

Article

National Accounts articles: Detailed assessment of changes to Balance of Payments annual estimates 1997 to 2011

Provides details of forthcoming changes and their indicative impact on main Balance of Payments and International Investment Position estimates. These changes will be introduced when revised figures for the UK National Accounts and Balance of Payments, consistent with Blue Book 2016 and Pink Book 2016, are published on 30 June 2016. This article covers the period from 1997 to 2011 only.

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1. Introduction

On 30 June 2016, the Office for National Statistics (ONS) will publish revised figures for the UK National Accounts and Balance of Payments. This article is part of a series describing changes and improvements to the UK's National Accounts and Balance of Payments. Changes will be made in line with international standards adopted by all European Union (EU) Member States and with worldwide best practice. These, as well as additional improvements that are being made, will ensure that our National Accounts and Balance of Payments continue to provide a reliable framework for analysing the UK economy and for making international comparisons.

The changes and improvements due to be made in June 2016 can be split into 2 categories:

- classification changes, as a result of new European System of Accounts 2010 (ESA10) international standards, which are planned to be incorporated into the National Accounts and Balance of Payments in Blue Book 2016 and Pink Book 2016
- 2. other regular improvements, methodological changes and corrections

The remainder of this article is structured as follows:

- Section 2 Provides the indicative overall revision to main aggregates in the Balance of Payments and International Investment Position. These indicative figures include both changes as a result of the implementation of new methods and normal revisions that would be expected as part of the Pink Book (Balance of Payments annual publication) compilation process.
- Section 3 Summarises the key methodological changes and their impacts
- Section 4 Provides indicative annual revisions of the trade balance, primary income balance, and current account balance
- Section 5 Provides indicative annual revisions of the financial account balance and International Investment Position

Throughout the article, data are presented for 1997 to 2011 to the nearest pound billion.

2. Summary of indicative impact of changes on main aggregates

Table 1 provides an indicative impact that changes will have on the Balance of Payments and International Investment Position.

Table 1: Summary of indicative revisions on annual data between previously published data and indicative Pink Book 2016 data, 1997 to 2011 (£ billion)

United Kingdom

£ billion	1997 to 2011			2011			
	Largest downward revision	Largest upward revision	Average annual revision	Average absolute annual revision	Previously published value	Indicative value in Pink Book 2016	Revision 1
Trade balance	-1 (2011)	0	-0.1	0.3	-26	-27	-1
Primary income balance	-1 (2011)	0	-0.1	0.1	20	20	-1
Secondary income balance	0	-	0	0	-22	-22	0
Current account balance	-2 (2011)	0	-0.2	0.3	-27	-29	-2
Financial account balance	-5 (2011)	0	-0.4	0.4	-18	-23	-5
Net International Investment Position	-	68 (2008)	29	29	-122	-97	25

Source: Office for National Statistics

Notes:

3. Summary of the indicative impact of individual methodological changes

Revisions throughout the published time series are likely as a result of implementing the changes described in this article. Revisions between 1997 and 2011 (known as the closed period) will normally be due to methods changes. Years 2012 to 2014 (known as the open period) are also fully open for revision to incorporate new data from sources, which will be covered in the next impact article on 7 June 2016. Table 2 briefly summarises the main closed period changes that will be introduced into the Balance of Payments and International Investment Position. The table separates out those changes that have an impact on the current account and those that do not. For those changes affecting the current account, indicative impacts on the trade balance, primary income balance and secondary income balance are presented. All estimates presented remain subject to further quality assurance before publication at the end of June; therefore they should be treated as indicative.

^{1.} Change in values may not sum to revision due to rounding

Table 2: Summary of impact by change (more detail is provided in sections 4 and 5)

Change	Summary of change	Impact		
Current Account	Impacting changes			
Withdrawal of income from quasi-corporations (cross border property income)	Improvements to the value of imputed rental on second homes in the UK impacted the value of inward imputed rental and outward imputed rental	Current account impacts: Trade balance Range of revisions rounded to between -£0.4 billion and +£0.6 billion		
Estimates of value added tax fraud	Improved estimates of non-complicit value added tax (VAT fraud)	Current account impacts: Trade balance Small revisions of less than absolute £0.1 billion		
Natural gas imports from Norway	Changes in the methodology for collecting non-EU gas imports.	Current account impacts: Trade balance Downward revision of -£1 billion (2011)		
UK listed shares and mutual funds and bonds	An error was identified with the levels of shares, mutual funds and bonds. These levels are under-reported in most periods from 2011 onwards. This issue also affects unlisted shares (minimal impact) and the level of dividend and bond interest receipts between sectors.	Current account impacts: Primary Income balance Downward revision of -£1 billion (2011) Other impacts: Financial account and International Investment Position		
Non-Current Acco	ount Impacting changes			
Holdings of property	An error was identified in the estimate of holdings of property for both UK assets (direct investment abroad) and UK liabilities (direct investment in the UK). Data from 1999 to the latest period are affected.	International Investment Position		

Source: Office for National Statistics

4. Analysis of impact on the current account

4.1 Definition of main current account aggregates

The current account includes debit and credit transactions relating to trade in goods and services, primary income, and secondary income. Credits are income or transfers receivable by the UK, and UK exports. Debits are income or transfers payable by the UK, and UK imports. The key indicators in this account are the:

- trade balance, which shows the balance of exports and imports of goods traded between UK residents and non-residents and services transactions between UK residents and non-residents
- primary income balance, which shows the net income earned by UK residents from non-residents and net
 income earned by non-residents from UK residents; this income is further broken down into compensation
 of employees (wages, salaries and other benefits earned by individuals), investment income (income
 earned from the provision of financial capital and income earned on reserve assets), and other primary
 income (covers earnings from rent and taxes, and subsidies on production and on the import of goods)
- secondary income balance, which represents the provision (or receipt) of an economic value by one party without directly receiving (or providing) a counterpart item of economic value
- current account balance, which is the summation of the trade balance, the primary income balance, and the secondary income balance

4.2 Indicative impact on main current account aggregates

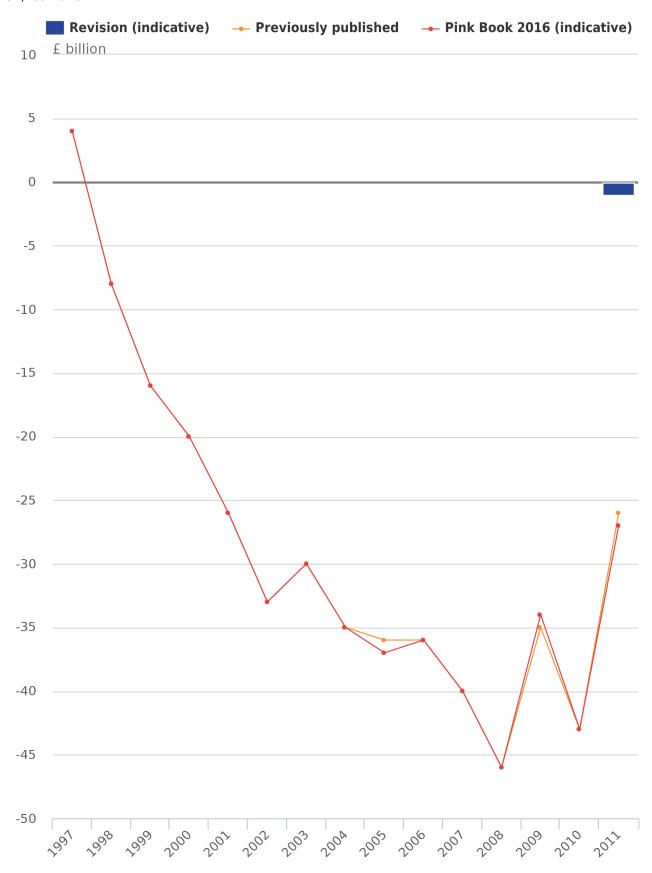
4.2.1 Trade balance

The lines in Figure 1 show the level of the trade balance in published data and the Pink Book 2016 indicative balance, while the bars show the differences between the 2 lines (or the revision).

As shown in Figure 1, revisions to the trade balance are relatively small. 2011 shows the biggest downward revision in the trade balance of around £1 billion, mainly due to changes to natural gas import from Norway estimates (section 4.3.3). This was partially off-set by the revisions to withdrawal of income from quasi-corporations (cross border property income) and estimates of value added tax fraud (sections 4.3.1 and 4.3.2 respectively).

Figure 1: Indicative trade balance revision

UK, 2007 to 2011



Source: Office for National Statistics

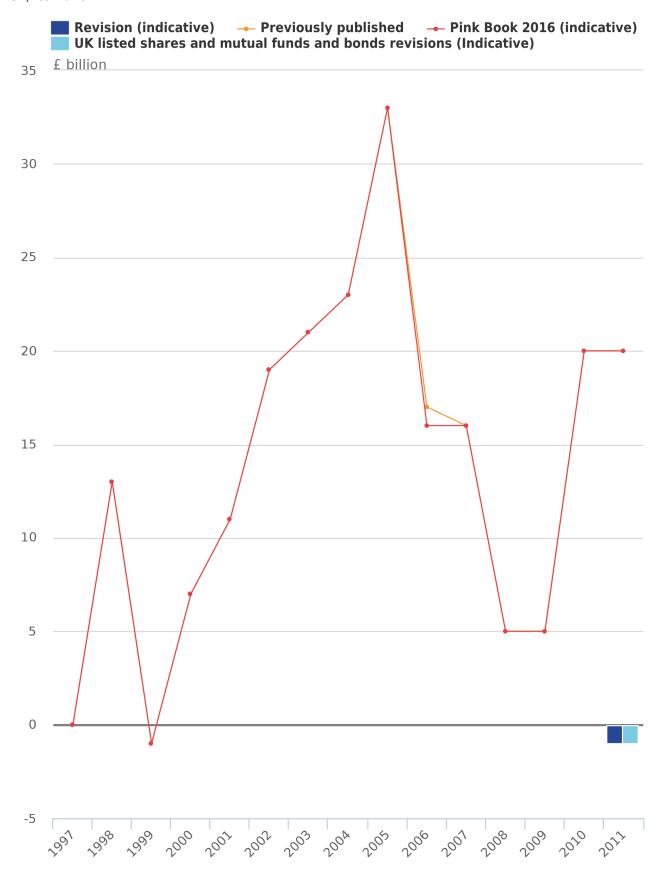
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4.2.2 Primary income balance

The lines in Figure 2 show the level of the primary income balance in published data and the Pink Book 2016 indicative balance, while the blue bars show the differences between the 2 lines (or the revision). The purple bars show the impact of changes due to revisions to the levels of UK listed shares and mutual funds and bonds (sections 4.3.4 and 4.3.5).

As shown in Figure 2, revisions to the primary income balance from 1997 to 2010 are small, while the revision to 2011 is mainly due to a downward revision of UK bonds (section 4.3.5).

Figure 2: Indicative primary income balance revision



Source: Office for National Statistics

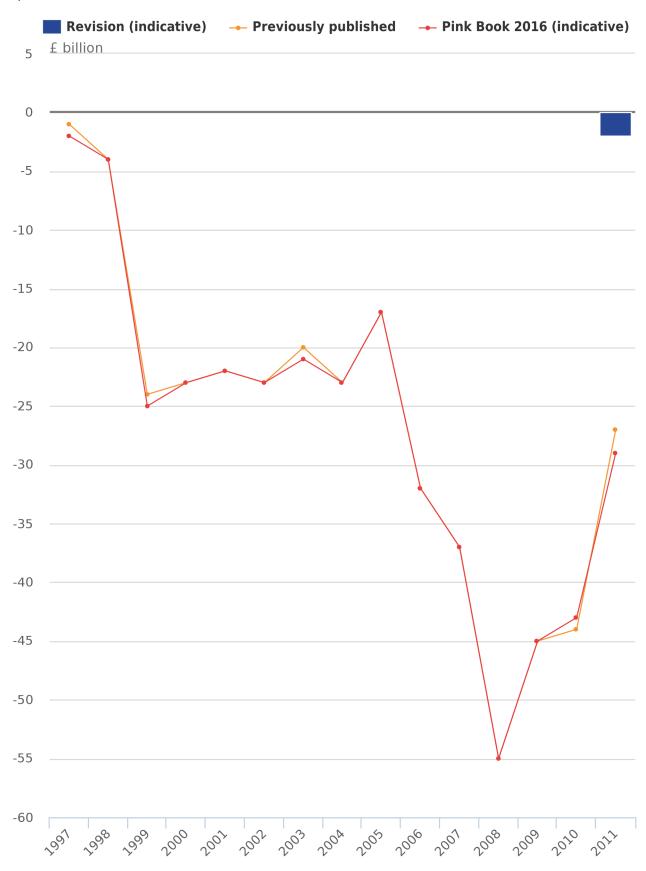
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4.2.3 Current account balance

Figure 3 shows the level of the current account balance in published data and the Pink Book 2016 indicative balance. The blue bars show the differences between the 2 lines (or the revision). This figure approximately represents the summation of the changes to the trade balance (shown in Figure 1) and the primary income balance (shown in Figure 2). Revisions to the secondary income balance are small.

As shown in Figure 3, revisions to the current account balance are relatively small from 1997 to 2010, less than £0.5 billion through the time series. 2011 shows a slightly larger revision of the current account deficit, mainly due to the revisions to the trade and primary income balance as described above.

Figure 3: Indicative current account balance revision



Source: Office for National Statistics

Notes:

4.3 Impact by change

The following sections further explore the impact of the biggest changes on the current account.

4.3.1 Withdrawal of income from quasi-corporations (cross border property income): Improvements to the value of imputed rental on second homes in the UK

Improvements to the value of imputed rental on second homes in the UK have an impact on the value of inward imputed rental and outward imputed rental (that is, the export and import of housing services related to foreign owned second homes).

In Blue Book and Pink Book 2015, methodology was introduced for <u>cross border property income</u>. In summary, inward imputed rental is the value of the housing services that non-resident owners consume while occupying their own home in the UK. This is included in the National Accounts and Balance of Payments as an export of housing services. Inward imputed rental (the export of housing services) is estimated as a proportion of the total imputed rental for second homes in the UK and as such has been revised in line with the revisions to total imputed rental. In other words, a proportion of the second homes in the UK are foreign-owned so a proportion of the imputed rental of these homes is inward imputed rental.

Outward imputed rental is the housing service that UK home owners consume while occupying their second home abroad. This is included in the National Accounts and Balance of Payments as an import of housing services. Outward imputed rental (the import of housing services) is assumed to have a relationship with inward imputed rental (the export of housing services) proportionate to the ratio of the stock value of UK-owned second homes abroad to the stock value of foreign-owned second homes in the UK (for which the stock values are sourced from the English Housing Survey).

As such, the estimates of inward and outward imputed rental (that is, the import and export of housing services for foreign-owned second homes) are affected by this change to the imputed rental of second homes in the UK, even though the method for calculating the relevant imports and exports has not been altered. Similarly, the net trade balance on imputed rentals has therefore changed.

The impact on the balance of trade is no greater than £600 million in a single year, in current prices.

4.3.2 Estimates of value added tax fraud

As described in the previously published Impact of Blue Book 2016 Changes article, scrutiny of estimates of non-complicit Value Added Tax (VAT fraud) has led to improvements which are now being implemented. VAT fraud is thought to occur when individuals or corporations who under- or non-report their respective salaries and profits to the tax authorities ("tax evasion") also choose to hold onto the VAT that they charge to non-complicit customers on their under- or unreported activity. It is thought that by paying VAT on these transactions they would reveal the wider evasion. Because current estimates of tax evasion are at basic prices, meaning before the inclusion of taxes on products, this form of VAT fraud is not currently captured in the National Accounts.

To estimate the impact of VAT fraud, we start from the estimates of under-reporting and non-reporting of income. Under the reasonable assumption that such income (under appropriate conditions) is also not reported for VAT, and vice versa, these estimates imply a level of VAT fraud.

There are indirect impacts on trade in services (mainly exports) via coherence adjustments in order to align the three approaches to GDP.

There is a planned work programme to improve the income/corporation tax evasion adjustments applied to GDP components. This work programme is part of the ongoing ONS programme of continuous improvement to our statistics and will be considered against other priorities. This programme offers the potential for ONS to work with the HMRC Tax Gaps team to understand the methods and processes behind the compilation of the Tax Gaps estimates that underlie the tax evasion adjustments.

4.3.3 Natural gas imports from Norway

HM Revenue and Customs (HMRC) Trade Statistics amended the mechanism for the data source used in the compilation of natural gas traded with non-EU partners. This change adopts the recent recommendation from Eurostat to the best practice method. Given the scale of the changes, HMRC are revising past years' trade figures (non-EU imports only) to improve the data continuity and accuracy. This change will improve consistency with data released by the Department of Energy and Climate Change (DECC) and international trading partners. HMRC have revised past years' trade figures (non-EU only) imports from 2011. Details to this change are published on HMRC's website.

4.3.4 UK listed shares and mutual funds

As previously <u>announced</u>, an issue has been identified between the levels of UK listed shares and mutual funds reported in the National Accounts and by the London Stock Exchange. We have subsequently identified that some UK listed shares and mutual funds were not captured during processing of the data, and others were being double-counted. The net impact is an increase in the level of these assets from 2011 onwards. The changes in value to UK-listed shares will also have an impact on the estimated value of unlisted UK shares in the National Accounts.

By definition, all UK-based shares and mutual funds are UK liabilities. Some of the assets are owned by overseas investors. Therefore, the increase in the levels of these assets will impact the net International Investment Position, increasing UK liabilities to the rest of the world. Dividend payments are not directly affected by the change, as these are drawn from a different source. The distribution of dividend income receipts changes slightly as a result, although the impact on the current account deficit is minimal.

Further work is taking place over 2016 to review the estimation methodology for shares. As such, further revisions to these series should be anticipated.

4.3.5 UK bonds

The Sector and Financial Accounts present the level of bonds in the UK economy as well as how these bonds are distributed across institutional sectors. We process bonds and shares within the same system and consequently, when an issue was identified with the processing of shares, estimates of bonds were reviewed for due diligence. Investigatory analysis confirmed that some UK bonds were also not captured during the processing of the data. As a result, UK bonds have also been under-recorded in the National Accounts from 2011 onwards.

As with shares, UK bonds are by definition a liability to the UK, but many are owned by overseas investors. This change will therefore impact the net international investment position, increasing UK liabilities to the rest of the world. Amending the overall level of bonds will change the distribution of bond interest payments between institutional sectors, increasing the amount of bond interest paid to overseas investors, and hence impacting the current account.

5. Analysis of impact on the financial account and the International Investment Position

5.1 Definition of main financial account and International Investment Position aggregates

The financial account includes transactions (flows) associated with changes of ownership of the financial assets and liabilities. The financial account balance shows the net position of these flows between the UK and the rest of the world.

The International Investment Position (IIP) measures the UK's stock (levels) of external financial assets and liabilities. A positive net IIP indicates that assets exceed liabilities, while a negative figure indicates that liabilities exceed assets.

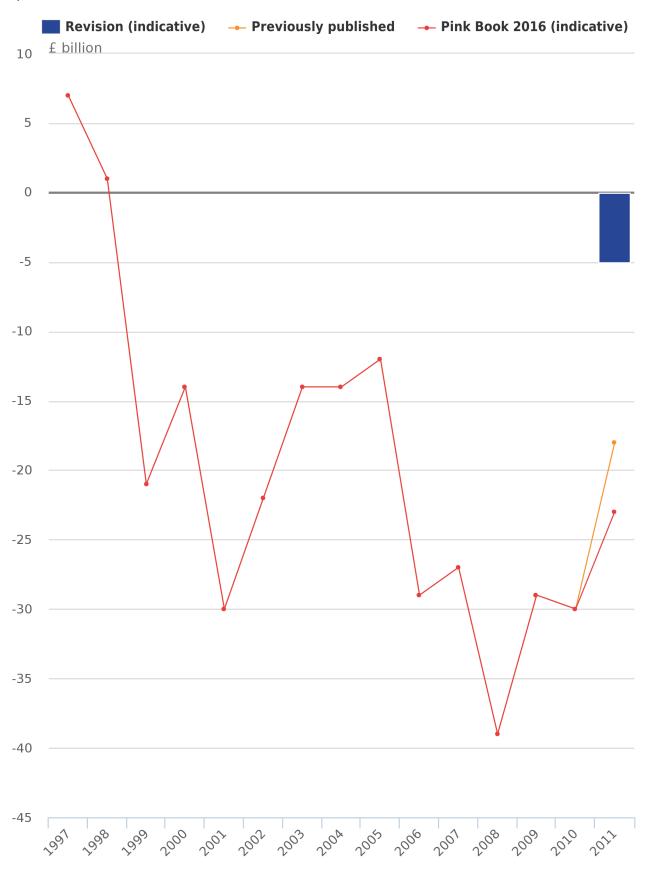
5.2 Indicative impact on the main financial account and International Investment Position aggregates

5.2.1 Financial account balance

The lines in Figure 4 show the level of the financial account balance in published data and the Pink Book 2016 indicative balance, the blue coloured bars show the total differences between the 2 lines (or the revision).

As shown in Figure 4, revisions are relatively small from 1997 to 2010 but 2011 shows a downward revision to the financial account balance of around £5 billion. This is mainly due to changes to the flows of UK bonds (section 4.3.5).

Figure 4: Indicative financial account balance revision



Source: Office for National Statistics

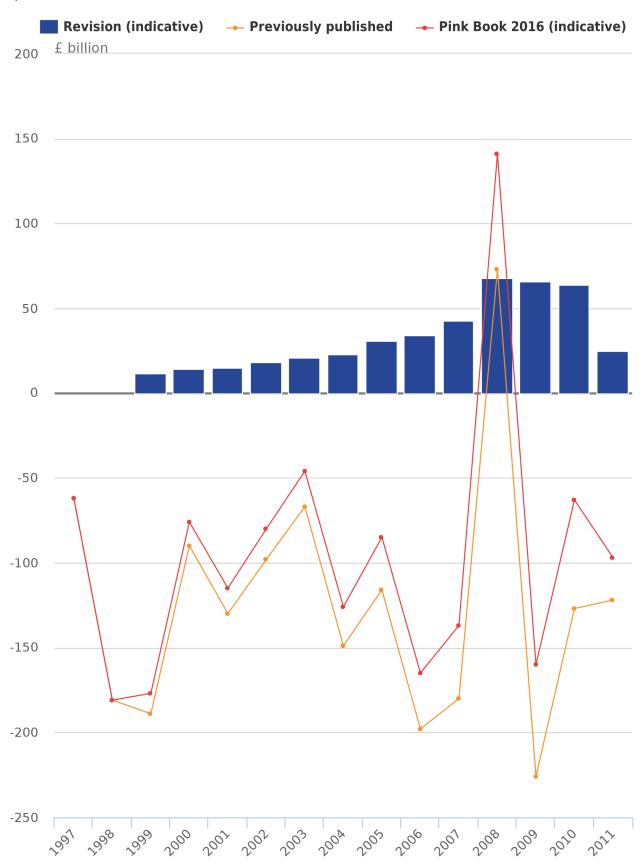
Notes:

5.2.2 Net International Investment Position

The lines in Figure 5 show the net International Investment Position in published data and the Pink Book 2016 indicative position, the blue coloured bars show the total differences between the 2 lines (or the revision).

As shown in Figure 5, the upward revisions from 1997 to 2010 broadly increase through the time series, mainly due to the changes to the measurement of the holdings of property (see section 5.3.1). The downward revision to the levels of UK listed shares and mutual funds and bonds data has a large impact on 2011 (further explained in sections 4.3.4 and 4.3.5), which partially off-sets the upward revision to the net IIP from the holdings of property revision.

Figure 5: Indicative net international investment position revision



Source: Office for National Statistics

Notes:

5.3 Impact by change

The following section further explores the impact of the biggest change on the financial account and International Investment Position.

5.3.1 Holdings of Property

As <u>previously announced</u> on 29 February 2016, an error was identified in the estimate of holdings of overseas property for both UK assets (direct investment abroad) and UK liabilities (direct investment in the UK). Data from 1999 to the latest period are affected.

This revision only impacts the estimated levels of investment in property (abroad and into the UK) and does not impact the financial flows or earnings from such property. In 2015 the methods of estimating overseas property were updated. In the process annual data was estimated for levels, flows and earnings. While producing the quarterly paths an error was introduced to the levels series for both inward and outward investment. This has now been corrected for the 2016 Pink Book.

6. Plans for future updates

A further impact article for Balance of Payments covering period 2012 to 2014 will be published on 7 June 2016. The revised figures for the UK National Accounts and Balance of Payments, consistent with Blue Book 2016 and Pink Book 2016, are published on 30 June 2016.

7. Authors

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8. Background notes

1. Details of the policy governing the release of new data are available on the UK Statistics Authority website or from the Media Relations Office email: media.relations@ons.gsi.gov.uk