Article

National Accounts articles: Detailed assessment of changes to balance of payments annual estimates, 1997 to 2016

Trade in goods and services, income, current and capital transfers, transactions in UK external assets and liabilities, and levels of identified assets and liabilities.

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Release date:
1 June 2018

Next release:
To be announced

Correction

1 June 2018

A correction has been made to section 11 due to incorrect data being used. You can see the original content in the superseded version. We apologise for any inconvenience.

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1 . Main points

- This article explains the forthcoming changes and their indicative impact on the main balance of payments estimates from 1997 to 2016.

- The current account balance deficit in 2016 has narrowed mostly due to improvements made to estimates of trade, down from an equivalent 5.8% of nominal gross domestic product (GDP) to 5.2%, but remains the largest deficit since the series started in 1948.

- The average revision to the current account balance between 1997 to 2016 is £3.4 billion.

- The trade balance deficit in 2016 has narrowed due to the improvements explained in this article, from 2.1% of nominal GDP to 1.6%; while the other elements that make up the current account (the primary income and secondary income balances) have remained relatively unchanged.

- Relatively small revisions have been made to both the financial account and international investment position (IIP).

2 . Introduction

This article is part of a series describing changes to national accounts and balance of payments, detailing the improvements being made to UK National Accounts in Blue Book 2018 and Pink Book 2018. These improvements ensure that the UK National Accounts continue to provide the best possible framework for analysing the UK economy and for comparing it with those of other countries. The changes will be introduced when revised figures for the UK National Accounts and UK Balance of Payments, consistent with Blue Book 2018 and Pink Book 2018, are published on 29 June 2018 in the Balance of Payments, UK: Quarter 1 (Jan to Mar) 2018.

This article brings together methodological and data improvements that impact the UK Balance of Payments for the period 1997 to 2016. These figures are still indicative at this stage and final quality assurance is currently being undertaken.

3 . Definition of main current account aggregates

The current account records the extent to which the UK is a net lender to or net borrower from the rest of the world and 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 debits are income or transfers payable by the UK. The main indicators in this account are:

- trade balance, which shows the balance of exports and imports of goods and services traded between UK residents and non-residents

- primary income balance, which shows the income earned by UK residents from non-residents and 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

4 . Definition of main financial account and international investment position aggregates

The financial account is the counterpart to the current account, showing how the UK is financing its borrowing from the rest of the world.

The international investment position (IIP) measures the stock of assets and liabilities at the end of the period, which is the sum of the opening balance, financial flows and other changes (where the other changes could be price changes, currency changes and so on). A positive net IIP indicates that assets exceed liabilities, while a negative figure indicates that liabilities exceed assets.

5 . Summary of indicative impact on main aggregates

Tables 1 and 2 give a summary of the indicative revisions to the main elements of the current account, the financial account and the international investment position (IIP). From looking at both Tables 1 and 2, the positive revision to the current account deficit in 2016 from 5.8% of nominal gross domestic product (GDP) to 5.2% of GDP is due primarily to the improvements to the trade balance, which had total revisions of £9.8 billion. Despite a narrowing in the current account deficit, the 2016 deficit remains the largest on record since 1948.

The other elements that make up the current account balance, the primary income and secondary income balances, have only seen slight revisions in 2016.

The financial account net transactions saw a revision of negative £1.7 billion during 2016. Meanwhile, the IIP saw a revision of £38.8 billion in 2016, narrowing the net IIP liability position to £47.5 billion, the lowest net liability position in eight years.

Table 1: Summary of indicative revisions on annual data between currently published data and indicative data (consistent with Pink Book 2018), UK, 1997 to 2016

£ billion	1997 to 2016			2016			
	Largest downward revision	Largest upward revision	Average annual revision	Average absolute annual revision	Previously published value	Indicative value in Pink Book 2018	Revision
Trade balance	-1.2	9.8	3.3	3.5	-40.7	-30.9	9.8
Primary income balance	-0.1	1.0	0.0	0.1	-50.4	-49.4	1.0
Secondary income balance	-0.3	0.0	-0.0	0.0	-22.5	-22.5	0.0
Current account balance	-1.2	10.8	3.4	3.6	-113.6	-102.8	10.8
Financial account balance	-3.8	3.0	-0.1	0.7	-105.8	-107.6	-1.7
Net International Investment Position	-33.7	38.8	1.6	4.9	-86.2	-47.5	38.8

Source: Office for National Statistics

Notes:

1. Components may not add to totals due to rounding differences.

To add perspective to the size of the numbers presented in the balance of payments, it is useful to compare them with the size of the UK's GDP. Table 2 presents the main accounts as a percentage of GDP in current market prices.

Table 2: Summary of indicative revisions as a percentage of gross domestic product between currently published data and indicative data (consistent with Pink Book 2018), UK, 1997 to 2016

% of GDP	1997 to 2016			2016		
	Largest downward revision	Average revision	Largest upward revision	Previously Published Value	Indicative Value in Pink Book 2018	Revision
Trade balance	-0.1	0.2	0.5	-2.1	-1.6	0.5
Primary income balance	0.0	0.0	0.1	-2.6	-2.5	0.1
Secondary income balance	0.0	0.0	0.1	-1.1	-1.1	0.0
Current account balance	-0.1	0.2	0.6	-5.8	-5.2	0.6

Source: Office for National Statistics

Notes:

1. Components may not add up due to rounding differences.

Notes for: Summary of indicative impact on main aggregates

1. Currently published data refers to the data published in the last quarterly bulletin released on the 29 March 2018.

6 . Summary of the indicative impact of individual methodological improvements

Revisions throughout the published time series are due mainly to implementing the improvements described in this article. Indicatively, revisions between 1997 to 2013 (the closed period) will exclusively be from methods changes. The years 2014 to 2016 (the open period) are fully open for revisions to incorporate new data from sources.

This section summarises the indicative revisions in both the closed and open periods that will be introduced into the balance of payments and international investment position (IIP). For those changes impacting the current account, indicative impacts are presented for the trade balance, primary income balance and secondary income balance. Indicative impacts for the financial account and the IIP are also presented. All estimates presented remain subject to further quality assurance before publication at the end of June 2018, therefore they should be treated as indicative.

The two main improvements to the trade data and their impact on the total trade balance are explained in this section. We show the total impact of the changes on the trade balance, however, there are also indicative impacts on the sub-components that make up the trade balance. For more information on the indicative impacts on the sub-components within both trade in services and trade in goods, please see [National Accounts: UK trade data impact assessment from new developments, 1997 to 2016](), which was published on 8 May 2018.

6.1 Net spread earnings

Some financial companies generate income by trading in financial assets. They buy assets at a price that is typically lower than the prevailing market price and sell them at a price that is typically above the market price. Together these margins are referred to as net spread earnings (NSE). In the national accounts, NSE are considered to be the production and income associated with this trading. NSE do not include the income that comes from the ownership of these assets (that is, dividends, interest or holdings gains), estimates for these items are therefore unaffected by this change.

The Bank of England has collected NSE generated by banks from trading in foreign exchange, securities and derivatives using its Profit and Loss (PL) form since 2004. This collection of NSE has proved challenging as it is not something the reporting units are required to report within their own published accounts. The closest concept is trading profits, which encompasses other types of income alongside NSE. The Bank has recently emphasised the importance of these data and has targeted some of the main reporters to ensure that NSE are more accurately reported. This has led to a more comprehensive coverage and the Bank has revised the estimates supplied to Office for National Statistics (ONS).

The majority of trading that generates NSE is with the rest of the world sector. This has resulted in an increase in exports of financial services from 2004 to 2016.

The range of revisions to the trade balance between 2004 and 2016 (rounded to one decimal place) is between £0.1 billion and £6.2 billion.

6.2 Improvements to trade in goods and services

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

HM Revenue and Customs (HMRC) is the main source for our trade in goods data, delivering administrative data each month collected on an overseas trade statistics (OTS) basis; this measures the physical movement of goods in and out of the UK. Balance of payments adjustments are then applied to the data so that they are on a change of economic ownership basis. In some instances, goods change economic ownership but do not leave or enter the UK, while not all goods that leave or enter the UK represent a change of economic ownership.

One source of improvements to our trade in goods data is a new delivery of data from HMRC covering the period 1998 to the present. Prior to a change in legislation on 1 May 2016, HMRC provided OTS data on a general trade basis, which includes all merchandise crossing the national boundary of the UK, including goods imported into and exported from customs warehouses and free zones. Imported goods are recorded whether or not at the time of importation they are intended for use in the UK or for re-export.

For UK trade data to be published on a balance of payments basis, adjustments were applied to adjust the data onto a special trade basis, where goods imported into customs warehouses and free zones are only recorded once they are removed and enter free circulation or certain customs procedures. Delivery of new data from HMRC that include actual data for this adjustment enables us to remove our estimates; providing a better estimation of special trade data. More details on special and general trade can be found in the Overseas trade statistics methodology paper (PDF, 456.9KB), published July 2017.

The new system produces more detailed statistics and, in aggregate, the impact on gross domestic product (GDP) and net trade compared with the previous system is generally small. There is some impact at the more detailed level, and to gross imports and exports. These changes arise mainly from processing data at a more granular level, but also a review of historical national accounts conceptual adjustments.

As well as improvements to the trade in goods processing system, the first phase of developments to streamline and improve the transparency of the trade in services system is being introduced for Blue Book 2018 and Pink Book 2018. This first phase of developments has improved the process for the allocation of supply and use balancing adjustments.

The allocation is applied based on the size of the unbalanced product data. This affects the apportionment of these adjustments across components of the Extended Balance of Payments Services (EBOPS) classification, the classification system we use to produce our services statistics. This has resulted in revisions to trade in services imports, which has generally led to a decline in imports.

There was a detailed trade article released on 8 May 2018, National Accounts: UK trade data impact assessment from new developments, 1997 to 2016, which explains these improvements in more detail.

The range of revisions to the trade balance between 1997 and 2016 (rounded to one decimal place) is between negative £1.2 billion and positive £4.6 billion.

6.3 Data change to households and non-profit institutions serving households UK-listed share asset level

Continuing the enhancement of last year's Blue Book project looking at the households and non-profit institutions serving households (NPISH) sectors' equity data, a further improvement has been implemented in the way we apportion the levels between the two sectors. For more information on this change implemented last year, please see the article Improving the household, private non-financial corporations and non-profits institutions serving households sectors' non-financial accounts, which explains the method that impacted on last year's data.

These changes have affected the value of stocks held in the UK by non-resident investors, with stocks of external liabilities of total equity securities into the UK declining in most years between 2005 to 2014. This has led to an average overall narrowing in the international investment position (IIP) net liability in these years. However, in 2015 and 2016, these changes will lead to an increase in the stock of liabilities of total equity securities into the UK causing a widening in the IIP net liability.

As well as the levels of stock, these changes have also impacted on the earnings of these stocks (primary income). These changes led to a decrease in earnings on equity and investment fund shares in the UK in most years between 2005 and 2014, while there were increases in 2015 and 2016. This led to both a narrowing and then a widening in the primary income balance deficit, in these periods respectively.

The range of revisions between 1997 and 2016 (rounded to one decimal place) is between:

- negative £0.3 billion and positive £0.0 billion for the primary income balance
- negative £11.7 billion and positive £1.9 billion for the IIP net balance

6.4 Share ownership benchmarking

This improvement concerns UK-listed shares (also known as quoted shares), which are listed on the UK stock market (the London Stock Exchange). To determine who holds the assets and therefore the recipients of dividends paid by UK-listed companies, Office for National Statistics (ONS) run a Share Ownership Survey (also known as the Share Register Survey) every two years.

This provides benchmarks for UK-listed share assets, around which quarterly data can be built. The Share Ownership Survey benchmarks determine the number of shares each sector hold and these in turn allocate the number of dividends receipts each sector receives.

The last benchmark of the allocation of share ownership of UK-issued shares was up to Quarter 4 (Oct to Dec) 2014. This has been updated with data up to 2016. The new data in 2015 and 2016 suggest that the rest of the world held less UK-issued shares than previously thought, causing a narrowing in the net international investment position (IIP). This decreases their allocations of dividends paid and leads to a narrowing in the current account deficit.

The range of revisions between 2015 and 2016 (rounded to one decimal place) is between:

- £0.0 billion to £0.4 billion for the primary income balance
- £0.0 billion to £3.0 billion for the financial account balance
- £13.0 billion to £30.0 billion for the IIP net balance

6.5 Foreign direct investment benchmarking

The balance of payments uses information from the quarterly and annual Foreign Direct Investment (FDI) Surveys. In the short-term, the quarterly survey is used within the balance of payments and then later revised when the more comprehensive annual survey data become available, known as the FDI benchmark process. This benchmark process is an annual reconciliation between the quarterly and annual surveys used in the production of FDI data.

The quarterly survey for outward and inward FDI has 680 and 970 sampled enterprise groups respectively; these increase to 2,100 and 3,500 sampled enterprise groups respectively on an annual basis. The increased sample size and responses being taken from audited annual accounts, rather than quarterly management accounts, can result in revisions. This annual process ensures that the balance of payments and annual foreign direct investment publications are coherent.

These annual FDI revised estimates for the year 2015 will be incorporated into the Balance of Payments, UK: Quarter 1 (Jan to Mar) 2018 release on 29 June 2018.

The revisions in 2015 are:

- negative £0.1 billion for the primary income balance
- positive £6.6 billion for the net financial balance
- negative £44.4 billion for the net international investment position (IIP) balance

6.6 Public sector finances alignment with national accounts

The term public sector finances (PSF) refers to those outputs and datasets that form the suite of public sector finances statistics. The primary purpose of the PSF is to inform its users of the public sector finances and the fiscal position.

In September we released an article explaining the reasons for differences between the PSF and National Accounts. Since the end of September 2017, work has been undertaken to better align PSF with the National Accounts. Work, such as this, to align the two datasets as closely as possible is undertaken annually. For more information see this section written on 'Future planned alignment work'.

This change has led to a slight decrease in total general government income received from abroad into the UK, leading to an overall narrowing in the secondary income deficit.

Revisions between 2001 and 2011 for the secondary income balance are less than £0.1 billion per annum.

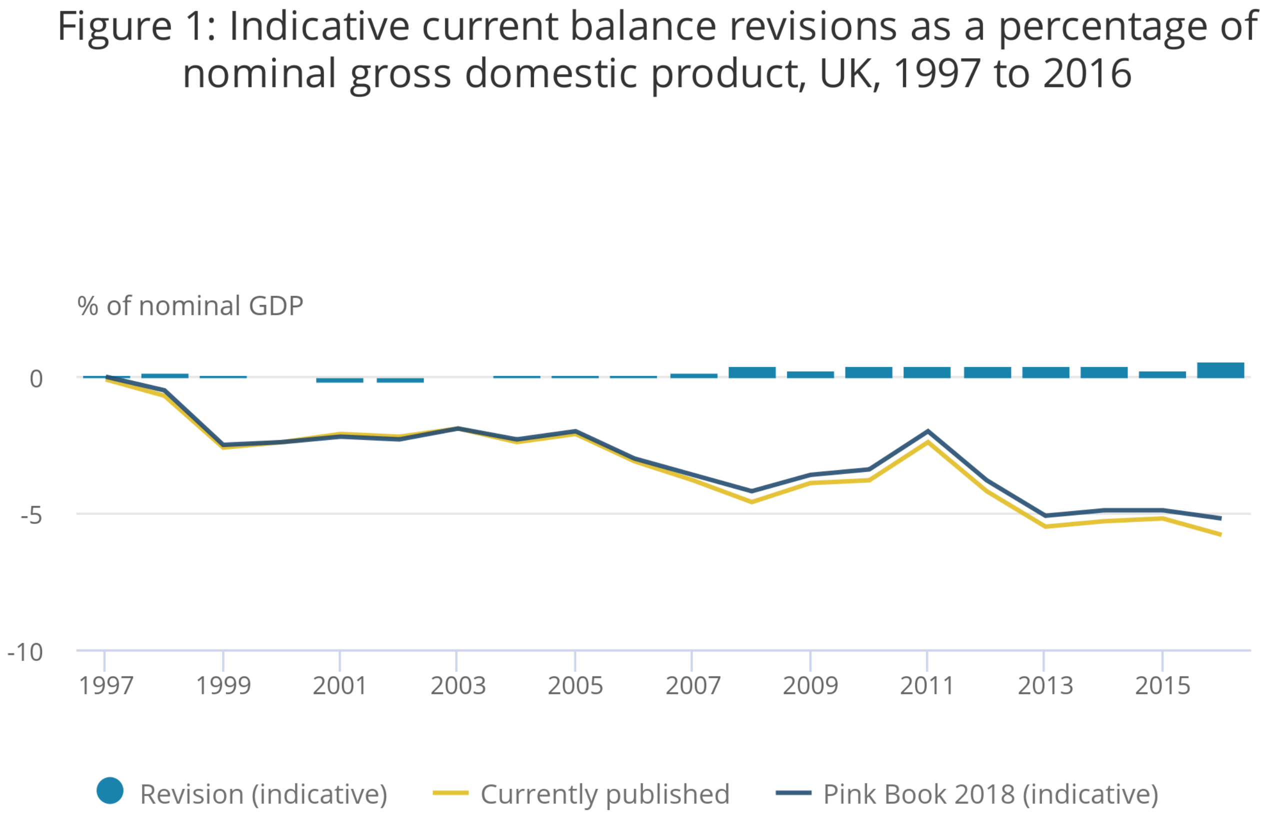
7 . Indicative impact on main current account aggregates

7.1 Current account balance

Indicative revisions to the current account balance, along with the currently published current account balance and Pink Book 2018 indicative current account balance, are shown in Figure 1. Revisions between 1997 and 2016 are mainly positive, apart from 2000, 2001 and 2002, which see small negative revisions.

The main cause of the current account indicative revisions are those revisions to the trade balance. Again, the largest current account revision was in 2016, in which the current account deficit has been revised to £102.8 billion (negative 5.2% of nominal gross domestic product (GDP)). This is narrower than the £113.6 billion (negative 5.8% of nominal GDP) that is currently estimated, but remains the largest deficit in the series history.

Figure 1: Indicative current balance revisions as a percentage of nominal gross domestic product, UK, 1997 to 2016

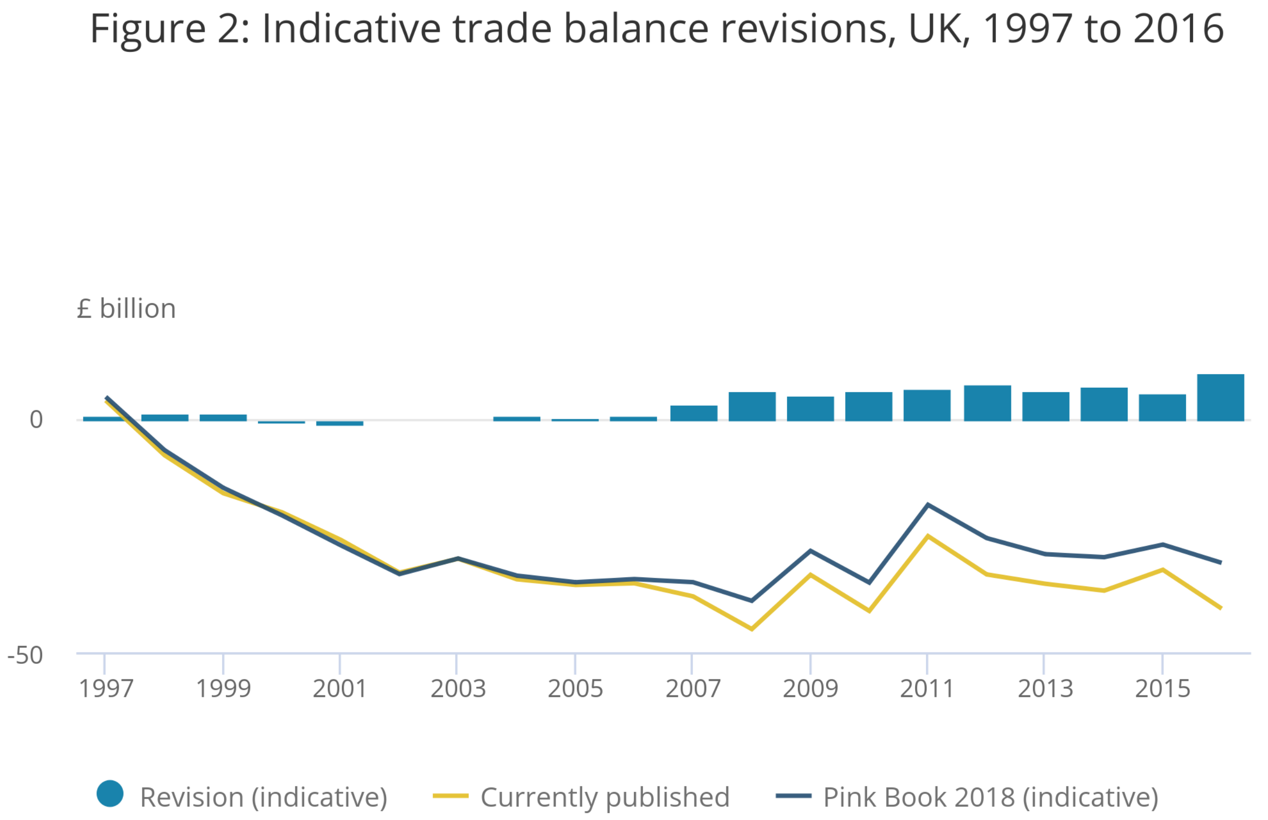


Source: Office for National Statistics

7.2 Trade balance

Figure 2 shows both the currently published trade balance and the Pink Book 2018 indicative trade balance (indicated by the two lines). The corresponding indicative revisions can also be seen in Figure 2, represented by the bars.

Figure 2: Indicative trade balance revisions, UK, 1997 to 2016



Source: Office for National Statistics

As can be seen in Figure 2, the majority of revisions to the trade balance are positive, with the exception of 2000, 2001 and 2002, in which there are small downward revisions. Figure 3 shows that the main driver behind the revisions to the trade balance from 2007 has been revisions made to net spread earnings (affecting trade in services), with revisions to net spread earnings being relatively smaller between 2004 and 2006.

The Bank of England has recently established better coverage of net spread earnings with effect from 2017 through targeting some of the main trading entities within the foreign exchange and derivative markets. This has helped the Bank derive better estimates for earlier periods where data from those institutions were not available. This better coverage of net spread earnings falls into the credits side of the trade balance. Since all indicative revisions for net spread earnings are positive, holding everything else constant, the revised current account deficit would be narrower for each period in which revisions are present – these changes have improved the coverage of UK exports.

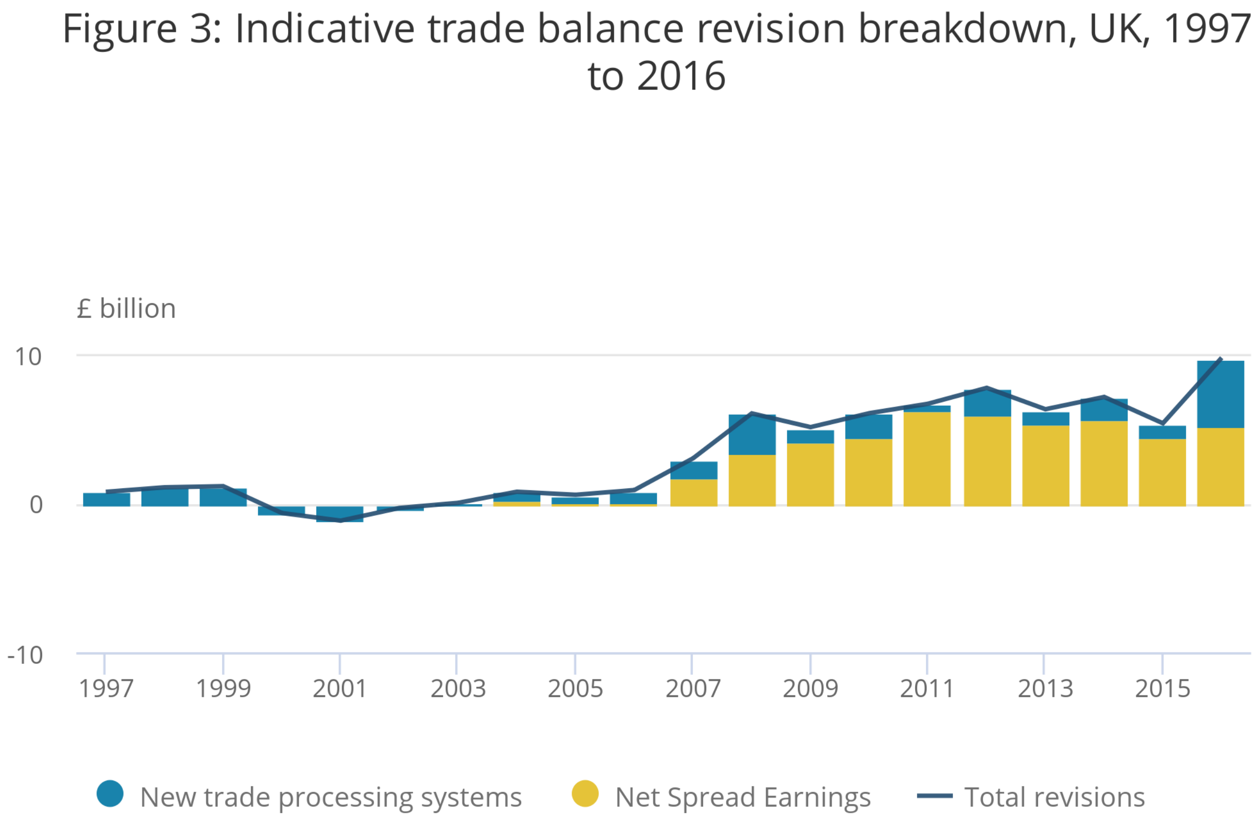
Changes associated with the new trade in goods processing systems developed as part of the wide range of developments and improvements to UK trade statistics, as detailed in the UK trade development plan: 2017, have also contributed to the total revisions to the trade balance, for the entire period shown in Figure 3.

As shown in Figure 3, developing the new trade in goods processing systems (which have enabled us to introduce improvements to trade in goods data) account for all revisions to the trade balance up to and including 2003. These developments are also the main driver to total trade balance revisions up to and including 2006, therefore determining the direction of the total revisions for that period. The new processing systems include a new delivery of data from HM Revenue and Customs (HMRC) covering the period 1998 to present; also methodological change has been implemented for the allocation of low-value trade, both contributing to revisions in trade in goods.

The improvements introduced within the new trade in goods processing system (which enables the production of more granular country-by-commodity data on a regular basis for the first time, as well as improving the processing of the data) have led to both positive and negative indicative revisions, although mainly positive. This new processing system is aimed at producing faster and more streamlined processing, capable of processing more granular data. For more information relating to enhancements to the trade in goods processing system, see Section 6.2.

As well as improvements to the trade in goods processing system, the first phase of developments to streamline and improve the transparency of the trade in services system is being introduced for Blue Book 2018 and Pink Book 2018. This first phase of developments has improved the process for the allocation of supply and use balancing adjustments.

Figure 3: Indicative trade balance revision breakdown, UK, 1997 to 2016



Source: Office for National Statistics

2016 saw the largest total revisions (of £9.8 billion) to the trade balance over the period in question, which reduced the trade balance deficit to an indicative £30.9 billion. This large indicative revision is due to large positive revisions in both net spread earnings (NSE) and enhanced trade processing systems, which includes an improved process for the allocation of supply and use balancing adjustments, leading to revisions in trade in services imports.

7.3 Primary income balance

Indicative revisions to primary income balance between 1997 and 2016 are relatively low, ranging from negative £0.1 billion to positive £1.0 billion, with the largest revision in 2016. The main drivers behind indicative revisions to the primary income balance are due to the non-profit institutions serving households (NPISH) UK-listed share asset levels improvement and the decreased payments to the rest of the world on their holdings of UK equities due to the share ownership data. For more information, see Sections 6.3 and 6.4.

Notes for: Indicative impact on main current account aggregates

1. Currently published data refers to the data published in the last quarterly bulletin released on the 29 March 2018.

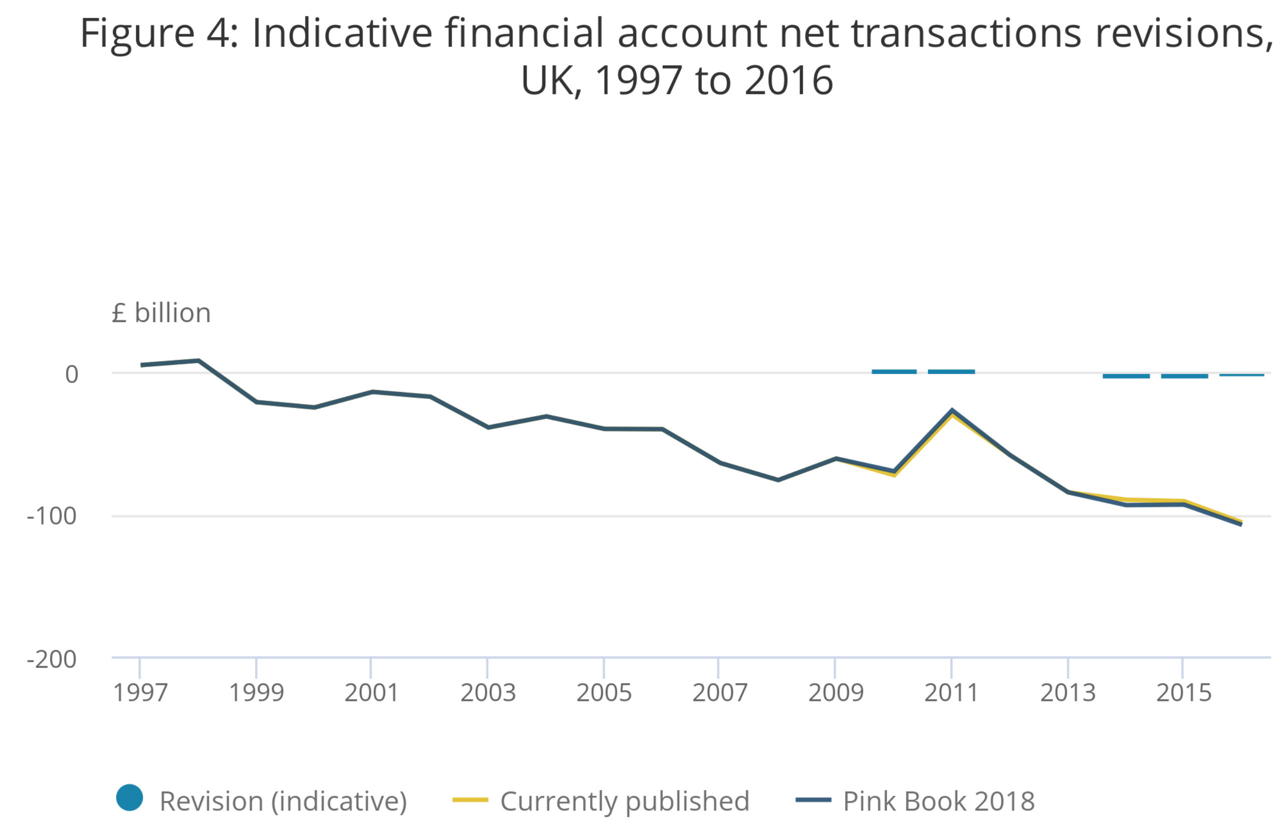
8 . Indicative impact on the net financial account and international investment position

8.1 Financial account net transactions

The lines in Figure 4 show the level of the financial account balance in currently published data and the Pink Book 2018 indicative balance, the bars show the total differences between the two lines (that is, the revision).

As shown in Figure 4, the total revisions are relatively small and generally negative, with the largest negative revision of £3.8 billion occurring in 2014, caused by the data change to the non-profit institutions serving households (NPISH) UK-listed share asset flow. The negative revisions causing a widening in the net financial deficit from 2014 to 2016 are caused primarily by the UK investing less abroad than currently published. The revisions also led to a decline in investments made in the UK than currently published in the years 2014 and 2015, although these were only slight overall and did not outweigh the revisions that caused a decline in how much the UK invests abroad.

Figure 4: Indicative financial account net transactions revisions, UK, 1997 to 2016



Source: Office for National Statistics

8.2 Net international investment position

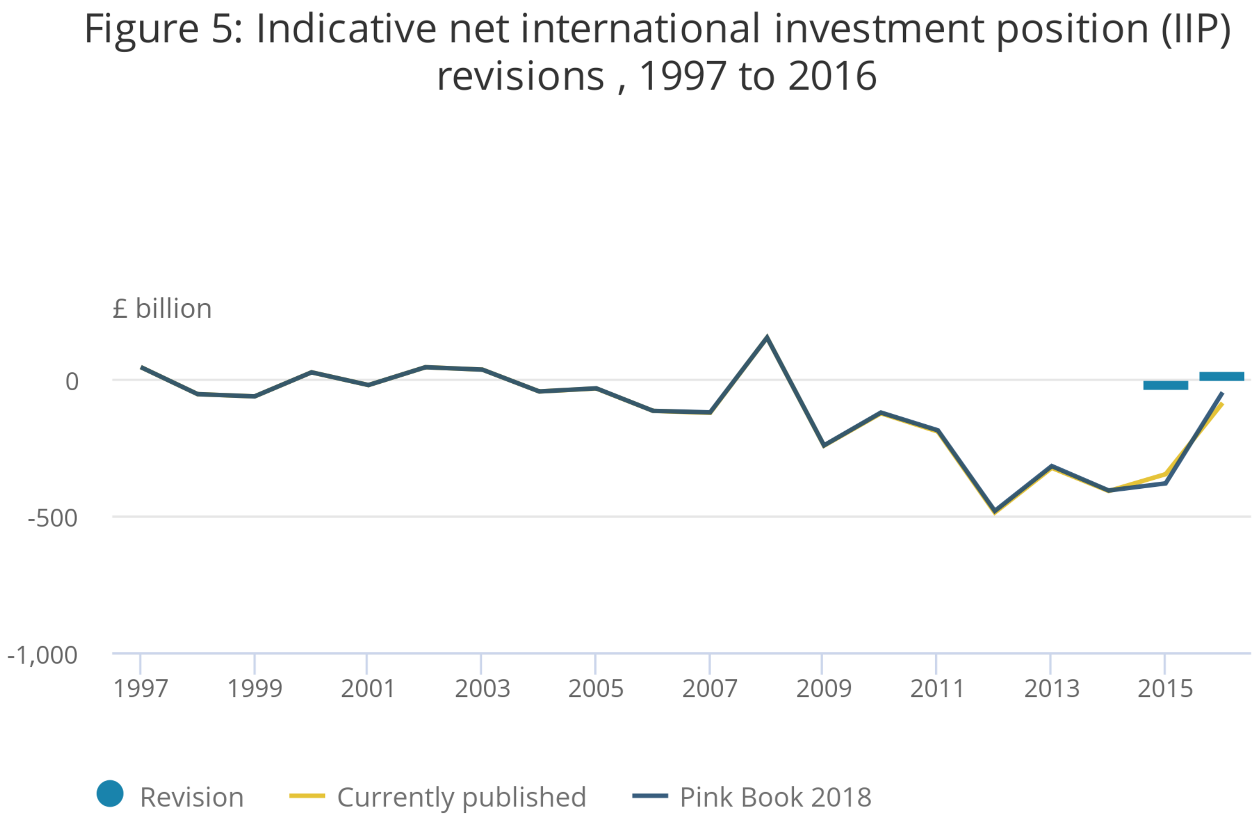
The lines in Figure 5 show the net international investment position (IIP) in published data and the Pink Book 2018 indicative position, while the bars show the total difference between the two lines (the revision).

As shown in Figure 5, the revisions are relatively small, with the largest negative revision of £33.7 billion occurring in 2015. This is caused mainly by the revisions from foreign direct investment (FDI) benchmarking, which are partially offset by the positive revisions caused by the share ownership benchmarking (see Sections 6.4 and 6.5 for more information on these changes).

The revisions in 2015 caused an increase in both the value of UK investments abroad as well as the value of investments made in the UK from foreign investors. However, the increase in valuation of investments made in the UK from foreign investors (liabilities) was greater and led to an overall negative revision and a widening in the net IIP liability.

The largest positive revision occurs in 2016, with a revision of £38.8 billion caused primarily by new data from the Share Ownership Survey. The revisions in 2016 lead to an overall decline in investments made into the UK (liabilities) and an increase in UK investments made abroad (assets), causing a narrowing in the net IIP liability.

Figure 5: Indicative net international investment position (IIP) revisions , 1997 to 2016



Source: Office for National Statistics

Notes for: Indicative impact on the net financial account and international investment position

1. Currently published data refers to the data published in the last quarterly bulletin released on the 29 March 2018.

9 . Changes to Pink Book tables

There will be several changes to the tables included in the Pink Book 2018. These changes are caused primarily by the inclusion of more detailed trade data, which include the addition of new countries to the trade in services by type of service and the addition of more granular trade in goods data. Tables 2.2 and 2.3 will no longer be available. As a result of the improvements made to the trade in goods systems, chained volume measures (CVM) and implied deflators are to be published in a timelier manner within the regular monthly trade bulletins. For the list of all the changes that will affect the Pink Book 2018 tables, please see the Pink book changes for more information.

10 . Gross national income (GNI)

In the UK system of accounts, the transition of gross domestic product (GDP) to gross national income (GNI) is obtained by adding the difference between compensation of employees and property income[1] received from and paid to the rest of the world. Compensation of employees is basically the remuneration paid by an employer to employee for work done; property income is primarily the earnings from financial investments and assets, such as interest, dividends and repatriated profits.

In our National Accounts articles: Impact on GDP current prices and chained volume measure annual and quarterly estimates: 1997 to 2016, published on 8 May 2018, we outlined the impact on GDP. By adding the revisions to total primary income to the previously published revisions to GDP we can state that the impact on UK GNI of these improvements is between positive £0.2 billion in 2000 and positive £9.5 billion in 2011, with the average absolute revision being £4.9 billion.

This is virtually unchanged as the revisions to total primary income are negligible in most years. The largest revision of significance is £1.0 billion in 2016. Please see Table 3 for the breakdown of revisions.

Notes for: Gross national income (GNI)

1. Also known as investment income.

11 . GNI revisions

Table 3: GNI revisions

All figures £ billion unless stated, current price

Year	QNA March 2018 nominal GNI	Total nominal GDP revision	Total primary income balance revisions	Provisional Blue Book 2018 nominal GNI	Percentage change in the level of current price GNI
1997	949.2	0.7	0.0	949.9	0.1%
1998	999.4	1.9	0.0	1,001.3	0.2%
1999	1026.1	1.6	-0.0	1,027.7	0.2%
2000	1093.3	0.2	-0.0	1,093.5	0.0%
2001	1134.7	3.0	-0.0	1,137.7	0.3%
2002	1195.3	3.1	-0.0	1,198.4	0.3%
2003	1264.6	3.3	-0.0	1,267.9	0.3%
2004	1323.9	2.8	-0.0	1,326.7	0.2%
2005	1405.3	2.4	0.0	1,407.7	0.2%
2006	1465.0	2.5	0.0	1,467.5	0.2%
2007	1529.4	4.9	0.0	1,534.3	0.3%
2008	1557.8	7.3	0.0	1,565.1	0.5%
2009	1518.0	7.7	-0.0	1,525.7	0.5%
2010	1581.0	7.6	0.0	1,588.6	0.5%
2011	1641.6	9.5	-0.0	1,651.1	0.6%
2012	1667.5	9.2	-0.0	1,676.7	0.6%
2013	1716.2	8.8	0.0	1,725.0	0.5%
2014	1799.2	7.2	-0.0	1,806.4	0.4%
2015	1845.8	7.1	-0.1	1,852.8	0.4%
2016	1912.9	6.2	1.0	1,920.1	0.4%

Source: Office for National Statistics

Notes:

1. Components may not sum to totals due to rounding.