

Changes to the Annual Business Survey, the Quarterly Survey of Capital Expenditure and the Survey into Business Spending on Capital Items, in 2015

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Executive summary

The Office for National Statistics (ONS) is publishing a series of [articles](#) which collectively explain the forthcoming improvements to UK National Accounts and Balance of Payments. These improvements reflect the recent revisions to the European System of Accounts 2010 (ESA 2010) and the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6).

In order to implement these improvements, changes are being made to a group of ONS surveys, from which source data are used to compile several parts of the National Accounts.

This article presents the changes to the collection of data on gross fixed capital formation (GFCF) by ONS, and explains why they are needed as a result of the updated ESA 2010 frameworks and as part of longer term quality improvements.

Gross fixed capital formation is defined in the National Accounts as the net expenditure (acquisitions less disposals) on produced assets used in the production of goods and services, and is a component of the expenditure measure of Gross Domestic Product (GDP). The surveys affected will be: the Annual Business Survey (ABS); the Quarterly Survey of Capital Expenditure (Capex); and the annual Survey into Business Spending on Capital Items (Business Spend).

The changes to be introduced will include changes to the definition of GFCF which are legally required under ESA 2010, and improvements to the questionnaire design. The key changes are:

- removal of the lower limit of £500 in reporting GFCF;
- the inclusion of small tools used in production within the definition of GFCF;
- the inclusion of contracts and fees for sports personnel within the definition of GFCF;
- the splitting up of GFCF on computer software from that on databases;
- improvements to the questionnaire design through question testing with respondents;
- improvements to the consistency of questionnaire design across the three surveys; and changes to the survey names for Capex to the Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS) and Business Spend to the Annual Acquisitions and Disposals of Capital Assets Survey (ACAS).

The questionnaire changes will be implemented with the quarter 1 2015 despatch of Capex, and the 2014 ABS and Business Spend despatched during 2015.

The extensions to the definition of GFCF are likely to increase total GFCF. Although the exact impact of these and the other changes to the questionnaires will not be known until the data are collected. As such this article does not provide a numerical impact of the changes to GFCF. This information will be published at a future date once data are available. Neither does this article present changes that will be implemented into Blue Book 2014.

1. Introduction

This article presents the changes ONS is making to the Annual Business Survey (ABS); the Quarterly Survey of Capital Expenditure (Capex); and the Survey into Business Spending on Capital Items (Business Spend). Whilst the updated ESA 2010 manual is a key driver for updating and improving source data, the changes referenced in this article are also part of a programme of work to improve source data used within the National Accounts more generally.

Section 2 summarises the reasons for the changes to the surveys. Section 3 gives a background to the current surveys, the users of the data and the differences in definitions of capital expenditure. Section 4 summarises the changes to the surveys (with more detail given in Annex A). Section 5 describes the impact these changes will have on both respondents to the surveys and data users. Section 6 provides links to further detailed information on these surveys, and to articles about related changes in other ONS surveys.

2. Changes to the surveys

ONS is making changes to the following surveys, which collect data on GFCF:

- the Annual Business Survey (ABS);
- the Quarterly Survey of Capital Expenditure (Capex); and
- the Survey into Business Spending on Capital Items (Business Spend).

These changes are legally required, to ensure that the UK meets its requirement to comply with the European System of Accounts 2010 (ESA 2010) in the compilation of the UK National Accounts. Although the UK Annual National Accounts 2014 (Blue Book 2014) must be consistent with most of the changes required under ESA 2010, the implementation of the survey changes is not legally required until 2017, although these changes can be made at an earlier date.

The legally required changes include:

- all GFCF to be included, not just that over £500;
- the inclusion of small tools used in production within the definition of GFCF;
- the inclusion of contracts and fees for sports personnel within the definition of GFCF; and
- the splitting up of GFCF on computer software from that on databases.

The redevelopment of these surveys is also an opportunity to develop ONS's collection of capital expenditure data through improvements to the questionnaire design, and by increasing the consistency of the questions across surveys.

3. Background

3.1 Current surveys

ABS, Capex and Business Spend all collect data on acquisitions and disposals of capital assets (capital expenditure):

- **ABS** – collects data on capital expenditure on produced non-financial assets used in the production of goods and services (GFCF) and on non-produced assets such as land. The estimates of capital expenditure published by ABS include both these concepts, and also include expenditure on existing buildings. The ABS has a large sample size (62,000 per year in Great Britain and 11,000 per year in Northern Ireland), and includes both private and publicly owned businesses of all sizes. As an

annual survey, respondents are likely to provide results from their audited accounts, although not always for a calendar year (more detail on the data periods represented in ABS releases is available in the [ABS Technical Report](#)). ABS can provide detailed industry breakdowns, but only relatively high level asset breakdowns compared with Capex and Business Spend. It is used in the validation of the other two surveys. Capital expenditure data from the ABS are published in the annual ONS release, the [UK Non-Financial Business Economy \(Annual Business Survey\)](#) and are the key data source for the UK's legal requirement to provide information under the Structural Business Statistics regulation (SBS).

- **Capex** – collects data on capital expenditure on produced assets used in production (GFCF). It is a short-term (quarterly) indicator of investment, with a more detailed breakdown of GFCF by asset than is provided by ABS. It has a smaller sample size (27,000 per quarter), and so cannot provide the same level of industry detail as ABS. It requests information from private businesses whose employment is greater than 19. Capex is the key source of data in ONS's quarterly [Business Investment Release](#), and in the GFCF component of the expenditure measure of GDP. GFCF is the key data source for estimates of capital stocks and the consumption of fixed capital.
- **Business Spend** – provides detailed information on the products which are sub-components of the GFCF assets. To reduce respondent burden the sample size of this very detailed survey is smaller than that of the other two surveys (2,500 per year) and covers privately owned businesses whose employment is greater than 99. The product breakdowns are used to disaggregate the asset-level data collected by Capex into individual products. This breakdown is used in the estimation of volume measures of GFCF. Product-level deflators are weighted up to the asset level using the Business Spend product-to-asset ratios. These ratios are also used to disaggregate GFCF assets into products for [balancing supply and use](#) across the economy.

3.2 Users of the data

Data collected from these surveys are used to produce estimates of gross fixed capital formation (GFCF), a measure of investment and a component of the expenditure measure of GDP. These data are also the key source for estimates of capital stocks and the consumption of fixed capital. Key users of the data include the Bank of England, the Office for Budget Responsibility, the Department for Business, Innovation and Skills and HM Treasury. Capital expenditure data from the ABS are also published separately from the National Accounts, and the data are used to meet the UK's legal requirements under the SBS. A list of publications based on data collected via these surveys can be found in Annex B.

3.3 Definitions of capital expenditure

The definition of capital expenditure in the ABS SBS return is wider than the definition of GFCF – which is the net expenditure (acquisitions less disposals) on produced assets used in the production of goods and services. The ABS measure of capital expenditure, in line with the requirements of the SBS, also includes estimates for net expenditure on non-produced assets (for example: natural resources; contracts fees and licenses; and goodwill and marketing assets), and on existing buildings and land, which are not included in GFCF. GFCF only includes new construction (dwellings and other buildings) and major repairs and improvements to dwellings and buildings. The dwellings component is not collected by the surveys discussed here, as other data sources are available.

4. Impact of changes upon the surveys

To implement the changes necessary under ESA 2010, significant coordinated changes across the three business surveys are required.

- ABS will ask 17 additional questions on its long questionnaires, but there will be no additional questions added to the short ABS questionnaires (which are mainly completed by smaller businesses).
- Capex will increase the number of questions asked from 11 to around 30.
- Business Spend will increase the number of questions asked from around 50 to 80 and extend its coverage from just Great Britain to the whole of the United Kingdom.
- There will be amendments to the wording and background notes for most of the existing capital expenditure questions on the questionnaires, in order to clarify definitions and make them consistent across the three surveys.
- The Capex and Business Spend survey names will also be changed, to reflect ONS best practice and assist respondent understanding. Capex will become the Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS). Business Spend will become the Annual Acquisitions and Disposals of Capital Assets Survey (ACAS).

More detail on the changes can be found in Annex A. To meet the UK's ESA 2010 commitments, the first despatch of the new questionnaires will be in early 2015 for the annual surveys' 2014 reference period, and for the first quarter of 2015 for Capex.

5. Impact of the changes on respondents and users

5.1 Impact on respondents

- The questionnaire testing of the new detailed questions for Business Spend, which was carried out with a small sample of businesses, showed that even though the number of questions increased from around 50 to 80, respondents spent less time completing the questionnaire because of the improved definitions and structure. As the sample for testing was small, it is not possible to know whether this will be true for all respondents but ONS will monitor completion times when the redeveloped questionnaires are despatched.
- The addition of new questions will increase the length of the ABS questionnaires, which could reduce the number of responses. However, the evidence is that the improved questionnaire design and accompanying notes make it easier to complete which should reduce the risk of lower response for the wider ABS financial questions.
- The improved question definitions and notes – which are now consistent across all three surveys – should help respondents include everything required which will improve the quality of the capital expenditure data.
- More information about the detailed questionnaire changes can be found in Annex A.

5.2 Impact on users

- Consistency with internationally-agreed concepts and definitions has been improved across all three surveys.
- The surveys will be more consistent with each other, making validation between these surveys more robust and user comparisons between the surveys more reliable.
- There will be a minor change to the ABS calculation of [approximate Gross Value Added](#) (aGVA). This is because a small component of capital expenditure: "work of a

capital nature by own staff for business use, excluding software” currently feeds into aGVA. ESA 2010 makes it clearer what should be included here and, as a result, ABS will start including the value of in-house developed software in the calculation of aGVA. This is also in line with the SBS. ONS has estimated that this change will have only a minor impact on estimates of aGVA (for example the non-financial business economy’s aGVA for 2012 would increase by 0.26% if own account software were included).

- Although at the aggregate level the definitional changes due to ESA 2010 may have a relatively limited impact, changes to the questionnaire formats and improvements to the notes could result in a discontinuity in the time series of the surveys. It is not possible to foresee the scale of the impact, but ONS will review it once sufficient data are available and will provide guidance to users.

ABS is intended to be used to analyse structural changes in the economy at a point in time rather than over time. So, published estimates from ABS will not be revised beyond the normal one year revision period to reflect the changes being implemented in 2015. However, it is a key user requirement that change-over-time analysis (for example, analysis of growth rates) can be carried out on all National Accounts outputs (including GFCF, business investment, and the measures into which these feed, including the expenditure measure of GDP). So, ONS will analyse the impact of the ESA 2010 changes on the GFCF time series, and make appropriate adjustments to the back series, if necessary, in order to ensure consistency over time.

6. Further information

Copies of the existing and redeveloped [ABS](#), [Capex](#) and [Business Spend](#) questionnaires can be found on the ONS website.

More information on these surveys can be found in their Quality and Methodology Information Reports.

[ABS Quality and Methodology Information Report](#)

[Capex Quality and Methodology Information Report](#)

[Business Spend Quality and Methodology Report](#)

Other ONS surveys are also undergoing changes to meet the legal requirements of ESA 2010. These changes are described in the [articles](#) on:

Changes to National Accounts: Updating Data Sources

A new business survey to collect purchases for intermediate consumption

Redevelopment of the Financial Services and Securities Dealers surveys

Also in the article [Impacts of European System of Accounts 2010 and other changes on economic statistics](#).

7. Contacts

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Annex A: detailed information on changes to the questionnaires

For all the questionnaires, the lower limit of £500 for capital expenditure will be removed, and small tools used in production will be included in the asset definition for GFCF.

ABS - the changes separate out the national accounts concepts of non-produced assets, from GFCF (produced assets), allowing compliance with both ESA 2010 and the Structural Business Statistics regulation (SBS). There will be more detail available by:

- introducing new asset breakdowns such as:
 - natural resources,
 - intellectual property,
 - contracts and fees for sports personnel,
 - mineral exploration and evaluation,
 - other non-produced assets such as goodwill and marketing.

Capex - there will be more detail available by:

- splitting up investment into computer software and databases
- introducing new asset breakdowns such as:
 - intellectual property,
 - telecommunication equipment,
 - contracts and fees for sports personnel.

Business Spend – will include more detailed breakdown of machinery and equipment and intellectual property, as well as splitting up investment into computer software and databases.

More information on the surveys, including specimen questionnaires – both the existing versions and draft versions of the redeveloped questionnaires – are available on the [ABS](#), [Capex](#) and [Business Spend](#) survey web pages.

Annex B: list of publications related to ABS and Capex

ABS

[UK Non-Financial Business Economy \(Annual Business Survey\)](#)

Capex (GFCF)

[Business Investment](#) – list of ad hoc analysis published by ONS, including analysis of Capex survey estimates, is included in this publication

[Quarterly National Accounts](#)

[Second Estimate of GDP](#)

[UK Economic Accounts](#)

[UK Annual National Accounts \(Blue Book\)](#)

[Capital stocks and consumption of fixed capital](#)