandate deliberately focused on current spending, as reflected in the targeting of the current balance. The exclusion of capital expenditure can be viewed as a means of safeguarding public investment, which is generally considered to be the most economically productive element within public spending. A cyclically-adjusted aggregate (see Annex 2) was targeted, such that the automatic stabilisers could operate fully in support of the economy. The mandate was to lapse at the 2015 dissolution of Parliament.

The major innovation detailed in the new framework was the creation of an independent Office for Budget Responsibility (OBR) in May 2010. The rationale was that this would increase transparency and openness in official forecasting and assessments of fiscal policy. It was intended to allay concerns that a Chancellor or ministerial colleagues might otherwise exert pressure on HMT to produce unduly optimistic economic and financial forecasts.

The OBR's principal remit is to examine and report on the sustainability of the public finances. The [Charter for Budget Responsibility \(PDF, 311KB\)](#) states that the remit provides for the OBR to investigate the impact of trends and policies on the public finances from a multitude of angles, including through forecasting, long-term projections and balance sheet analysis. It performs this duty completely independently of government.

Prior to the establishment of the OBR, responsibility for producing official forecasts for economic indicators and fiscal aggregates, and for assessing fiscal policy sat with HMT. The Charter specified that, following the transfer of responsibilities to the OBR, HMT would "continue to maintain the necessary analytical and macroeconomic expertise to provide ongoing advice to the government."

The Charter indicated that the Chancellor would commission the OBR to produce fiscal and economic forecasts on specified dates at least twice a year, one of which would coincide with Budget day. The forecast horizon was to be consistent with that set by the Chancellor and would always be for a period of at least five financial years. In practice, since its inception, the OBR has published five-year horizon forecasts for the UK economy and public finances biannually in its [Economic and Fiscal Outlook](#) (EFO) publications. In addition, it publishes two other [publications](#):

- an annual Forecast Evaluation Report (FER) each autumn, examining how the forecasts have compared with subsequent outturns, drawing lessons for improving future forecasts
- a biannual [Fiscal Risks and Sustainability Report \(FRSR\)](#) which examines the fiscal impact of past public sector activity, as reflected in the assets and liabilities that it has accumulated on its balance sheet, and fiscal risks facing the UK, whilst also examining the sustainability of public sector finances via long-term projections of how spending and revenues may evolve and the impact this would have on public sector net debt

The OBR's economic forecast includes projections for GDP, inflation, labour market indicators, and the balance of payments current account. The Charter specified that in its forecasts the OBR was to include projections of a number of PSF aggregates, including:

- public sector current expenditure
- public sector gross investment
- public sector net investment
- public sector current receipts
- the current balance
- public sector net borrowing
- general government net borrowing
- the central government net cash requirement
- public sector net debt
- general government gross debt
- any other aggregate or indicator as is required to judge progress or achievement against the government's mandate for fiscal policy, or is required for the purposes of the government's European commitments, in particular the Stability and Growth Pact

The Charter also required the OBR to assess progress towards meeting fiscal targets. In practice, this has involved assessing whether the government's fiscal policy is consistent with a greater than 50% chance of meeting the fiscal mandate.

4.2.6 Adjustments to the fiscal framework and mandate: introduction of the welfare cap (2014 to 2016)

As a means of exerting stricter control of spending in an area that can be difficult for government to control, the coalition government decided to introduce a welfare cap. The cap is a cash limit on the amount that government can spend on certain social security benefits and tax credits. The cap excludes expenditure on pensions, Jobseekers' Allowance and Housing Benefit. Tax Credits, Child Benefit and Disability Benefit are examples of benefits that are in scope. Unlike the other fiscal targets, the welfare cap is not based on national accounts concepts or principles and no data directly relating to the welfare cap is published in the public sector finances.

The introduction of the cap at the Budget 2014 was reflected in an [updated Charter \(PDF, 192KB\)](#) with a revised mandate. The revised mandate included a restating of the target for public sector net debt (PSND) as:

- an aim for PSND as a percentage of GDP to be falling by 2016 to 2017

Following the general election in May 2015, the [Charter \(PDF, 428KB\)](#) was further updated with a revised mandate for fiscal policy, but no changes in the objectives for fiscal policy or role of the OBR. The updated Charter was approved by Parliament in October 2015 and the revised mandate was expressed as:

- in normal times, once a headline surplus has been achieved, the Treasury's mandate for fiscal policy is a target for a surplus on public sector net borrowing in each subsequent year
- for the period outside normal times from 2015 to 2016, the Treasury's mandate for fiscal policy is a target for a surplus on public sector net borrowing by the end of 2019 to 2020
- for the period from 2015 to 2016 until 2019 to 2020, the Treasury's mandate for fiscal policy is supplemented by a target for public sector net debt as a percentage of GDP to be falling in each year
- after 2019 to 2020, the normal times target will apply unless and until the OBR assess, as part of their economic and fiscal forecast, that there is a significant negative shock to the UK
- a significant negative shock is defined as real GDP growth of less than 1% on a rolling four-quarter-on-four-quarter basis.

The expression, "normal times", can be construed as periods when the economy is growing steadily, in the absence of significant negative shocks as defined in the previous final bullet point.

4.2.7 Current fiscal framework with the introduction of new supplementary fiscal aggregates (2016 onward)

The autumn 2016 update to the [Charter](#) stated that, in order to provide for sustainable public finances, HMT's objective for fiscal policy was to:

- return the public finances to balance at the earliest possible date in the next Parliament

HMT's mandate for fiscal policy in Parliament was:

- a target to reduce cyclically-adjusted public sector net borrowing to below 2% of GDP by 2020 to 2021

The 2016 Autumn Statement included an announcement by the Chancellor that two new supplementary fiscal aggregates had been defined, which would provide additional commentary on the state of the public sector balance sheet and context for the main fiscal metric of public sector net debt. These supplementary aggregates, public sector net debt excluding the Bank of England (PSND ex BoE), and public sector net financial liabilities (PSNFL), are described in Section 5.

The Chancellor also announced that the government intended to move to a single major fiscal event each year. Traditionally, UK governments had tended to reveal their plans for taxation in a spring budget and announce planned government expenditure in an autumn report or statement. However, over time the distinction had become less clear cut, such that planned tax changes might be presented to Parliament either in spring or in autumn.

The Chancellor signalled that the spring 2017 Budget would be the last springtime fiscal event that would include taxation plans. Thereafter, budgets were to be delivered in the autumn, with the first one taking place in autumn 2017. The move to a single fiscal event meant that businesses and individuals would face less frequent changes to the tax system, helping to promote certainty and stability. From winter 2017, Finance Bills were to be introduced following the Budget, affording Parliament more time to scrutinise tax changes before the tax year in which most of them take effect.

4.3 UK's compliance with the Maastricht Treaty while a member of the EU

In preparation for monetary union, various safeguards against fiscal profligacy were enshrined in the [Treaty on the Functioning of the European Union](#) (commonly known as the Maastricht Treaty), which came into force in 1993. The Stability and Growth Pact requires all member states to avoid excessive budget deficits and levels of government debt.

The reference values set out in the Pact, which member states should endeavour not to exceed, comprise a general government (GG) deficit (or net borrowing) of 3% and GG gross debt of 60% of gross domestic product (GDP). Failure to meet these targets and more especially the deficit target, may result in the Commission initiating excessive deficit procedure (EDP) actions, as discussed in this section.

EU member governments are obliged to report their actual and planned deficits, along with their levels of debt, in detailed data tabulations to the Statistical Office of the European Union (Eurostat) in accordance with fixed deadlines.

The UK left the EU on 31 January 2020. A transition period was in place from 1 February 2020 to 31 December 2020 during which the UK continued to supply data to Eurostat in accordance with EU membership rules. The rules governing the new relationship between the EU and UK took effect on 1 January 2021, after which the UK stopped supplying Eurostat with EDP data.

4.4 International comparisons of debt and deficit

The [UK government debt and deficit statistical bulletin](#) is published quarterly in January, April, July and October each year. This is to coincide with when EU member states are required to report on their debt and deficit to the European Commission.

The general government debt and deficit figures published in this statistical bulletin for the time period 1997 onwards (when the ESA framework was first adopted for the compilation of data in the UK) are fully consistent with those published in the public sector finances, being compiled on the same [European System of Accounts: ESA 2010](#) basis.

There are two main differences between the headline debt and deficit measures between the public sector finance statistics and those used for international comparisons.

Firstly, this bulletin includes only the debt and deficit of central and local government bodies. The public sector finances' measures also include the debt and deficit of other public sector bodies, including public non-financial corporations and the Bank of England.

Secondly, this bulletin reports gross debt, while the focus of the public sector finances is net debt. Gross debt represents only the financial liabilities (debt securities, loans and deposits) of central and local government, while net debt deducts any liquid assets (mainly official reserve assets and other cash or assets that can quickly and easily be converted into cash) from the financial liabilities to arrive at a net figure.

It is important to achieve coherence in the estimates provided in both datasets. Therefore, each quarter (more specifically in March, June, September and December) PSF data are aligned to the more detailed quarterly data (as reported to both OECD and IMF).

Aligning datasets

For the latest month and financial year-to-date, outturn data in the PSF bulletin has to reflect the latest available information, while ensuring coherence with the EDP bulletin. Therefore, the following approach is adopted:

- the latest reported month reflects the most up-to-date PSF data available
- the quarterly data in the periods common to both EDP and PSF bulletins are aligned
- the estimates for the month immediately prior to the latest month, but after the period of aligned quarterly data, are calculated by taking the latest cumulative estimates for the financial year-to-date and subtracting both the cumulative totals for those aligned quarters in the financial year and the latest month estimates

For example, in the PSF published in September:

- the August estimates use the latest reported data
- the PSF data in the period April to June are aligned to the estimates in the EDP bulletin
- the July figures are derived from the financial year-to-date (April to August) less the sum of the aligned period (April to June) and less the estimates for August

This alignment process results in a temporary adjustment to the published monthly profiles. This adjustment will unwind in the dataset reported in the bulletin published in the following month, when the PSF estimates are decoupled from the EDP bulletin to reflect the latest available data.

In this example, the estimate originally derived for July may subsequently be revised to reflect the latest source data. This phenomenon is discussed further in the [Public sector finances revisions policy](#).

5 . Fiscal aggregates included in the public sector finances statistics

This section amplifies the descriptions, provided in Section 2 of this guide, of the main fiscal metrics published in the Public sector finances (PSF) bulletin. These comprise a set of aggregates, designed primarily by HM Treasury (HMT) to monitor progress towards government fiscal goals (discussed in Section 4). The PSF statistics are designed to provide reliable, timely and appropriate information to enable users, including HMT and Office for Budget Responsibility (OBR), to gauge progress towards the government's fiscal goals.

5.1 Composition and reconciliation of the PSF aggregates

Three of the main fiscal aggregates, the public sector current budget deficit (PSCB), public sector net borrowing (PSNB) and the public sector net cash requirement (PSNCR), relate to economic activity and associated transactions that occur within a defined, limited period (such as a month, quarter, or year). They can be categorised as "flow" measures. Conversely, public sector net debt (PSND), public sector net financial liabilities (PSNFL) and public sector net worth (PSNW) record the cumulative net value of liabilities that have accumulated at a given point in time and can be categorised as "stock" measures.

5.1.1 Public sector current budget deficit (PSCB)

In Section 2.2 we noted that PSCB represents the balance of receipts over current expenditure, after providing for depreciation on capital assets. Hence, depreciation is treated as an expense for the period concerned, as in commercial accounts. So we can measure the deficit (or surplus if receipts exceed the two other components) as:

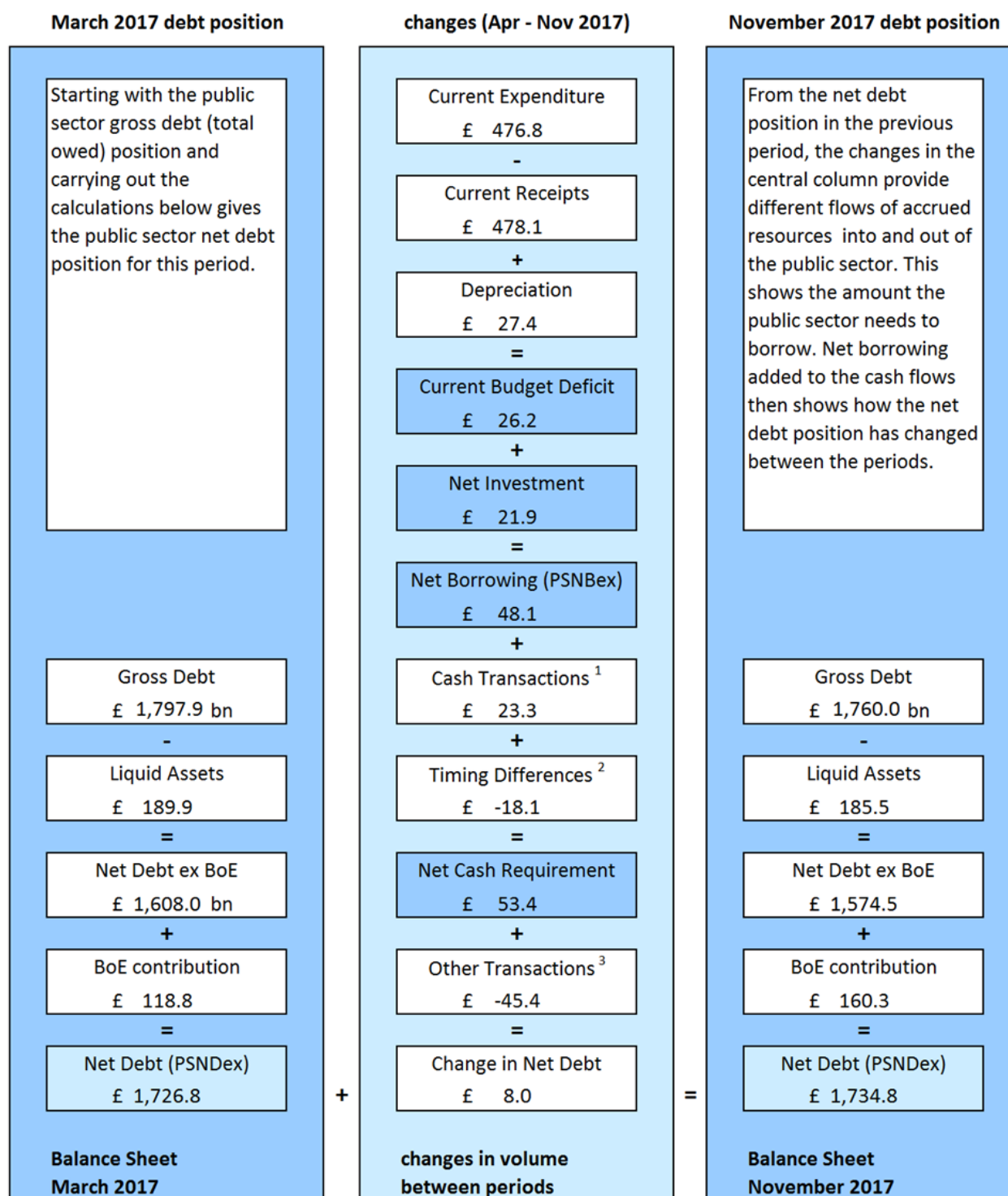
current budget deficit equals (current expenditure minus current receipts) plus depreciation

An illustration is provided in the upper section of the middle column of Figure 1, where data for current revenue, expenditure and depreciation for the period April to November 2017 are provided. One can see that over that eight-month period:

current budget deficit equals (£476.8 billion minus £478.1 billion) plus £27.4 billion equals £26.2 billion

So, over that eight-month period there was a current budget deficit of around £26.2 billion.¹

Figure 1: Connections between main PSF aggregates, and an illustration of how various elements contribute to changes in PSND ex over time



Source: Office for National Statistics

Notes:

1. Cash transactions in (non-financing) financial assets, which do not impact on net borrowing.
2. Timing differences between cash and accrued data.
3. Revaluation of foreign currency debt (for example, foreign currency). Debt issuances or redemptions above or below debt valuation (for example, bond premia and discounts and capital uplifts). Changes in volume of debt not due to transactions (for example, sector reclassification).

The main components of current receipts are:

- taxes on income and wealth, most of which are made up of personal Income Tax, Corporation Tax and Petroleum Revenue Tax
- taxes on production, of which the largest contributor is Value Added Tax (VAT); other components include oil, alcohol, tobacco and various gambling levies, Stamp Duties, National Non-domestic Rates (also known as business rates), rail franchise premia, and other levies on industries
- other current taxes, which include Vehicle Excise Duty, the Bank Levy, TV Licences and other licence fees
- taxes on capital, comprising primarily Inheritance Tax; some [European System of Accounts: ESA 2010](#) capital taxes are recorded within net investment
- compulsory social contributions, which are National Insurance contributions
- gross operating surplus, which, by convention for central and local government, is assumed to be equal in value to the figure recorded for the depreciation of capital assets
- interest and dividend receipts
- rent and other current transfers, which includes receipts of fines

and the main components of current expenditure are:

- current expenditure on goods and services, comprising expenditure on wages and salaries, and on the purchase of consumable goods and services
- subsidies
- net social benefits, which includes welfare payments and public sector pension payments
- net current grants abroad, made up of overseas aid and other grants paid to non-UK residents
- other current grants, which comprise grants to UK non-public sector bodies, and interest and dividends payments

5.1.2 Public sector net borrowing (PSNB)

PSNB covers both the current and capital elements of income and expenditure. As such, it is equal to the current budget deficit plus net investment (adjusted for depreciation). As noted earlier in this guide, the principal focus for monitoring purposes is the measure PSNB ex, which excludes borrowing and lending for public sector banks:

public sector net borrowing equals current budget deficit plus net investment

Referring again to the middle column of Figure 1, we can see that for the financial year-to-date, up to and including November 2017:

public sector net borrowing equals current budget deficit (£26.2 billion) plus net investment (£21.9 billion)

Net investment comprises the following components:

- gross fixed capital formation, which comprises acquisitions less disposals of capital assets
- (minus) depreciation of capital assets
- increase in inventories and valuables (typically a minor component)
- capital grants to and from the private sector

So PSNB ex for the period from April to November 2017 was around £48.1 billion.

In some periods, public sector revenue exceeds overall expenditure, which results in public sector net lending. January is a month that typically sees public sector net lending because it is characterised by higher than average levels of tax receipts, especially those arising from self-assessment.

Moving from a situation of annual net borrowing to a balance or net lending position is commonly referred to as eliminating the "deficit."

5.1.3 Reconciliation of public sector net borrowing and public sector net cash requirement (PSNCR)

Public sector net borrowing is the difference between payables (payments accrued to time of economic activity) and receivables (receipts accrued to time of economic activity), over a given period. Conversely, the public sector net cash requirement measures the amount of cash that the public sector needs to meet its commitments during a period, including welfare payments, interest and redemptions on loans, and other payments that must be paid as cash. Conceptually, this means there are two sets of factors accounting for difference between PSNB and PSNCR. These are:

Timing differences

Most transactions are recorded at the point in time when money changes hands in PSNCR, whereas for PSNB, expenditure is generally measured at the point where a liability arises. In the reconciliation of the two aggregates, most of these differences are recorded as accounts receivable or payable. There are particularly large timing differences in debt interest, arising mostly from the uplift on the principal (or capital) value of index-linked gilts. These are recorded as adjustments for interest on gilts.

Financial transactions

When cash is used to purchase a financial asset of equal value, there is no change to overall indebtedness, as the reduction in cash is balanced by the acquisition of an asset of comparable value. Hence there is no expenditure and the transaction has no impact on PSNB. However, there is necessarily a cash payment, which impacts on PSNCR. Many such transactions involve loans to the private sector and to rest of the world. Additional examples of financial transactions include net acquisition of company securities, which encompasses items such as privatisation proceeds that increase government cash reserves, and the purchase of shares in public sector banks, which depletes cash reserves.

The system of national accounts records non-cash transactions that reflect genuine economic activity. Many of these non-cash transactions have no impact on net borrowing. Such transactions include matching imputed tax and subsidies. However, some transactions, such as debt cancellation, do impact on net borrowing. These transactions represent another difference between net cash requirement and net borrowing. In Figure 1 these differences in the treatment of non-cash transactions are included in the "timing differences" box.

As the two aggregates are recorded largely using different systems and sources, there are also statistical discrepancies.

Referring to Figure 1, one can see that for the relevant period, the PSNCR on an ex-basis was around £53.4 billion. This comprised the £48.1 billion for PSNB ex, which was augmented by net cash transactions that increased the cash requirement by a further £23.3 billion, but was then reduced by £18.1 billion attributable to timing differences (48.1 plus 23.3 minus 18.1 equals 53.4).

As mentioned previously, the central government net cash requirement (CGNCR) is the aggregate that is closely connected to the amount of gilts issued by the Debt Management Office (DMO). In outturn, the CGNCR is used as a reconciliation item in the DMO's remit, offsetting the amount of gilts and Treasury Bills issued by the DMO and other liability issuance, for example, through National Savings and Investments (NS&I). The amount of cash held by the DMO is the difference between the remit and the CGNCR.

5.1.4 Public sector net debt (PSND)

PSND is defined as the public sector financial liabilities for currency and deposits, debt securities and loans, minus public sector liquid assets. The main components of liabilities are gilts and Treasury Bills issued and National Savings liabilities. The liabilities of gilts and other government bonds are included in PSND at face value, whose other liabilities are recorded at nominal value. The main liquid assets are bank deposits held with the Bank of England and foreign exchange reserves.

PSND is predominantly a cash-based measure and is therefore a stock value that is equivalent approximately to the cumulative PSNCR flows over earlier periods. However, some factors impact the two measures in different ways. For example:

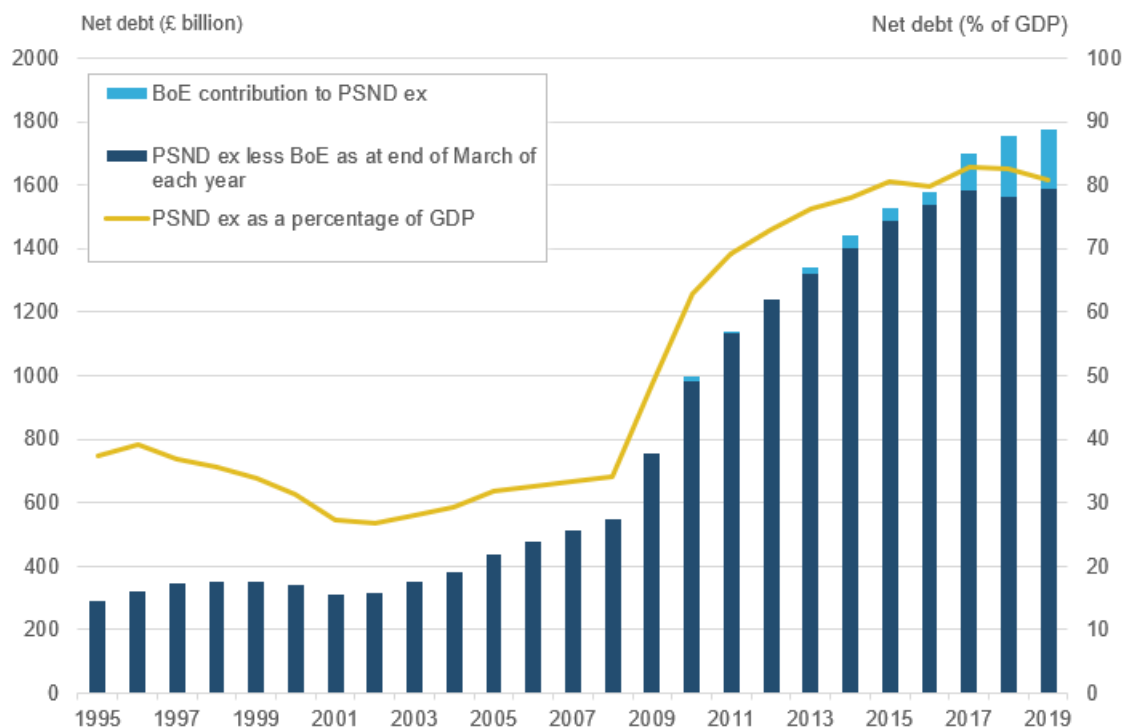
- the capital uplift on index-linked gilts is only recorded in the PSNCR when it is paid out at maturity but accrues in PSND over the life of the instruments
- when gilts are issued at discounts or premia, the level of PSND is deemed to have changed by the nominal value of gilts issued, whereas the impact on PSNCR reflects the actual cash amounts received
- fluctuations in exchange rates affect the sterling value of the official reserves of foreign currencies that are components of liquid assets that figure in the calculation of PSND; however, they do not impact the calculation of the PSNCR
- the reclassification of institutional units into and out of the public sector typically changes PSND without necessarily involving any movements in cash, such that there is no impact on PSNCR

The stock equivalent of PSNB is the public sector's net financial wealth. This differs from PSND as net wealth is measured at market as opposed to nominal values and all financial assets are netted off rather than merely liquid assets.

PSND also differs from general government gross debt (calculated for excessive debt and deficit procedure purposes, as explained in Section 4.3) in that the latter is on a gross basis (without netting off liquid assets) and is restricted to the general government sector (rather than the whole public sector).

Figure 2: The level of public sector net debt (excluding public sector banks)

UK, 1995 to 2019



Source: Office for National Statistics

As noted in Section 2.2, in the 2016 Autumn Statement the Chancellor announced that two new supplementary fiscal aggregates had been defined and these are the subject of a 2016 [ONS Methodology paper](#).

The first supplementary aggregate, public sector net debt excluding public sector banks and the Bank of England (PSND ex BoE), provides a somewhat narrower measure of net debt than PSND ex, by not only excluding the debt of public sector banks, but also the debt of the Bank of England (BoE).

The BoE's contribution to net debt is largely a result of its quantitative easing activities through the Asset Purchase Facility (APF), Term Funding Schemes (TFS) and the purchase of corporate bonds.

The APF was one of several initiatives that aimed to increase liquidity in the banking sector in the wake of the financial crisis by purchasing gilts from commercial banks. The APF's impact on debt is measured as the difference between the value of the reserves created to purchase gilt (or market value of the gilts) holdings and the face (or redemption) value of the gilts purchased.

In 2016 the APF was extended to enable the BoE to also purchase corporate bonds on the secondary market and to provide loans to participating banks and building societies at a rate close to Bank Rate under the [Term Funding Scheme](#) (TFS).

In January 2019, the TFS was transferred onto the BoE balance sheet, prior to its expansion in 2020 to include [Term Funding Scheme with additional incentives for SMEs](#) (TFSME).

The APF incurs debt via its purchases of gilts and corporate bonds, and the loans made to banks via the TFS and TFSME. These purchases and loans are funded through the creation of central bank reserves, which create a BoE liability equal to the value of the central bank reserves created.

The aim of the TFS and TFSME are to reinforce the transmission of low Bank Rate levels set by the Monetary Policy Committee to the interest rates faced by households and businesses.

Both the TFS and TFSME seek to achieve this by providing term funding to eligible banks and building societies at a rate at or close to Bank Rate, with the actual rate paid by banks being based on the volume of their net lending to households and businesses.

Lending under these schemes is supported by collateral, provided by the banks and building societies, in the form of securities and/or loan portfolios.

The ONS judged that our economic statistics should reflect both the TFS and TFSME in the public sector balance sheet as both a loan asset for the schemes lending to banks and building societies, and a deposit liability relating to the creation of central bank reserves. Since loans, like corporate bonds, are illiquid assets then they too raise PSND ex by the value of the central bank reserves created. When the scheme was announced, the BoE indicated that the value of lending in the TFS could reach around £100 billion, in actual fact the final size of the TFS at its closure to new drawdowns was £127 billion. Further, when the TFSME closed for new drawdowns in October 2021, the value of the lending reached £193 billion.

Our presentation of the BoE's contribution to net debt can be found in Table PSA9A in our [Public sector finances tables 1 to 10: Appendix A](#).

5.1.6 The supplementary aggregate, public sector net financial liabilities (PSNFL ex)

To provide a more complete picture of the public sector balance sheet, the 2016 Autumn Statement introduced a second supplementary aggregate, public sector net financial liabilities (PSNFL). PSNFL is a more comprehensive measure of the public sector balance sheet, which captures a wider range of financial assets (including, for example, the non-liquid assets held by the TFS) and liabilities than recorded in PSND ex. In common with the headline aggregates and PSND ex BoE, it is an ex-measure that excludes data for public sector banks.

PSNFL corresponds almost precisely to the national accounts concept of public sector financial net worth. The crucial difference is that for PSNFL the deposit, loan, and debt security assets and liabilities are recorded at face or nominal (redemption) value, whereas for financial net worth purposes they are recorded at market value.

In the context of government debt and fiscal sustainability measures, debt securities are most commonly recorded at face (or nominal) value as this more closely reflects the financing requirements of government. For this reason, PSNFL ex-measures the liabilities associated with debt instruments (such as gilts and loans) at their face (nominal) value. This approach is also consistent with the recommendations of the [2013 Review of PSF statistics](#) and the principles that emerged in regard to the composition of existing and new ex-measures.

In general, differences between market and face value for deposit and loan liabilities are likely to be minor, but there can be significant difference between the market and face value of gilts and other debt securities. Our estimates suggested that the market value of government debt securities in issuance at the end of March 2016 was almost £300 billion higher than the face value of those securities.

The 2016 [Methodology paper](#) lists various categories of assets and liabilities included within PSNFL ex, provides examples of their components and indicates whether associated valuations are at market or face value. Certain assets, such as monetary gold and financial derivatives, do not have nominal or face values in themselves and so are necessarily valued at market prices.

The paper identifies liabilities and assets that are common to both PSND and PSNFL, as well as those that are encompassed by PSNFL but excluded from PSND. The latter category includes equity, derivatives and the liabilities of funded public sector pension schemes.

A funded pension scheme is defined by its use of assets. A pension fund is endowed with an investment pot that was generated through member contributions. The fund uses this pot to generate return through investing in and trading assets (financial derivatives, gilts and property among other things). As such, a funded pension scheme holds both assets and liabilities.

Prior to September 2019, we netted off the investment assets from the total pension liability. The resulting figure, often referred to as the pension fund deficit outside of the national accounts framework, was included in the calculation of PSNFL as a liability for the government sector. Following [a review and a public consultation](#), in September 2019, we moved to the new gross approach of presenting funded pension schemes whereby the total pension liabilities, alongside with the financial assets held by the pension funds, are directly included in the calculation of PSNFL. However, non-financial assets, such as real estate, held directly by the pension funds are excluded.

In contrast to funded pensions, unfunded schemes do not use investment pots to generate return, as current income (contributions from employees) is used to pay current liabilities (pension benefits to retirees). As such, unfunded pension schemes do not hold investment assets, only obligations. The ESA 2010 framework considers obligations under unfunded schemes to be contingent. Such obligations are included in the supplementary statistics, such as the [UK National Accounts Table 29: Accrued-to-date pension entitlements in social insurance](#), but are not recorded on the public sector balance sheet in the core UK National Accounts publications such as the [Blue Book](#), nor in the ESA 2010-based fiscal statistics. On the other hand, our fiscal statistics produced on the basis of the International Monetary Fund's Government Finance Statistics Manual include such obligations.

5.1.7 Public sector net worth (PSNW ex)

In April 2023 we published a new fiscal aggregate in the PSF bulletin, public sector net worth (PSNW). It is a more comprehensive balance sheet measure compared with both PSND and PSNFL because it summarises the value of all assets held (both non-financial and financial) and considers the liabilities owed by the public sector. In common with the headline aggregates, PSNW is an ex-measure that excludes data from the public sector banks.

PSNFL is a broad measure of the balance sheet. However, it is not a comprehensive indicator of the public sector's net stock of assets and liabilities because it excludes non-financial assets, such as buildings owned by the government or the road networks. In flow terms, PSNFL captures the incurrence of a liability to pay for such assets but it does not capture the counterpart acquisition of the asset itself. Therefore, a measure of PSNW fills this gap as it is a comprehensive aggregate of the public sector's financial and non-financial assets less the total value of the public sector's liabilities.

The addition of PSNW completes our suite of European System of Accounts (ESA) 2010-based public sector finances statistics. PSNW is a direct extension of PSND and PSNFL, and is fully comparable with existing stock and flow estimates (as illustrated in Figure 1).

Figure 3: Assets and liabilities included in the different measures of the public sector balance sheet, including the ESA-based public sector net worth

	Public Sector Net Debt (PSND) European System of Accounts (ESA)-based	Public Sector Net Financial Liabilities (PSNFL) ESA-based	Public Sector Net Worth (PSNW) ESA-based	Public Sector Net Worth (PSNW) Based on International Monetary Fund's government finance statistics framework
Assets:				
Assets associated with additional public-private partnerships ¹				✓
Non-financial assets			✓	✓
Illiquid financial assets ²		✓	✓	✓
Liquid financial assets ²	✓	✓	✓	✓
Liabilities:				
Deposits and currency	✓	✓	✓	✓
Bonds (debt securities) and loans ³	✓	✓	✓	✓
Other financial liabilities ⁴		✓	✓	✓
Funded public sector pension liabilities		✓	✓	✓
Unfunded public sector pension liabilities				✓
Liabilities associated with additional public-private partnerships ¹				✓

The ONS already publishes two measures labelled PSNW, one in the National Balance Sheet (NBS) and the other in the supplementary statistics consistent with the International Monetary Fund's Government Finance Statistics Manual 2014 (IMF GFSM).

The new PSNW measure published in the PSF bulletin is compliant with ESA 2010, as is the existing NBS aggregate. However, it is also consistent with the PSF statistics in its approach to revisions, to the public sector boundary, and to valuations.

The most substantive differences between the new PSNW measure and the existing measures of public sector net worth are the asset and liability coverage, sectoral coverage and valuation of debt instruments.

The new PSNW measure will include financial assets and liabilities, and non-financial assets in line with ESA-2010; this excludes unfunded public pension liabilities and contingent liabilities. This aligns with PSNW in the NBS however, our IMF-GFSM consistent statistics include unfunded public pension liabilities.

For the new PSNW measure, the public sector will be defined as central government, local government, public non-financial corporations, and public financial corporations, including the Bank of England and public sector funded pension schemes, but excluding public sector banks. PSNW in the NBS differs as it excludes public financial corporations and has a different timeline for the implementation of reclassifications. The IMF-GFSM consistent statistic is broadly aligned with the new measure but includes additional public-private partnerships.

As mentioned in the previous sections, debt securities in the PSF are measured at face value. PSNW in the NBS and PSNW in our IMF-GFSM is valued at market value. For more information on the methodology and differences between existing PSNW measures, see our published article: [Wider measures of the public sector balance sheet: public sector net worth](#).

The addition of PSNW to the balance sheet aggregates enables a complete and integrated presentation of the public sector finances, providing a fuller picture of the UK's fiscal position (as demonstrated in Figure 2). Here we consider the narrowest measure of the balance sheet, the redemption value of central government gilts issued by the Debt Management Office. We build upon this by widening the coverage of both the sub-sector and range of assets and liabilities included to reach the far wider measure, PSNW.

Table 3: Public sector balance sheet measures, April 2023
Balance sheet measures as at the end of 2023 Mar, all measures expressed in £ billion

Classification of assets and liabilities^{1 2}	Central government gilts	General government gross debt	Public sector net debt excluding both Bank of England and public sector banks	Public sector net debt excluding public sector banks	Public sector net financial liabilities excluding public sector banks	Public sector net worth excluding public sector banks
Total³	2,144.8	2,537.0	2,247.0	2,530.4	2,176.8	-605.8
Assets: Non-financial						1,571.0
Assets: Illiquid financial					1,035.5	1,035.5
Assets: Liquid financial			260.4	305.5	305.5	305.5
Liabilities: Currency and deposits		238.8	244.3	1,297.7	1,297.7	1,297.7
Liabilities: Gilts	2,144.8	2,144.5	2,105.7	1,377.9	1,377.9	1,377.9
Liabilities: Other debt securities and loans		153.7	157.4	160.3	160.3	160.3
Liabilities: Other financial liabilities					681.9	681.9

Source: Office for National Statistics and Debt Management Office

Notes

1. All aggregates presented on an 2010 European system of national and regional accounts (ESA 2010) basis unless indicated.
2. Consolidation between sub-sectors mean that the size of assets and liabilities (such as gilts) impacting on the measure can change as the coverage increases.
3. Total equals Liabilities less assets except public sector net worth, where Total equals Assets less liabilities.
4. Non-financial account data based on UK National Balance Sheet.
5. 'Liquid financial assets' mainly consists of foreign exchange reserves and cash deposits. 'Illiquid financial assets' includes assets such as loans, financial derivatives, and other accounts receivable.
6. Gilts liabilities have been adjusted to remove the gilts held by Pool Re which is classified as a central government body.
7. 'Other financial liabilities' includes monetary gold and special drawing rights, standardised guarantees, financial derivatives, funded pension liabilities and other accounts payable.
8. We publish an additional presentation of the UK public sector balance sheet following International Monetary Fund's Government Finance Statistics framework in the public sector finances: Appendix E.

5.2 Derivation of the fiscal measures

In practice, there are two methods that can be used to calculate budget deficits:

- "above the line" – from income and expenditure, with the budget deficit defined as expenditure minus income
- "below the line" – by summing the transactions that finance the deficits

A combination of the two approaches is used for the estimates in the Public sector finances (PSF) bulletin.

Central government net borrowing and current budget deficit are predominantly measured above the line, whilst the central government net cash requirement (CGNCR) is calculated and cross-checked using both methods.

A breakdown of the income and expenditure determinants of the CGNCR is provided in the PSF bulletin.

The main fiscal flow aggregates (ex-measures of PSNB, PSCB and PSNCR) are formed by combining totals for the relevant individual public sector sub-sectors (that is, central government, local government, public corporations, public sector pension funds and the Bank of England). Each sub-sector total includes the transactions with other sub-sectors, which exactly net off one another in the combined PSF aggregates. Hence, a grant from a central government (CG) to a local government (LG) body would have increased CG net borrowing but reduced the LG net borrowing, by equal amounts.

To produce overall public sector aggregates, the public sector banking group(s) components are added to the ex-aggregates.

Notes for: Fiscal aggregates included in the public sector finances statistics

1. Please note that the estimates used in this equation have been rounded to the nearest 100 million, which leads to a £0.1 billion discrepancy between the sum of the components and the total.

Notes for: Fiscal aggregates included in the public sector finances statistics

1. Please note that the estimates used in this equation have been rounded to the nearest 100 million, which leads to a £0.1 billion discrepancy between the sum of the components and the total.

6 . Data sources and data quality issues

This section details main sources of data used to produce the published monthly estimates for the central government, local government and public corporations sectors, and provides examples of how the data from these sources evolve over time.

The Public sector finances (PSF) bulletin is compiled predominantly from administrative data. Best practice in the use and treatment of administrative data is set out in the [Quality assurance of administrative data \(QAAD\) \(PDF, 299KB\)](#) guidelines published by the UK Statistics Authority. More detail on the QAAD guidelines can be found in Sub-section 6.4, along with [an assessment of quality assurance issues](#) for data and methods underpinning the production of the PSF.

6.1 Central government

Central government's contribution to the public sector borrowing and debt aggregates is largely compiled by HM Treasury (HMT), mainly using a range of [administrative data sources \(PDF, 103KB\)](#).

This is efficient, as the information is collected once and then used for a range of purposes. As explained in Section 3.3, central government data are reported on an accruals basis in almost all instances.

6.1.1 Central government expenditure data

The main source of central government expenditure data is HMT's public spending database, the Online System for Central Accounting and Reporting (OSCAR), which collects financial information from central government departments and the devolved administrations.

Prior to the financial year ending 2013, the HMT database known as [Combined Online Information System](#) (COINS) was the repository for the corresponding data. This and the [OSCAR database](#) are designed to monitor spending against the frameworks outlined in Section 4. Statisticians in HMT ensure that OSCAR maintains its integrity as a main data source for the PSF bulletin.

As part of its commitment to increased transparency in regard to public spending, HMT has published the [quarterly raw data from OSCAR](#) (and COINS) and [annual raw data](#) from OSCAR since June 2010.

Central government expenditure data from OSCAR generally go through various stages of refinement during the current financial year and beyond. Typically, this evolution comprises four stages. Adjustments to the data may be made during any stage, resulting in revisions to estimates previously published in the PSF bulletin.

Stage 1

Each month, departments submit to OSCAR a monthly profile of spending for the current financial year. This includes estimates of actual spend for completed months (outturn) and forecasts for future months. In subsequent data supplies, departments can provide updated estimates for any month, which tends to lead to frequent and sometimes significant revisions to the estimates published in the bulletin.

Some departments are more likely to revise their data than others. This may be because of a department falling into either of the following categories:

- an arrears reporter: some departments report their expenditure in arrears; the latest data reported in the bulletin through the year are not an estimate of actual spending but rather a forecast
- subject to non-standard reporting arrangements: some bodies, whose data are amalgamated into departmental OSCAR returns, provide updated data on a quarterly rather than monthly basis; these are typically arms-length bodies associated with departments, such as NHS Trusts and Foundation Trusts (whose data are subsumed within the Department of Health's return)

Stage 2

Following the completion of the financial year in July, HMT's annual [Public Spending National Statistics](#) are published. These are based on most departments' audited resource accounts and so departments update their full-year expenditure estimates (but not their monthly profile) for this publication.

Stage 3

The full-year estimates are updated for the autumn update of HMT's Public Spending National Statistics. Additionally, there may also be revisions because of:

- departments who missed the July deadline for the initial Public Spending National Statistics publication
- new data, changes or corrections that weren't reflected in the July update
- methodology updates

Stage 4

In the February following the end of the financial year the winter update of HMT's Public Spending National Statistics is published. Usually, this will incorporate the finalised, audited accounts of the devolved administrations along with those of any outstanding departments, including outturn data for academies.

The most significant revisions generally occur within stages 1 and 2. Revisions resulting from updates at stages 3 and 4 are often not material.

A number of "national accounts" adjustments are made to the OSCAR data. These adjustments may be made for several possible reasons including the following.

Conceptual framework differences

Although HMT's budgeting system is designed to align closely with the European System of Accounts 2010: ESA 2010 framework for most transactions, there are still some differences between the ESA 2010 and International Financial Reporting Standards (IFRS) reporting requirements. Where necessary, conceptual adjustments are applied to bring budgeting data in line with the national accounts framework.

Error corrections

Sometimes errors are identified in the mapping or profiling of data that departments have loaded on to OSCAR. The data held on the database will generally be amended to correct the errors. However, in some cases this may not be possible within the tight publication timetable for the bulletin and ad-hoc adjustments are instead made to the data supplied to the Office for National Statistics (ONS).

Different approaches to the estimation of depreciation

As noted in earlier sections, depreciation of capital stock is a significant element in the calculation of the current budget deficit and public sector net investment. Like many other national statistics institutes, the ONS uses a perpetual inventory model to estimate depreciation, whereas departments' own estimates are likely to reflect commercial accounting approaches.

Treatment of student loans

A characteristic of the UK student loan policy is that, by design, a significant proportion of the stock of student loans will be cancelled rather than repaid. This can be for a number of reasons, but most notably because a student's earnings may remain below the earnings threshold after they graduate, or may rise above it too infrequently or by too small an amount to repay both their principal and the interest on it before the loan matures.

In recognition of this characteristic, we partition student loans into conventional lending, since some portion of the loans will be repaid, and capital transfers, since some will not. To do that, we work with the Department for Education to model expected repayments and estimate the government expenditure element. Our approach is explained in detail in a separate methodological guide, [Student loans in the public sector finances](#).

Use of sources other than OSCAR

A limited number of central government expenditure items come from sources other than OSCAR. The largest of these is expenditure on debt interest, which is derived from a variety of sources – mostly the Debt Management Office (DMO) and HMT finance systems but also from other sources including National Savings and Investments (NS&I) and UK Asset Resolution (UKAR). Other data come from sources such as HM Revenue and Customs (HMRC), Treasury cash systems and the Bank of England (BoE).

As explained previously, the data reported monthly to HMT on OSCAR is on an accrued basis, as required for published departmental resource accounts. However, [the calculation of accrued debt interest expenditure](#) is more complicated. Debt interest expenditure comprises the sum of four separate components.

Coupon payments

Most interest payments on UK gilts (generally referred to as coupon payments) are scheduled at six-month intervals from the National Loans Fund (NLF). The NLF is a government bank account held with the BoE. Information on coupon payments comes from HMT's financial management systems. An adjustment is applied to distribute the coupon payments to the months when they accrued. This spreads monthly payments evenly for conventional gilts (that is, those with a fixed interest rate). The adjustment is more complicated for index-linked gilts, with the accrued monthly interest payments varying with movements in the Retail Prices Index (RPI).

Uplift on index-linked gilts

The principal of an index-linked gilt is also adjusted in line with RPI. Rather than scoring this capital uplift at the date the gilt is redeemed, the uplift is accrued over the life of the gilt, mirroring movements in RPI.

Amortisation of discounts and premia of issue

Often, gilts are not issued at their face or nominal value. They may have been sold at a discount (or premium), such that the debt issued is less than (or greater than) the nominal value. As we noted in Section 5, the impact on public sector net debt (PSND) reflects only the nominal increase in government liability from the issuance of the gilts. The discounts or premia are arguably part of the financing cost and under [ESA 2010](#) are treated as interest accruing. In practice, information on the profit or loss made at gilt auctions is supplied by the DMO and these amounts are then distributed evenly over the lifetime of the gilt until it is redeemed.

Other

Other relatively small amounts of interest that government pays out are scored to public sector net borrowing (PSNB) as they accrue. These include interest on Treasury Bills and National Savings certificates.

6.1.2 Central government income data

Central government income largely comprises tax receipts, the bulk of which are collected by HMRC. Therefore, the majority of PSF receipts are collated and quality-assured by HMRC analysts prior to their delivery to HMT and the ONS.

While quality assurance processes are mainly the responsibility of the authorities collecting the receipts (in most cases HMRC), additional checks are applied by HMT (including cross-referencing with HMT's financial systems) and by the ONS.

HMRC publishes [taxation data](#) as National Statistics series. Hence, its data collection and quality assurance procedures are subject to the scrutiny of the UK Statistics Authority. The requirements of the PSF bulletin and national accounts are fully embedded into all the receipts monitoring systems.

The principle underlying HMRC's recording of tax receipts on an accruals basis is to record them against the period in which the tax liability arises (which may, or may not, correspond to the period when the underlying economic activity took place). For most tax receipts this means that, in practice, a simple time lag is applied to the cash series. For example, Pay As You Earn (PAYE) cash receipts are lagged by one month as, for the most part, the government receives PAYE taxes one month after salaries are paid.

Similarly, Value Added Tax (VAT) is accrued over the quarter preceding the cash receipt. In some cases, an appropriate accrual time is not available in a timely manner and so unaltered cash data are used instead, for example, for self-assessed income taxes. This was formerly the case for Corporation Tax. However, commencing with the Public sector finances bulletin released on 21 February 2017, the [ONS has used an improved methodology for the time of recording of receipts](#) related to Corporation Tax, Bank Corporation Tax Surcharge, and the Bank Levy.

The improved methodology derives accrued revenue figures by adjusting cash receipts to more accurately reflect the time at which the economic activity relating to the tax receipts took place, which can be up to 21 months before the cash has been received. The changes were in line with the accrual principles prescribed in the ESA 2010 and the System of National Accounts 2008, which require that taxes should be recorded "when the activities, transactions or other events occur that create the liabilities to pay taxes."

As most tax data are time-lagged, the published estimates for the latest periods include significant elements that have been forecast. This is also true for expenditure estimates some of which are reported in arrears. For periods older than one quarter, estimates of tax receipts apart from Corporation Tax are largely data driven (that is, they reflect outturn data). However, revisions can still occur as a result of the auditing process, particularly after the year-end.

In addition to the accruals adjustments, other adjustments to tax data are required in some cases to move to a national accounts-consistent basis. Most notable are the inclusion of "imputed" tax and spend items, such as Renewable Obligation Certificates and VAT refunds to public sector bodies:

- the Renewable Obligation Certificates (ROCs) scheme is an incentive mechanism to ensure that an increasing proportion of electricity in the UK is generated using renewable methods; the transactions between electricity generators and suppliers are imputed as a tax and a subsidy
- producers pay VAT on materials that they use in the course of production, but are able to claim those VAT payments back from HMRC; government is a "producer", however, it does not pay VAT accrued on materials used in the production of public services, nor does it receive the repayment for such expenditure, therefore, these transactions have to be imputed

Additional receipts are obtained from non-HMRC sources, which include:

- non-HMRC tax or levy raising bodies that supply data directly to the ONS; this includes the Driver and Vehicle Licensing Agency (DVLA), which provides data on Vehicle Excise Duty
- HMT sources, including OSCAR, which cover the majority of dividend and interest receipts as well as the TV Licence fee and various relatively low-value receipts items (including, for example, passport fees)
- the ONS modelling to estimate gross operating surplus; by convention, the government gross operating surplus is assumed to be equal to depreciation, which is derived from ONS PIM models

6.1.3 Cash data

Most cash data come from HMT's cash management systems, supplemented with data from the DMO, BoE and other sources, such as National Savings and Investments.

Estimates of the central government net cash requirement are produced via a system of balancing various central government accounts, for which complete balances are produced each month. The most significant of these are the Consolidated Fund, National Loans Fund and the Debt Management Account.

Within each account, transactions are divided into "determinants" of the cash requirement and financing items. Determinants are the income and expenditure associated with government business, while financing items are those activities required to fund government business. As the accounts are fully balanced, the sum of the determinants (that is, the net cash requirement) equals the sum of the financing items.

6.2 Local government

Most local government data are annual, relating to financial years (April to March). Detailed annual returns of expenditure and income are compiled by local government bodies and collected by the [Department for Levelling Up, Housing and Communities](#) (DLUHC), [Scottish Government](#) and [Welsh Government](#). Summary data are compiled for [Northern Ireland](#).

The most detailed returns are collected from local authorities at two stages for any given financial year: budget and outturn. Revisions to data are expected between these stages because plans and priorities change, and because some items of receipts and spending are unpredictable. Outturn data collected for England and Scotland are released in two phases; provisional and final outturn. This can lead to some minor updates because of changes at the final auditing stage.

For England, Scotland and Wales, data for the current year are based on local government budgets. However, in recent years, planned expenditure initially reported in budgets has systematically been higher than the final outturn expenditure reported in the audited accounts. The Office for National Statistics (ONS) therefore includes four adjustments to reduce the amounts reported in budgets: one for England revenue (current) expenditure and one each for England, Scotland and Wales capital expenditure. In the context of the UK totals, Northern Ireland data do not need similar adjustments.

These underspend adjustments are used until the outturn data are published and are based on observed differences between budget and outturn data for previous years. These are then reviewed based upon additional information available within the year, such as from the quarterly DLUHC surveys described in this section. The ONS underspend adjustments for England are in addition to underspend adjustments made by DLUHC to capital expenditure budget data, mainly because of the aforementioned need for the ONS to take into account any in-year movements and new information.

Final figures are based on audited resource accounts, which are available between 7 and 11 months after the end of the financial year.

Some data are available within the year, for months or quarters:

- monthly data relating to central government grants to local government are collected on OSCAR (HM Treasury database)
- monthly data for local government deposits with banks and building societies are collected by the Bank of England
- DLUHC collects quarterly data for the whole of the UK on the borrowing and lending of local government; in addition, data are collected monthly from a sample of around one-third of authorities, which covers proportionally more authorities with larger borrowing and lending
- monthly reports from the DMO of all changes in the levels of Public Works Loan Board lending
- quarterly DLUHC returns covering England provide quarterly estimates of current and capital expenditure, interest and dividend receipts, and Council Tax receipts

These more recent in-year data are used wherever possible in preference to the local government budget data. The in-year data are available up to three months after the relevant period. In-year monthly or quarterly data are replaced or updated when provisional outturn data and final outturn data are published.

Quarterly data are not currently available for Scotland, Wales, or Northern Ireland. The ONS therefore assumes that the quarterly pattern observed for England can also be applied to the rest of the UK. When no monthly data are available, quarterly amounts are divided by three.

The Office for Budget Responsibility (OBR) also makes underspend adjustments when forecasting local authority spending. Their [methodology](#) is described on the OBR website. The ONS works with the OBR to review the underspend adjustments we each apply to the local authority budget data. However, the ONS and OBR underspend assumptions can differ, mainly because they are reviewed at different times, according to the respective publication schedules.

The ONS and OBR both adjust their underspend assumptions to reflect the latest available in-year data, but the ONS and OBR figures will differ as the year progresses, depending on the release dates for the latest data and on the ONS revisions policy.

The ONS also adjusts budget housing benefit data supplied by local authorities at the beginning of each financial year. These adjustments are made because in-year housing benefit data are available from the OSCAR database (see Section 6.1.1), which because of its timeliness the ONS uses to record the specific amounts allocated to authorities by the Department for Work and Pensions (DWP). Local authorities then use these allocated amounts to pay their tenants, via rent rebates to local authority tenants and rent allowances to private sector tenants, and provide estimates of these payments for the financial year in their budgets. Recently these budgeted figures have been higher than the in-year DWP data, meaning that the adjustment usually operates similarly to the underspend adjustments – it reduces the total amount reported in budgets to one closer to that eventually reported at the outturn stage.

6.3 Public corporations

6.3.1 Public non-financial corporations

In the aftermath of the Second World War, many strategically important industries were nationalised; that is, they were taken into public ownership and control. In the 1980s, state ownership of many industries was called into question and many former public corporations have been "privatised": that is, sold to the private sector. Nevertheless, albeit their scope and role have considerably diminished over several decades, public corporations still play an important role in certain segments within the economy and form their own sub-sector for the purposes of the public sector finances.

The Office for National Statistics (ONS) has been collecting quarterly data directly from some of the largest non-financial public corporations via survey questionnaires for many years. However, because of privatisations and developments in the way we collect the data, the number of public corporations participating in the survey has fallen. We now rely on different sources for most public corporations, such as the HM Treasury's (HMT) Whole of Government Accounts (WGA) discussed in Sections 3.3 and 3.4.

Data for any public corporations that are not included in WGA are extracted from their annual reports. One example is the Crown Estate, an independent commercial business created by an Act of Parliament, whose legal owner is the Sovereign, but whose net surplus, or profit, is passed to HMT for the benefit of the nation.

Historically, a significant part of the subsector related to the provision of social housing. Until November 2017, housing associations operating in all countries of the UK were classified to the public corporations subsector. However, following the passage of the Regulation of Social Housing (Influence of Local Authorities) (England) Regulations 2017 and the equivalent legislation in Scotland and Wales, we reviewed the classification of registered providers of social housing in these countries. We concluded that significant public sector controls have been removed and these bodies should be treated as private corporations from the dates at which the regulations came into force in each country.

Data for housing associations in Northern Ireland, which remain in the public sector, are based on the forecasts produced by the Office for Budget Responsibility, and updated when audited data become available.

The Housing Revenue Account, which relates to local authority-owned housing stock, is a quasi-corporation and is classified to the public corporations sector. Data for the Housing Revenue Account are supplied by the Ministry of Housing, Communities and Local Government.

Given that, apart from the quarterly survey data, virtually all data for public corporations are extracted from annual accounts or reports it is only possible to produce monthly or quarterly profiles using a simple set of assumptions. Like many local government and some central government statistics, estimates relating to public corporations are prone to revision until final, audited accounts are available.

6.3.2 Public financial corporations

The data for public financial corporations, such as the Bank of England (BoE), are also largely sourced from published accounting data. Where these data do not fully meet the statistical requirements, we collect some of the clarifying information directly from the relevant units.

In September 2019, we adopted the gross recording of funded public sector pensions. This meant that public pension administrators, and with them the pension funds with all their assets, were included in the statistical boundary for the public sector. Pension funds are considered to be a form of financial corporation, although we often present them separately for analytical purposes.

The Pension Protection Fund (PPF) is also included in the pension fund subsector of the public corporations. To appropriately reflect its activities in the accounts, we view the PPF as a public pension scheme rather than a protection fund in a narrow, statistical sense.

Pensions differ from most elements of fiscal statistics in their heavy reliance on actuarial modelling. Most pensions in the public sector are provided by the so-called defined benefit (DB) schemes, which use a formula to determine the size of the annuity or payout to which a retiree is entitled. The formula often includes considerations such as salary, length of service and age at retirement, among various other factors. As a result, the size of the pension liability recognised on the public sector balance sheet depends on demographic factors, such as life expectancy, economic assumptions such as pre-retirement wage of the scheme members, as well as the discount rates used in valuing the future liability.

The method of quantifying the value of pension liabilities in statistics is similar to that used in business accounting and is based on actuarial estimates for each scheme. However, there are important differences in assumptions between the accounting and statistical treatments. The full list of statistical assumptions is provided in our article [Pensions in the national accounts: UK Table 29 methodology](#), while the general treatment of pensions in fiscal statistics and their impacts on the main fiscal aggregates are explained in detail in a separate guide, [Pensions in the public sector finances](#).

6.4 Quality assurance of administrative data

While some data inputs to the public sector finances (PSF) production are collected via surveys, most originate in administrative systems, which may not be designed for statistical purposes. Therefore, it is important that the data are scrutinised and subjected to checks that provide assurance regarding their integrity and validity.

The UK Statistics Authority (the Authority) published an [assessment report for the PSF bulletin](#) in October 2015. One of the requirements resulting from this assessment concerned the quality assurance of administrative data sources, in relation to which the Authority stated that "there is a clear need for ONS {the Office for National Statistics} and HM Treasury to identify and investigate the quality assurance arrangements for the administrative data sources for public sector finances statistics."

To this end, the ONS PSF team assessed the administrative data sources used in the compilation of the PSF statistics, using the Authority's Administrative Data Quality Assurance Toolkit.

The Toolkit focuses on four areas of practice associated with data quality:

- operational context and administrative data collection
- communication with data supply partners
- quality assurance (QA) principles, standards and checks by data suppliers and internal or external audit in the data assurance process
- producers' QA investigations and documentation

In conjunction with these four practice areas, the Administrative Data Toolkit encourages consideration of potential issues associated with data, which may affect the quality of the statistics, as well as the nature of the public interest served by the statistics.

Through our assessment we identified common quality assurance practices amongst our data suppliers:

- suppliers generally have quality assurance procedures in place where raw data are taken from administrative systems, during editing and manipulation stages, as well as prior to sending to the PSF team or publication
- quality assurance procedures include validation checks such as those related to data changes, revisions, growth rates and checking for plausibility
- data are often signed off by senior management prior to sending to the PSF team or publication
- where suppliers publish their own data, quality assurance information is generally published alongside
- revisions policies exist
- most data suppliers are subject to some form of external auditing, but also have their own internal audit procedures

Quality assurance carried out by the PSF compiler team after receiving data from suppliers fall into the following areas:

- data are checked for completeness, that is, we have received what we require
- data are analysed by magnitude of revisions and growth rates in both monetary terms and percentages of the prior value – this is completed over several iterations for supplied data and during processing; any anomalies are queried with suppliers
- quality-assured data and a draft bulletin are sent to senior staff and main internal (within ONS and HM Treasury) data suppliers for sign-off

The [full findings and conclusions of the exercise](#) are documented.

Following this exercise, the team made several changes to quality assurance procedures and introduced methodological improvements, which have enhanced the quality of PSF statistics. Examples are provided in Annex 3.

7 . Relationship with the national accounts and revisions to published data

The statistics reported in the Public sector finances (PSF) bulletin differ from corresponding estimates provided in national accounts (NA) publications, such as The Blue Book; UK Balance of Payments, The Pink Book; and Quarterly national accounts. The differences do not reflect fundamental 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.

Differences and inconsistencies reflect the more flexible [revisions policy](#) that applies to PSF statistics. The intention is to incorporate the most up-to-date data for all time periods, in order that the Office for Budget Responsibility (OBR)'s forecasts, and government fiscal and other economic policies are based on the most timely data available. Revisions can be incorporated for any time periods and in any month.

In comparison, the NA revisions policy is much more restrictive. This is attributable to the complex, integrated nature of the accounts, which generally only allow long time-series revisions to be made at a single point in the year. This means that the PSF almost invariably incorporates data and methodological revisions concerning the public finances ahead of the NA. Consequently, data presented in the PSF bulletin are often inconsistent with most recently published national accounts data for the corresponding periods.

Periodically, an alignment process is undertaken to ensure that quarterly data presented in the PSF bulletin and quarterly national accounts estimates published for constituent sectors and sub-sectors (such as central government and local government), are as consistent and coherent as possible.

It has become customary for details of [the alignment process and the associated methodological and classification issues](#) to be set out in an annual article. An example of such an article was published in September 2017. It discusses examples of reclassifications, methodological improvements and implementation of new statistical rules that accounted for some of the differences in net borrowing exhibited in NA and PSF publications around that time. These included certain developments that were detailed in earlier sections within this guide, such as improved methodology for the time of recording of receipts related to Corporation Tax (CT), Bank Corporation Tax Surcharge and the Bank Levy (see Section 6.12), as well as the modelling of the accrued-to-date (net) liability for the Local Government Pension Scheme (LGPS).

8 . Acronyms and abbreviations

AME – Annually managed expenditure: Spending in departmental budgets that is difficult to manage precisely. Often it is particularly volatile or demand-led (for example, benefit payments, tax credits)

APF – Asset Purchase Facility: A subsidiary of the Bank of England empowered to improve liquidity and strengthen banks' balance sheets

BoE – Bank of England

CG – Central government: The central government sub-sector of the public sector or a property of that sub-sector. Public sector non-market bodies with a national remit (which includes the devolved administrations in Northern Ireland, Scotland and Wales)

CGNCR – Central government net cash requirement

COINS – Combined Online Information System: HM Treasury's public spending database until the financial year ending 2013. It was used to collect financial management data from across the public sector to support fiscal management, Parliamentary estimates, [Whole of Government Accounts](#) and statistical requirements such as national accounts and public sector finances

CPI – Consumer Prices Index: A measure of inflation used for targeting purposes by the Monetary Policy Committee

CT – Corporation Tax

DEL – Departmental expenditure limit: Departmental spending total that is set during regular Spending Reviews. DEL includes items that departments have the power to manage such as wages or consultancy spend

DLUHC – Department for Levelling Up, Housing and Communities

DMO – Debt Management Office: An agency of HM Treasury, established in 1997 to conduct the UK's cash and debt management activities

ex-measure – public sector finances aggregate that excludes the corresponding data for any public sector banking group: ex-measures are used in fiscal targets

EDP – Excessive deficit procedure: Protocol within the Maastricht Treaty that requires European Union members to report their general government debt and deficit twice a year to the European Commission

EUROSTAT – The Statistical Office of the European Union

EFO – Economic and Fiscal Outlook: The Office for Budget Responsibility's biannual publication that includes their fiscal and economic forecast for the UK over the next five years and the assessment of the likelihood the government will meet its fiscal mandate

ESA – European System of Accounts: The system of national and regional accounts used by members of the European Union. UK National Accounts and the public sector finances are currently compiled according to [ESA 2010](#)

ESCC – Economic Statistics Classification Committee: ONS committee of national accounts experts who approve all national accounts classification decisions

FRAB – Financial Reporting Advisory Board: Advises on reporting across government departments and on the implementation of public sector accounting policies, and updates the Government Financial Reporting Manual (FReM)

FReM – Government Financial Reporting Manual: The technical accounting guide for the preparation of financial statements of central government entities

FRSR – The Office for Budget Responsibility's Fiscal Risk and Sustainability Report

GAAP (UK) – Generally accepted accounting principles (or practice): The accounting standards used in UK central government finance until the financial year ending 2009

GDP – Gross domestic product

GFSM – International Monetary Fund's Government Finance Statistics Manual. The ONS publishes a supplementary presentation of the public sector finances produced in accordance with [GFSM 2014](#)

GG – General government: The government sector of the public sector, that is, central plus local government. The UK reports its GG debt and deficit to both the OECD and the IMF on a quarterly and annual basis

HMRC – Her Majesty's Revenue and Customs

HMT – Her Majesty's Treasury

IFRS – International Financial Reporting Standards used in UK central government finance from financial year ending 2010 onwards

IMF – International Monetary Fund

LG – Local government: The LG sub-sector of the public sector or a property of that sub- sector. Public sector non-market bodies with a remit that is not larger than a few local authority boundaries at most. Entities (regardless of their remit) that are controlled by other LG bodies are also in this sector

LGPS – Local Government Pension Scheme

MGDD – Manual on Government Debt and Deficit: A Eurostat manual that provides supplementary advice on the application of the European System of Accounts for the purposes of producing excessive deficit procedure statistics

MPC – Monetary Policy Committee of the Bank of England: Since May 1997 the MPC has been responsible for setting UK monetary policy to meet the government's inflation target

NA – National accounts

NLF – National Loans Fund

NNDR – National Non-domestic Rates, also known as business rates

OBR – Office for Budget Responsibility: Established in May 2010, the OBR is an independent body whose main roles are producing the government's official economic and fiscal forecasts and assessing the sustainability of the public finances

OECD - the Organisation for Economic Cooperation and Development

ONS – Office for National Statistics: The UK's independent statistical agency

OSCAR – Online System for Central Accounting and Reporting: The database replacement for COINS, in use from financial year ending 2013 onwards, used to collect financial management data from across the public sector to support fiscal management, Parliamentary Estimates, WGA and statistical requirements such as National Accounts and Public sector finances

PAYE – Pay As You Earn

PC – Public corporation: The PC sub-sector of the public sector or an institutional unit classified to that sub-sector

PESA – Public Expenditure Statistical Analyses: A command paper produced by HM Treasury with detailed analysis of public spending outturn and forecasts. Also, the commonly-used name for HM Treasury's Public Spending National Statistics series, which contain the outturn data used in the command paper

PS – Public sector: Includes central government and local government sectors (together comprising the general government sector) and public corporations

PSF – Public sector finances

PSCB – Public sector current budget deficit

PSNB – Public sector net borrowing

PSNCR – Public sector net cash requirement

PSND – Public sector net debt

PSND ex Bank of England – Public sector net debt excluding the Bank of England: Obtained by deducting the assets and liabilities held on the Bank of England's balance sheet from public sector net debt and thereby excluding the effects of the Asset Purchase Facility (APF) and Special Liquidity Scheme (SLS)

PSNFL – Public sector net financial liabilities: A broader measure of debt than public sector net debt

PSNW – Public Sector Net Worth

RAB – Resource accounting and budgeting

SNA – System of National Accounts: International guidelines from the UN on compiling National Accounts. The 2008 version is the most recent

SLS – Special Liquidity Scheme: A Bank of England scheme to increase liquidity in the banking sector by allowing banks to swap temporarily illiquid securities for Treasury Bills

TFS – Term Funding Scheme: A mechanism by which the Bank of England can purchase corporate bonds via the Asset Purchase Facility

VAT – Value Added Tax

WGA – Whole of Government Accounts

9 . Contact details

As part of our continuous engagement strategy, we welcome feedback on this article. Please email: public.sector.inquiries@ons.gov.uk.

In addition, queries may be directed to the Media Relations Office: media.relations@ons.gov.uk.

10 . Annex 1: Additional sources of statistics and complementary information on the public finances

The Office for National Statistics (ONS) has published a broad range of articles discussing methodological and other aspects of public finances and we have referenced and provided links to a number of these in this guide. The following sources relate primarily to estimates published at UK level:

- [UK government debt and deficit](#) - a quarterly ONS publication that sets out the UK's general government debt and deficit position in line with definitions from the Maastricht Treaty
- [Public sector finances analytical tables \(PSAT\)](#) - a monthly ONS publication that shows transactions related to borrowing by sub-sector; this time series dataset (1946 to present) is published one day after the main Public sector finances (PSF) bulletin

HM Treasury (HMT) publications include:

- [Public spending statistics](#), a quarterly publication, provides more detailed breakdowns of public expenditure outturn data including breakdowns by department and function
- the annual [Public Expenditure Statistical Analyses](#) (PESA) provides not only recent outturn data, but also spending plans (budgets) for the remainder of the current spending review period; breakdowns of outturn data are provided by department, sector, function and region
- HMT transparency data that underlie estimates of accrued spending published in PSF, and are extracted from HMT's spending database, OSCAR
- [Whole of Government Accounts \(WGA\)](#), which consolidates the audited accounts of over 6,000 organisations across the public sector to produce a comprehensive, accounts-based picture of the financial position of the UK public sector; the WGA is based on International Financial Reporting Standards (IFRS), a system of accounts discussed in Section 3 of this guide

Statistics or publications produced by other departments include:

- Office for Budget Responsibility (OBR)'s Public finances [databank](#), which is updated monthly, provides its most recent fiscal aggregate forecasts together with the latest monthly outturn data from the ONS
- [OBR's Economic and fiscal outlook](#), which is published twice per year alongside Spring and Autumn Statements and Budgets; it presents medium-term projections for the public sector finances and assesses whether the government's fiscal mandate is likely to be met
- OBR's biannual [Fiscal risks and sustainability report](#), which examines the fiscal impact of past public sector activity, as reflected in the assets and liabilities that it has accumulated on its balance sheet, and fiscal risks facing the UK; the report also examines the sustainability of the public sector finances via long-term projections of how spending and revenues may evolve and the impact this would have on public sector net debt
- [HM Revenue and Customs \(HMRC\) tax statistics](#), which include numerous statistics and analyses of tax receipts alongside a more detailed monthly breakdown of the tax receipts data contained in the PSF bulletin

While these sources and publications primarily provide data and statistics at the aggregate UK level, the following publications provide data for subnational geographies:

- ONS's annual [Country and regional public sector finances](#) provides detail of both public sector expenditure and revenue for each country and region of the UK; overall, UK estimates are consistent with the UK public sector finances, however, country and regional estimates are derived based on various methodologies and assumptions; the ONS does not publish sub-regional data on public finances, but a [scoping study](#) provides information on alternative sources of such data and associated quality issues
- HMT's annual [Country and regional analysis](#) (CRA) provides estimates of identifiable expenditure allocated to each of the four constituent UK countries and the nine English regions
- HMRC's [Disaggregation of tax receipts \(PDF, 989KB\)](#) allocates overall tax receipts collected by HMRC to each of the four countries (recording reflects a cash basis, in contrast to the accruals approach required by European System of Accounts)
- [Government Expenditure and Revenue Scotland](#) (GERS) is a long-established annual report published by the Scottish Government that provides public sector accounts for Scotland
- [Northern Ireland's Net Fiscal Balance](#) (NINFBR) provides an analysis of public sector revenue and expenditure in Northern Ireland (discontinued)
- Department for Levelling Up, Housing and Communities (DLUHC) and the devolved administrations (Welsh Government and Scottish Government) each publish comprehensive annual Local Government Finance Statistics; in addition, certain data are published on a quarterly basis

11 . Annex 2: The economic cycle, output gap, and automatic stabilisers

Over the long-term, output in the UK economy has expanded, as manifested in rising gross domestic product (GDP). However, the economy does not follow a consistently smooth, steady trajectory. The deviation of the actual output from the potential output is known as the ["output gap"](#). The potential output is thought to be consistent with no or low inflation and is related to growth in the productive capacity of the economy. The output gap can be positive, when output is above the potential output level; or negative, if output growth has fallen below the potential output.

A full economic cycle is typically characterised as consecutive time periods, commencing with an initial period of robust growth in output, followed by a downward phase when the economy slows and the output gap turns negative. However, no two economic cycles follow identical trajectories and identifying their start- and end-points and determining the trend rate of growth inevitably involves a degree of judgement.

In practice, HM Treasury (HMT) and others use a range of indicators to identify the start and duration of economic cycles and the trend rate of growth. These indicators include the state of the labour market, inflation and movements in GDP.

Economic cycles affect the public finances, via the operation of so-called automatic stabilisers. Automatic stabilisers are elements of revenue and expenditure that act to dampen fluctuations in the economy without any need for policy intervention. For instance, during an up-phase, tax receipts increase as incomes rise. Disposable incomes are therefore moderated, which in turn dampens the upswing. Conversely, during a downturn, benefit payments increase, moderating the slowdown by supporting household incomes and expenditure.

Typically, the impacts of automatic stabilisers are broadly symmetrical over the course of a cycle. As stabilisers smooth the path of the economy and operate with no time lags, governments have generally tried to avoid constraining the operation and impacts of stabilisers. Hence, fiscal policy has often concentrated on cyclically-adjusted measures, from which the impacts of automatic stabilisers have been removed. What remains after adjustment is an estimate of the structural balance (plus occasional one-off factors, such as the reclassification of housing associations as private market producers that took effect from 16 November 2017), which is the balance that would be expected on average over the course of a full economic cycle.

In practice, it is not possible to directly measure the structural balance. However, it can be estimated in various ways. The Office for Budget Responsibility (OBR) has chosen a method that involves initially estimating the output gap. The methodology is explained and contrasted with a range of other possible approaches in a [2012 Working Paper \(PDF, 409KB\)](#). From 1998 until 2010, HMT published forecasts for various cyclically-adjusted aggregates. However, following the creation of the OBR in May 2010, responsibility for forecasting the aggregates shifted to the OBR.

12 . Annex 3: Improvements resulting from the UK Statistics Authority's assessment report and the application of its Data Quality Assurance Toolkit

The improvements introduced as a result of the UK Statistics Authority's assessment included:

- a monthly quality assurance (QA) checklist to be signed off by senior staff
- creation of flow charts providing a high-level overview of QA at each level of production
- improvements to processing systems that increase efficiency and mitigate the risks of human error

The Public Sector Finances (PSF) Team worked with HM Treasury to improve the reconciliation of central government net cash requirement (CGNCR) and net debt, improving transparency for users and reducing the risk of errors. This resulted in methodological improvements and changes that were first implemented in the August 2016 PSF bulletin. Alongside this, the QA tools used to assure the coherence between cash flow and debt data were improved.

Further methodological improvements were made in relation to measuring the impacts of foreign exchange rate movements on public sector net debt (PSND). The methodological changes meant that where liquid assets have been "hedged" against exchange rate and price movements, the valuations of those assets in PSND are fixed and unaffected by movements in foreign currency and exchange rates.

Additionally, data coverage issues concerning repurchase agreements were identified and corrected. The underlying dataset used for obtaining National Savings and Investments (NS&I) liabilities was refined to ensure liabilities that had not crystallised by the end of the reporting period were excluded from PSND.

Errors in PSF statistics cannot be completely avoided given the large number of data sources and complex production processes. However, to mitigate the risk of errors, the PSF Team reviewed and improved communications with data suppliers and incorporated additional checks into relevant stages of the monthly PSF processing cycle. Steps taken include:

- building stronger relationships with data suppliers
- introducing or extending data access agreements and/or service level agreements with data suppliers
- improving understanding on the parts of the Office for National Statistics (ONS), HM Treasury and data suppliers of the strengths and weaknesses of specific data sources
- identifying additional validation and quality checks to be implemented by the ONS, HM Treasury and data suppliers

Given that the data sources for net cash requirement, net debt and net borrowing are largely distinct, the work on reconciling various fiscal aggregates (which has also been extended to include the supplementary fiscal aggregates) is of great importance. Hence, a lot of effort has been put into the process of reconciling the different fiscal measures to enable the consistency and coherence between different data sources to be examined and potential issues identified prior to publication.

The reconciliation between net cash requirement and net debt has been effectively integrated into the quality assurance processes within the monthly production systems. Reconciliations between net borrowing and net cash requirement and/or net debt are in place, but are less developed and work is continuing to improve further the detail available in these reconciliations.

13 . Annex 4: Asset Purchase Facility in the fiscal aggregates

In the [2022 Autumn Budget and Spending Review](#), the Chancellor confirmed the fiscal mandate to have public sector net debt (PSND) (excluding the Bank of England) as a percentage of gross domestic product (GDP), falling by the fifth year of the rolling forecast period.

The Asset Purchase Facility (APF) is by far the largest component of the Bank of England's contribution to the fiscal aggregates. This section explains how we record the APF in fiscal statistics.

In 2009, the Bank of England established a separate company, the Bank of England Asset Purchase Facility Fund Ltd (BEAPFF), as the vehicle to undertake quantitative easing. The Office for National Statistics (ONS) considered that the BEAPFF did not meet the statistical criteria to be an institutional unit. It is therefore consolidated with its parent, the Bank of England, in our statistics.

As of 30 September 2021, the BEAPFF - funded by a loan from the Bank of England - had cumulatively [purchased assets totalling £855.6 billion in value](#) (net of sales, redemptions and repayments), predominantly in UK government gilts. These gilts remain a central government liability and thus, measured at their face (redemption) value, contribute to PSND excluding the Bank of England. In our broader measure of PSND, which includes the Bank of England, the loan to BEAPFF and the fund's holdings of gilts are consolidated. However, the reserves created by the Bank of England to fund the BEAPFF loan are included. Because the gilts were purchased at market prices, which have generally exceeded face values on the purchase dates, the reserve liabilities are higher than the redemption value of the gilts that is subject to consolidation. Any future holding losses arising from the convergence of the market value of gilts to their redemption value at maturity are accounted for upfront in PSND including the Bank of England and will not affect this measure at the time of redemption or sale.

As a result of its gilt holdings, the BEAPFF receives interest payments from Her Majesty's Treasury (HMT). It also pays interest on the loan from the Bank of England (a transaction which is fully consolidated), which in turn pays interest on the associated reserve liabilities. However, interest paid by the APF has been lower than the interest received from HMT. Since 2013, the resulting excess cash, net of operating costs, is transferred back to HMT. The transfer is recorded as a dividend payment to central government. Because of consolidation, there is no direct impact on the fiscal aggregates at the public sector level from either HMT interest payments to BEAPFF, or the transfer of excess cash back to HMT. However, interest accruing on the Bank of England's reserve liabilities contributes to the public sector current budget deficit, and public sector net borrowing (PSNB).

In the event that the BEAPFF runs down its assets, for example if quantitative easing were unwound, BEAPFF could generate losses. In this situation, BEAPFF would either retain more of its interest income to cover any losses (thereby decreasing the amount of dividend payable to central government), or would receive a transfer from HMT under the indemnity arrangement.

The ONS has considered the recording of such hypothetical indemnity payments, against the guidance set out in the [Manual on Government Deficit and Debt \(MGDD\)](#) and concluded that it should be recorded as a capital transfer. Such a transfer between public units, should it take place, would have no direct accounting impact at the consolidated public sector level. Ultimately, however, HMT would face a reduction in interest income from BEAPFF and may have to finance the indemnity payment. The extent to which that extra spending (or reduction in revenue) is transmitted into gilt issuance and coupon payments on these gilts, will determine the final impact on both measures of PSND, current budget deficit and PSNB.