Office for National Statistics

Article

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

Changes to national accounts and balance of payments, detailing the improvements being made to UK National Accounts in Blue Book 2019 and Pink Book 2019.

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Notice

13 September 2019

A change in allocation of the four character reference codes announced in table 4 on 30 August 2019 has been required. The codes should be CWVK for exports and CWVL for imports. ONS apologises for any inconvenience.

Table of contents

1 . Executive summary

This article provides indicative estimates of the impact methodological improvements will have on headline balance of payments (BoP) statistics between 1997 and 2016, consistent with the Quarterly National Accounts, due to be published on 30 September 2019.

All the methodological improvements for the period between 1997 and 2016 were initially outlined in the National Accounts articles: Latest developments and changes to be implemented in Blue Book and Pink Book 2019 , published on 11 October 2018. Since then, we have published further details regarding these new methods and their impacts in our Blue Book 2019 indicative impact articles on gross domestic product (GDP), trade and non-profit institutions serving households, published on 20 August 2019.

These improvements have had the following impacts on the headline accounts in balance of payments:

- the current account deficit in 2016 was revised up from £102.8 billion to £104.0 billion in value terms, but remained unchanged as a percentage of GDP at 5.2%
- the average absolute revision to the current account balance between 1997 and 2016 is £2.3 billion
- the trade deficit in 2016 remained unchanged at 1.6% as a percentage of GDP but is revised from £30.9 billion to £32.3 billion in value terms
- the average absolute revision to the trade balance between 1997 to 2016 is £2.6 billion
- the average absolute revision to the financial account balance is £2.9 billion between 1997 and 2016, and £10.8 billion for the net international investment position over the same period

2 . Introduction

This article presents indicative estimates on the impact methodological improvements will have on the UK's Balance of Payments for the periods 1997 to 2016, introduced as part of Blue Book and Pink Book 2019.

Methodological changes are made in line with international standards adopted by all European Statistical System (ESS) 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 deliver a reliable framework for analysing the UK economy and for making international comparisons.

There are a number of changes and improvements being implemented, with the largest revisions caused by the introduction of new data sources and improved methods into trade statistics, and processing the charities data in the non-profit institutions serving households sector. This article is structured as follows:

- Section 3 – explains the methodological changes and their impacts
- Section 4 – presents indicative annual revisions of the total main aggregates
- Section 5 – describes analysis on the indicative annual revisions of the current account balance
- Section 6 – describes analysis on the indicative annual revisions of the financial account balance and international investment net positions
- Section 7 – presents indicative annual revisions of the UK's Gross National Income
- Section 8 – provides the changes in Pink Book 2019, to be published on 31 October 2019

Throughout the paper, the data are presented to the nearest billion British pounds, unless stated otherwise.

3 . Main methodological improvements

Revisions throughout the time series are mainly the result of implementing the improvements described in this article. Indicatively, revisions between 1997 and 2014 (the closed period) will exclusively be from methods changes. The years 2015 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 September, therefore they should be treated as indicative.

Trade

We have continued to develop UK trade statistics as set out in the trade development plan, and we will be introducing further improvements as part of Blue Book and Pink Book 2019.

We are improving our balance of payments (BoP) adjustments which are applied to trade in goods. Her Majesty's 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. However, such data are on a different basis from that required for balance of payments statistics. To conform to the International Monetary Fund (IMF) definition (PDF, 3.01MB), we have to make various adjustments to certain transactions which are not reported to HMRC and, conversely, to exclude certain transactions that, although are reported by HMRC, do not involve a change in economic ownership.

One of the improvements revises the method for allocating the adjustments for merchanting, and adjustments for goods sent abroad for processing to products. Merchanting is the purchase of a good by a resident from a non-resident and the subsequent resale of the good to another non-resident, without the good ever entering the resident economy. The value of these goods will not be present in the OTS data since they do not cross the customs border. Goods sent abroad for processing are goods that are exported or imported for processing where the enterprise doing that processing is not the economic owner. The value of these goods is present in the OTS data as they cross the customs border. The processor however does not have economic ownership over the goods, so the flow should not be included on a BoP basis.

Both of these adjustments are collected via the International Trade in Services (ITIS) Survey, but these data are not available on a product basis. Product classifications are designed to categorise products that have common characteristics. We are now utilising the trade in goods microdata from HMRC to allocate these adjustments to a product based on the industry that reported the transaction. Linking the data in this way assumes that a trader operates in a single industry. While this may hold for simple firms, for more complex firms who have operations spanning multiple industries, the matching method used in this release will provide a more accurate apportionment of trade values to industry.

A further improvement to our trade statistics is the inclusion of estimates of UK monetary financial institutions' intragroup fees and cost recharges in trade in services. This is in line with our planned improvements and ongoing developments of trade statistics. The Bank of England collects these data using its Profit and Loss (PL) Form. Transactions between residents and non-residents will be included within trade in services for Blue Book and Pink Book 2019. Transactions between UK institutions are already captured in the income and output measures of gross domestic product (GDP).

Intragroup fees and cost recharges cover:

- intragroup fees, including investment banking, advisory, brokerage, underwriting, insurance, loans and advances where these cannot be separately identified and explicitly reported within those items on Form PL
- cost recharges, applied when the costs of a centrally managed service are allocated and charged to each group entity; for example, software for the whole group may be purchased by one group entity but then recharged to other group entities
- other intragroup operating income and expenditure; any intragroup service income and expenditure not covered by intragroup fees or cost recharges

In addition, trade in services received balancing adjustments from the annual supply use balancing process. This is the process used to reconcile the three approaches to GDP: income, output and expenditure.

More details on the methodological improvements to trade and their indicative impacts can be found in the [trade impact article] published on 20 August 2019.

The range of revisions between 1997 and 2016 for total trade is:

- the trade balance – negative £1.4 billion and positive £6.3 billion.

Improvements to the processing of non-profit institutions serving households (NPISH) data

The non-profit institutions serving households (NPISH) sector is defined by economic agents who have a purpose to mainly benefit households; they must not be able to distribute profits to third parties and they must not be controlled by government. The NPISH sector within the UK includes, for example, non-market charities, further and higher education establishments, trade unions and political parties.

Improvements are being introduced to the estimates of the NPISH sector as part of the Blue Book and Pink Book 2019 publications. The largest impact in value terms is related to how charities data are processed. The result of these improvements is a reduction in the overall size of the NPISH sector.

While improving the system, areas for improvement were identified such as removal of double counting of the contributions of Northern Ireland and Scotland from UK totals, and introduction of an outlier process. Previously, no outlier treatment was performed. Further information on NPISH improvements can be found in the [impact article] published on 20 August 2019.

The range of revisions between 1997 and 2016 for NPISH is:

- the primary income balance – negative £0.2 billion to positive £0.1 billion
- the secondary income balance – negative £1.4 billion to negative £0.1 billion
- the net financial balance – negative £10.5 billion to positive £10.9 billion
- the net IIP balance – negative £15.8 billion to positive £4.6 billion

Foreign direct investment (FDI) benchmarking

The balance of payments employs data from the quarterly and annual foreign direct investment (FDI) surveys. In the short term, the quarterly survey is used within the balance of payments, before later being 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 927 and 1,454 sampled enterprise groups respectively; these increase to 2,270 and 4,062 enterprise groups respectively on an annual basis. Further detail on the FDI sample design can be found in methodological improvements to FDI statistics. The increase in the sample size between the quarterly and annual surveys – and revisions in respondent returns because of the availability of audited annual accounts rather than quarterly management accounts – can result in revisions. This annual benchmarking process ensures that the balance of payments and annual FDI publications are coherent.

These annual FDI revised estimates for the year 2016 will be incorporated into the balance of payments release on 30 September 2019.

The revisions in 2016 (only period subject to revision) are:

- the primary income balance – positive £2.7 billion
- the net financial balance – negative £57.6 billion
- the net IIP balance – positive £ 70.8 billion

Incorporating improvements in data sources for private non-financial corporations (PNFC)

As part of our ongoing private non-financial corporations (PNFCs) improvement programme we ran a project focusing on data originating from our Financial Assets and Liabilities Survey (FALS). Our investigation identified inconsistencies in some companies' deliveries in relation to debt securities and, after consultation with data providers, we now have an improved set of data on which to estimate these financial instruments. We have therefore taken this opportunity to feed these quality improvements into the accounts. Consequently, there are revisions that affect the current account, financial account and international investment position in the Pink Book 2019.

The range of revisions between 2014 to 2016 (only periods subject to revision) is:

- the primary income balance – negative £0.9 billion to negative £0.2 billion
- the net financial balance – negative £8.0 billion to negative £2.2 billion
- the net IIP balance – negative £34.0 billion to negative £19.2 billion

4 . Provisional impact on the main total aggregates

This section provides a summary of the indicative revisions to the main components of the current account, the financial account and the international investment position (IIP). Table 1 provides an indicative impact that changes will have on the balance of payments and IIP in billions of British pounds.

Table 1: Summary of indicative revisions on annual data between currently published data and indicative Pink Book 2019 data, 1997 to 2016 (£ billion) UK

£ billion	**1997 – 2016**				**2016**		
	Largest downward revision	**Largest upward revision**	**Average annual revision**	**Average absolute annual revision**	**Previously published value**	**Indicative value in Pink Book 2019**	**Indicative revision[1]**
Trade balance	-1.4	6.3	2.5	2.6	-30.9	-32.3	-1.4
Primary income balance	-0.9	1.5	0.0	0.2	-49.4	-47.9	1.5
Secondary income balance	-1.2	-0.1	-0.4	0.4	-22.5	-23.7	-1.2
Current account balance	-1.2	5.9	2.1	2.3	-102.8	-104.0	-1.2
Financial account balance	-11.3	9.0	-0.1	2.9	-107.6	-118.8	-11.3
Net International Investment Position	-53.6	53.7	-5.3	10.8	-47.5	6.3	53.7

Source: Office for National Statistics

Notes

1. Components may not add to totals because off rounding differences. Back to table

Table 2: Summary of indicative revisions as a percentage of GDP between currently published data and indicative data (consistent with Pink Book 2019), 1997 to 2016 (percentage of gross domestic product), UK

% of GDP	1997 - 2016			2016		
	Largest downward revision	**Average revision**	**Largest upward revision**	**Previously published value**	**Indicative value in Pink Book 2018**	**Indicative revision**
Trade Balance	0.0	0.2	0.3	-1.6	-1.6	0.0
Primary Income Balance	-0.1	0.0	0.1	-2.5	-2.4	0.1
Secondary Income Balance	-0.1	0.0	0.0	-1.1	-1.2	-0.1
Current Account Balance	0.0	0.1	0.3	-5.2	-5.2	0.0

Source: Office for National Statistics

Notes

1. Components may not add up because off rounding differences. Back to table

5 . Provisional impact on the current account aggregates

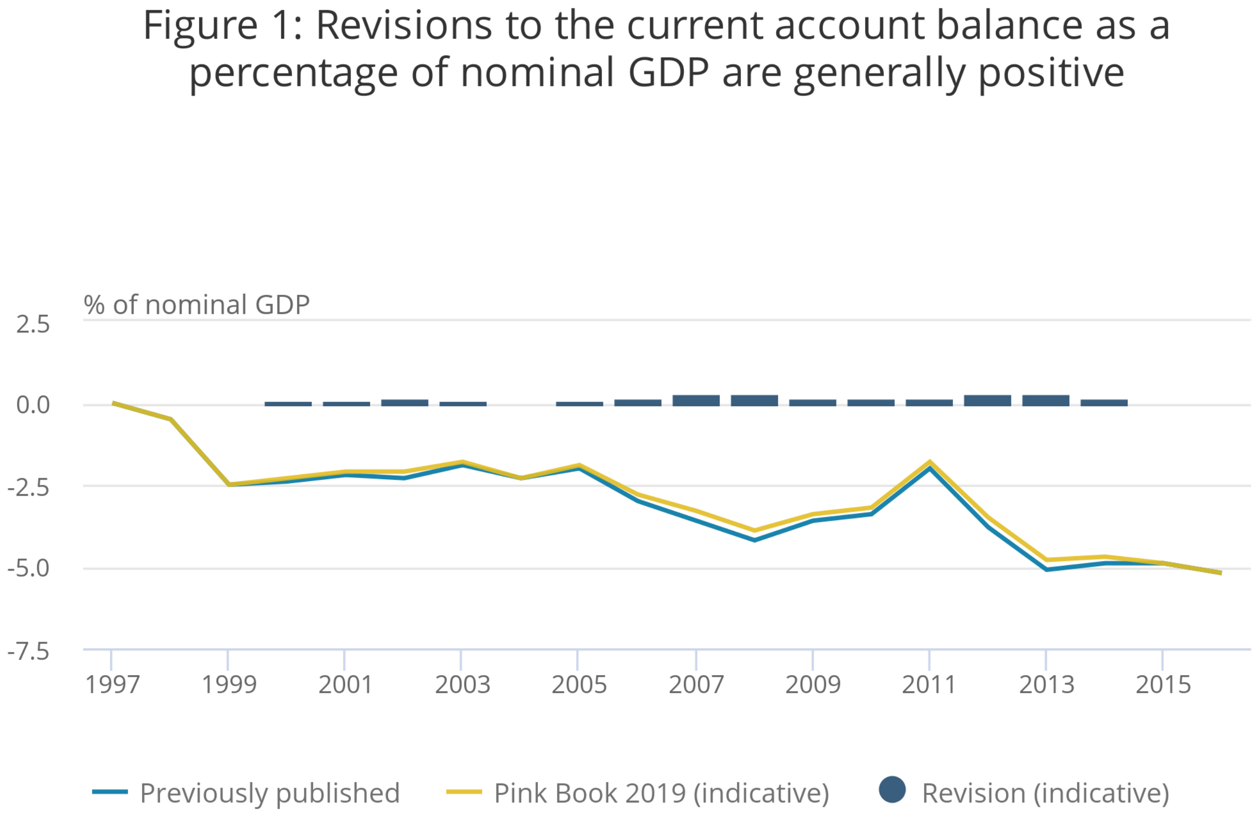
The current account records the extent to which the UK is a net lender or net borrower with the rest of the world and includes debit and credit transactions relating to trade in goods and services, primary income and secondary income. Credits are income or transfers receivable by the UK and debits are income or transfers payable by the UK. The main indicators in this account are the:

- 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; examples of these transactions would be where the government provides international aid for disaster relief or subscriptions to international organisations

Current account balance

Figure 1 shows the indicative revisions to the current account balance as a percentage of nominal gross domestic product (GDP), along with the previously published current account balance. The revisions between 1997 and 2014 are generally positive, with the exception of 2015 and 2016 which are unchanged. The main cause of the revision came from the changes in trade – mainly the incorporation of estimates of UK monetary financial institutions' intragroup fees and recharges within trade in services.

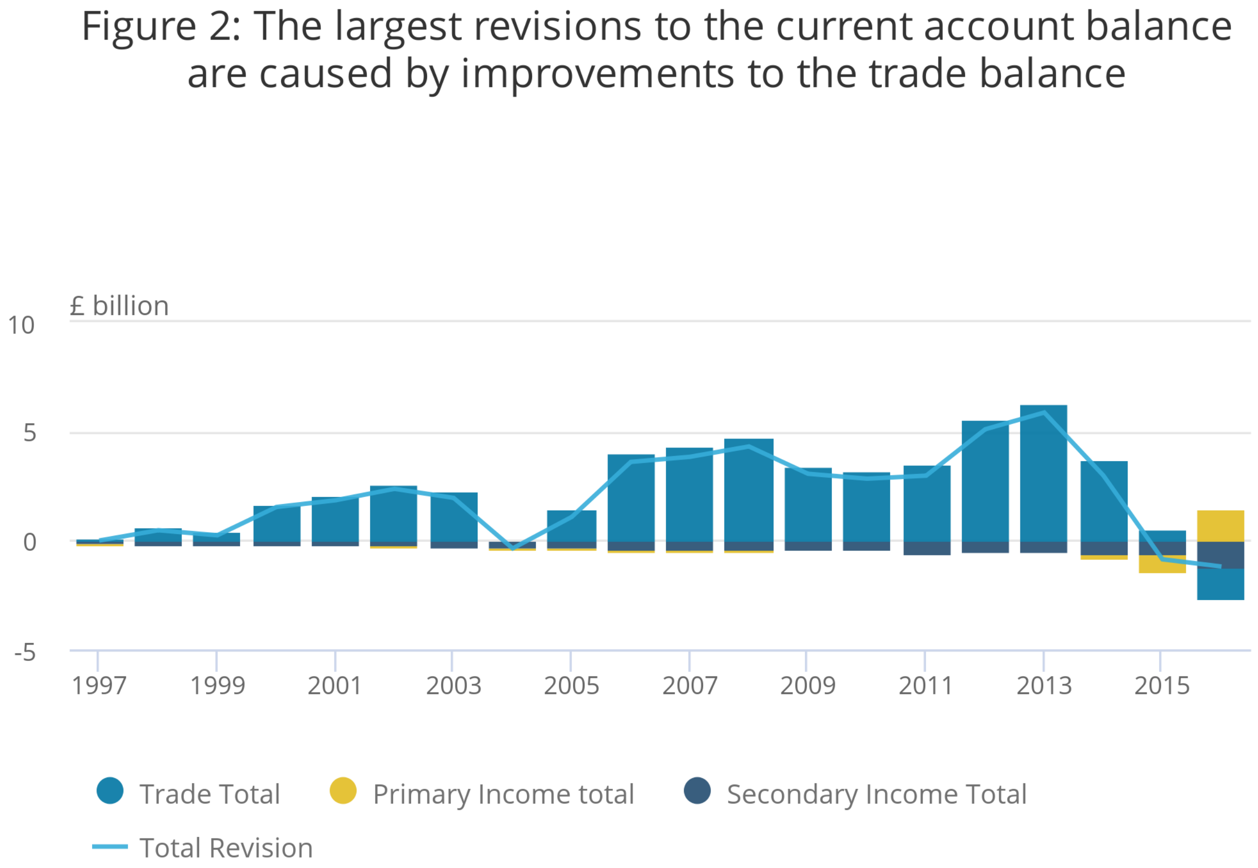
Figure 1: Revisions to the current account balance as a percentage of nominal GDP are generally positive



Source: Office for National Statistics

Figure 2 shows the breakdown of the current account balance revisions from 1997 to 2016 in value terms. Most of the revisions are positive and come from trade, with the exception of 2015 and 2016.

Figure 2: The largest revisions to the current account balance are caused by improvements to the trade balance

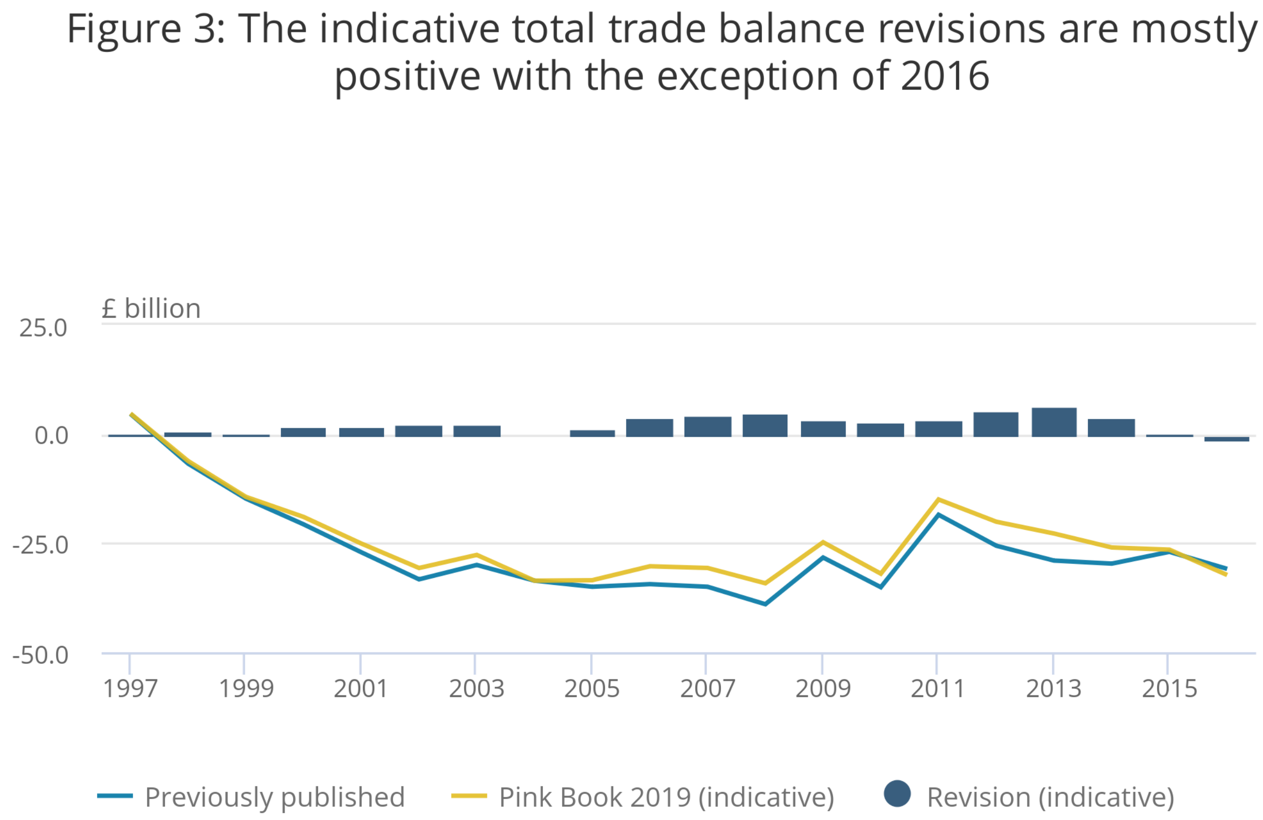


Source: Office for National Statistics

Trade balance

Figure 3 illustrates revisions to the overall trade balance. The indicative revisions are mostly positive in the time series presented, with the exception of 2016. The main reasons behind these revisions are changes to trade in services and incorporation of UK monetary financial institutions’ intragroup fees and recharges data.

Figure 3: The indicative total trade balance revisions are mostly positive with the exception of 2016



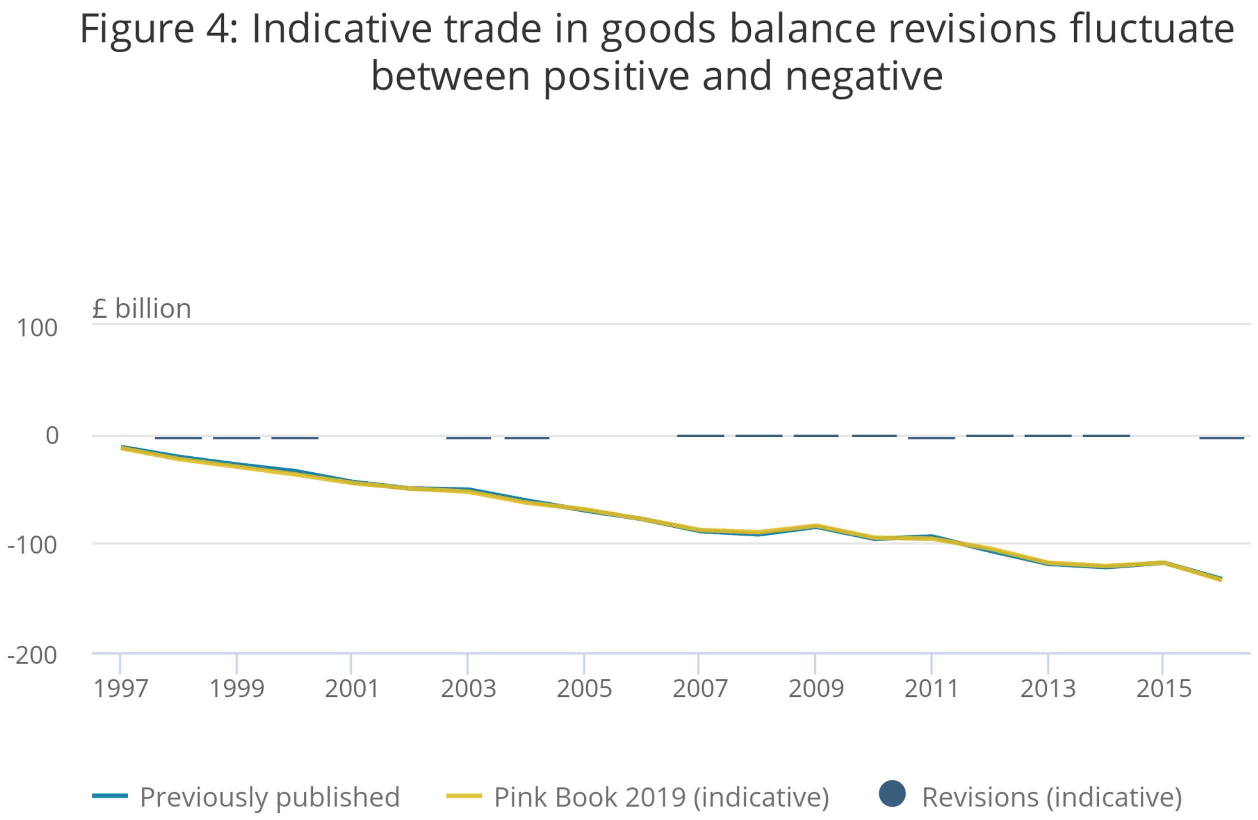
Source: Office for National Statistics

Trade in goods

As noted previously, the main source of revisions is the adoption of a new method for allocating the merchanting and goods sent abroad for processing adjustments to products.

Figure 4 illustrates the provisional impact on the revisions on the trade in goods alongside the current published and indicative Pink Book data. As can be seen, most of the revisions in trade in goods are negative, however total revisions between 2005 to 2010 and 2012 to 2015 are positive.

Figure 4: Indicative trade in goods balance revisions fluctuate between positive and negative

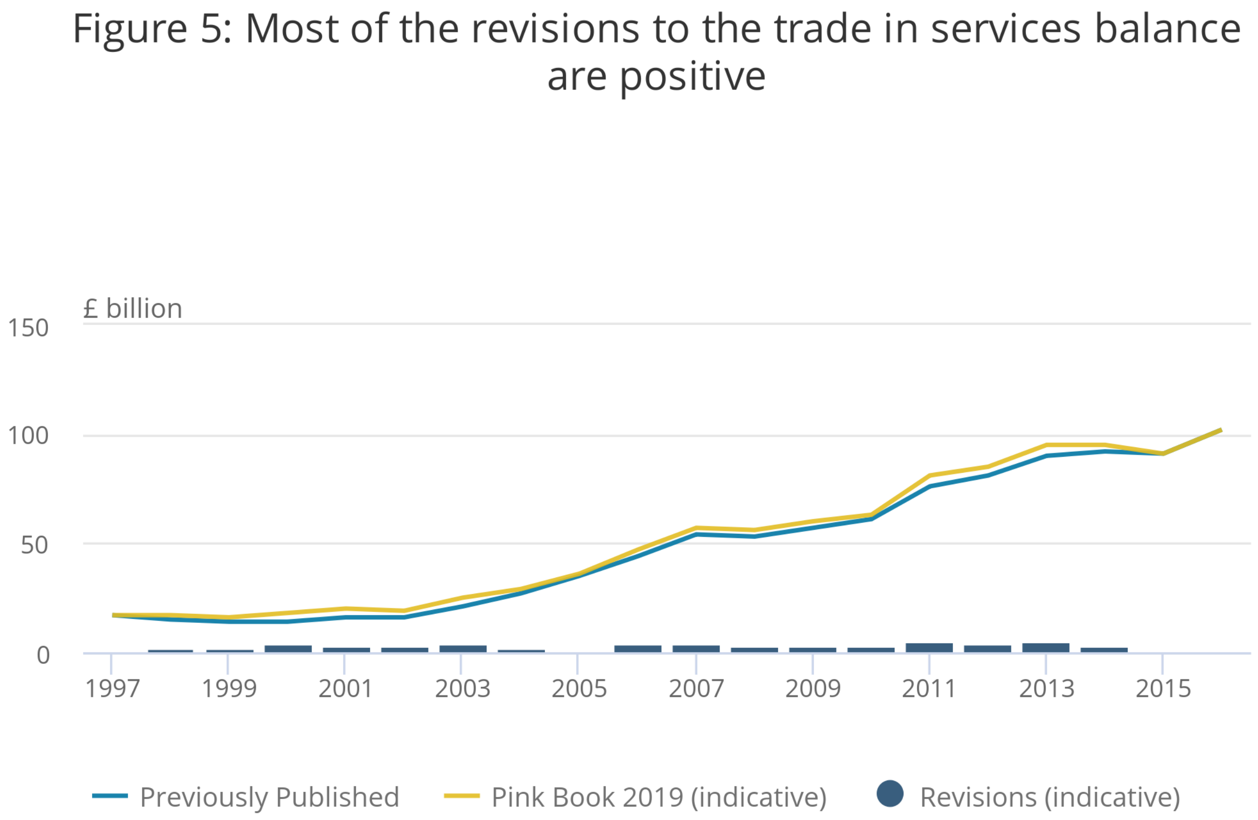


Source: Office for National Statistics

Trade in services

The main reason for changes in the overall current account balance was because of changes made in trade services. These were mainly the result of the inclusion of monetary financial institutions intragroup fees and cost recharges. Figure 5 shows the provisional impact on trade in services from 1997 to 2016.

Figure 5: Most of the revisions to the trade in services balance are positive



Source: Office for National Statistics

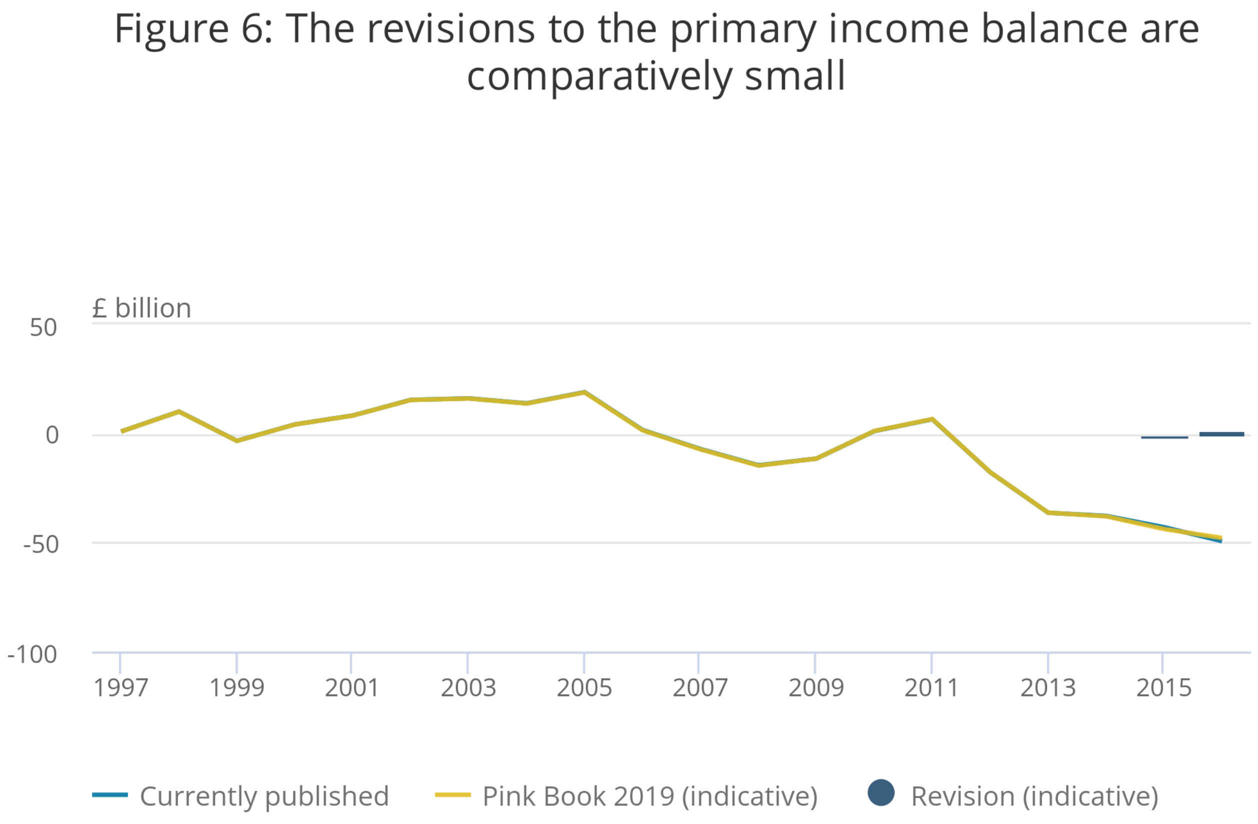
Most of the revisions in trade in services are positive. These improvements came through from UK monetary financial institutions' intragroup fees and cost rechanges that have been included in trade in services.

Primary income balance

Additionally, the current account balance was revised after small revisions in primary income. This is because of the revisions in investment income that make up the primary income. Figure 6 shows the provisional indicative revisions to primary income from 1997 to 2016.

The revisions in primary income are mostly negative, except for the years 2010 to 2013 and 2016. The main reasons for these revisions are improvements in how non-profit institutions serving households (NPISH) data are processed, but they are comparatively small. Another reason for these revisions is the improvements in our Financial Assets and Liabilities Survey (FALS) from the second half of 2014, which affects private non-financial corporations' earnings on debt securities.

Figure 6: The revisions to the primary income balance are comparatively small

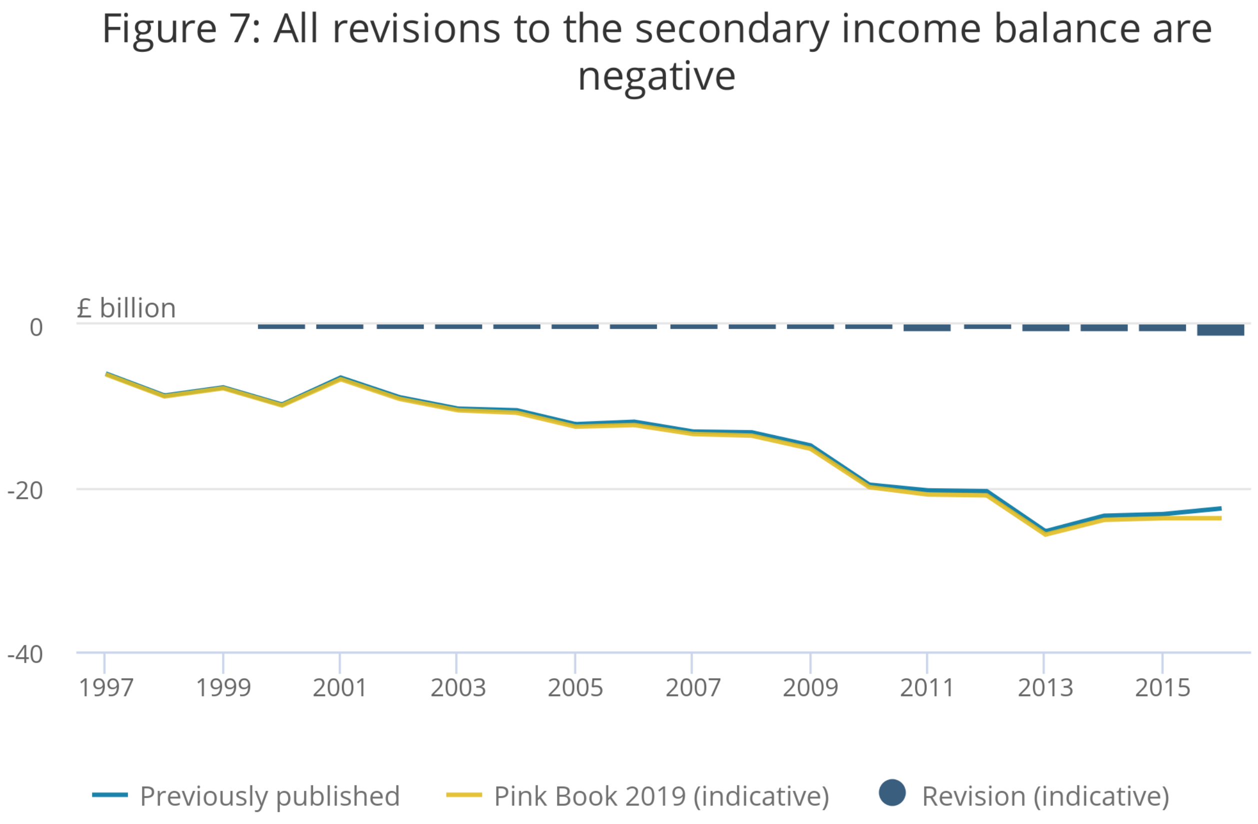


Source: Office for National Statistics

Secondary income balance

Other revisions in the current account balance were the result of minor improvements being incorporated in the secondary income balance. Figure 7 shows the provisional secondary income revisions in billions from 1997 to 2016. All revisions to secondary income are negative. These revisions are the result of improvements in NPISH data processing and other associated method changes.

Figure 7: All revisions to the secondary income balance are negative



Source: Office for National Statistics

6 . Provisional impact on the financial account and international investment position (IIP)

This section provides the provisional impact on the financial account and the international investment position (IIP).

Financial account contains transactions (flows) allied with changes of economic ownership of the financial assets and liabilities. The financial account balance reveals the net position of these flows between the UK and the rest of the world (RoW).

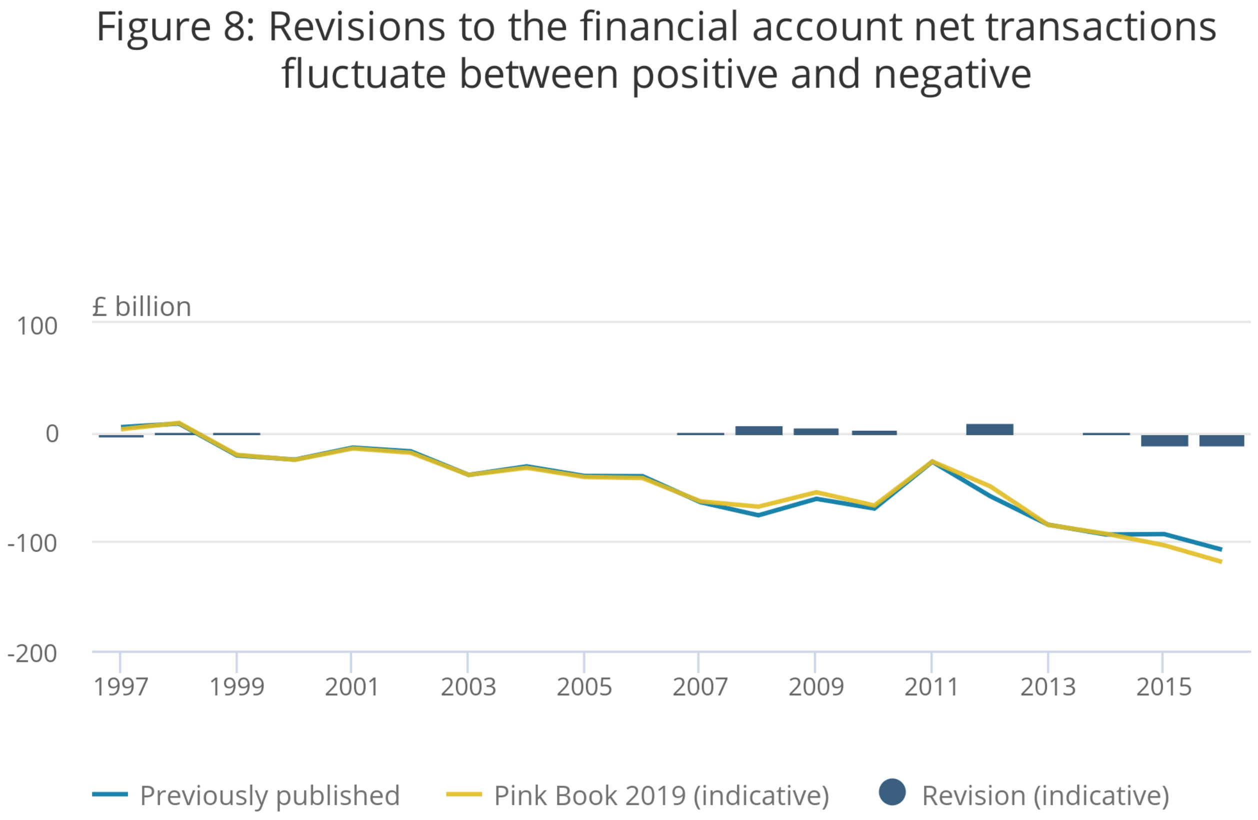
The IIP captures the UK's stock (levels) of external financial assets and liabilities. A negative net IIP denotes that liabilities exceed assets while positive IIP shows the assets exceeds liabilities.

Financial account net revisions

This section provides the details of impact on the financial account and the IIP. Figure 8 shows the provisional financial net account revisions in billions from 1997 to 2016.

The revisions between 1997 and 2014 fluctuate between positive and negative impacts. The largest revision is in 2016 of negative £11.3 billion. It is largely the result of revisions in open period revisions in foreign direct investment, portfolio, other investment and derivates.

Figure 8: Revisions to the financial account net transactions fluctuate between positive and negative

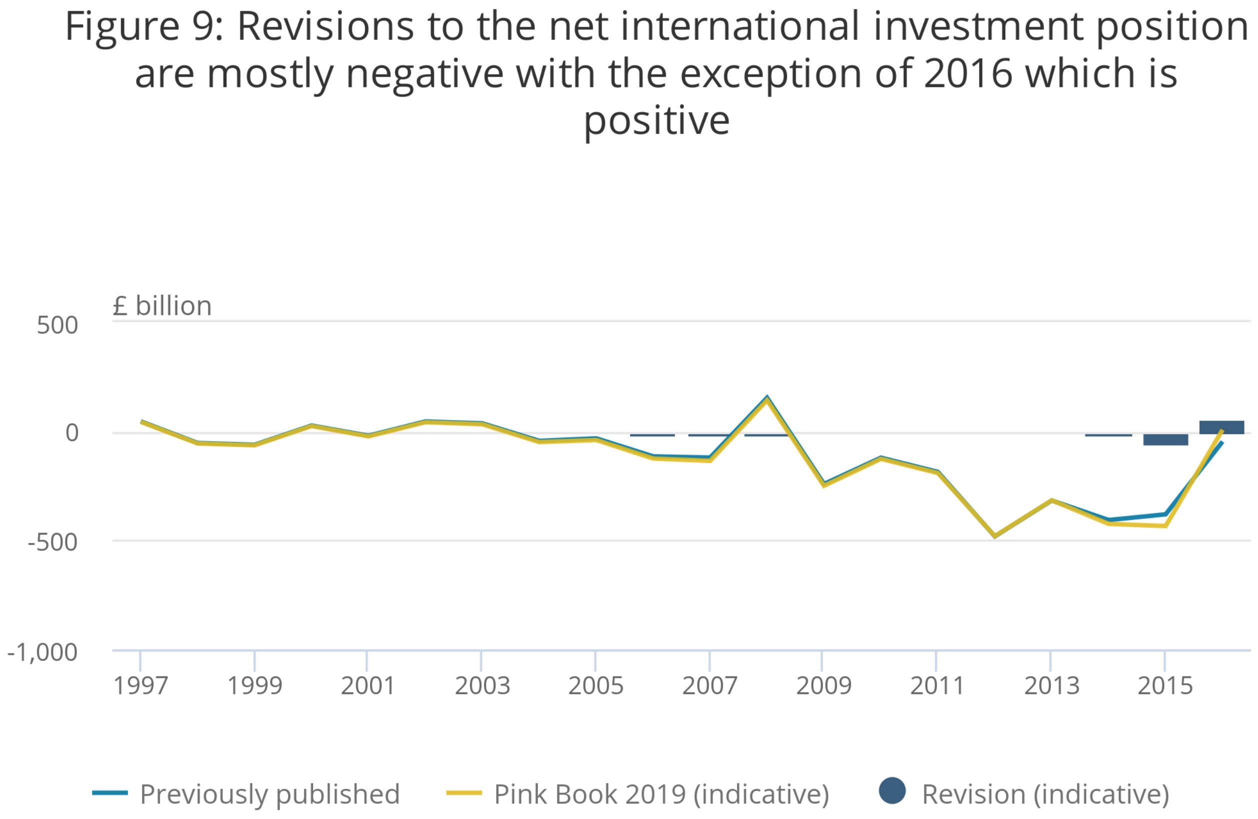


Source: Office for National Statistics

Net international investment position (IIP) revisions

Figure 9 shows the provisional impact on the net international investment position from 1997 to 2016. As shown in the figure, the revisions have been predominately negative besides 2016 which shows a small positive revision. The revisions from 1997 to 2013 are the result of the non-profit institutions serving households (NPISH) improvements and are comparatively small. In 2014 and 2015 the impact of the Financial Assets and Liabilities Survey (FALS) data revisions increase the total revision to the net IIP. However, in 2016 the revised annual benchmarks from the Foreign Direct Investment (FDI) Survey more than offset these negative revisions and lead to a positive impact.

Figure 9: Revisions to the net international investment position are mostly negative with the exception of 2016 which is positive



Source: Office for National Statistics

7 . Gross national income (GNI)

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 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 Blue Book 2019 impacts on GDP current price and chained volume measure estimates: 1997 to 2016 article of 20 August 2019, we outlined the impact on GDP. By adding the revisions to GDP and total primary income we can state that the indicative average annual revision to GNI between the years 1997 to 2016 will be positive 0.8 percent (see table 3 for the breakdown of the revisions).

Table 3: Impact of Blue Book 2019 changes on current price UK gross national income (GNI) estimates for inclusion in the September 2019 UK National Accounts update
All figures £ billion unless stated, current price

Year	Blue Book 2018 and Q1 2019 QNA nominal GNI	Total nominal GDP revision	Total primary income balance revisions	Near final Blue Book 2019 nominal GNI	Percentage change in the level of current price GNI
1997	949.9	3.3	0.0	953.2	0.3%
1998	1001.3	5.1	0.0	1,006.4	0.5%
1999	1027.8	8.7	0.0	1,036.5	0.8%
2000	1093.5	6.3	0.0	1,099.8	0.6%
2001	1137.7	10.0	0.0	1,147.7	0.9%
2002	1198.4	7.6	-0.1	1,205.9	0.6%
2003	1267.9	5.6	-0.1	1,273.4	0.4%
2004	1326.7	7.3	-0.1	1,333.9	0.5%
2005	1407.7	7.5	-0.1	1,415.1	0.5%
2006	1467.5	9.0	-0.1	1,476.4	0.6%
2007	1534.3	8.4	-0.2	1,542.5	0.5%
2008	1565.2	10.1	-0.1	1,575.2	0.6%
2009	1525.7	10.3	0.0	1,536.0	0.7%
2010	1588.5	14.5	0.1	1,603.1	0.9%
2011	1651.1	15.2	0.1	1,666.4	0.9%
2012	1676.6	17.9	0.0	1,694.5	1.0%
2013	1725.0	20.8	0.0	1,745.8	1.2%
2014	1806.5	17.7	-0.2	1,824.0	1.0%
2015	1852.8	21.1	-0.9	1,873.0	1.1%
2016	1920.1	26.0	1.5	1,947.6	1.4%

Source: Office for National Statistics

Notes

1. Components may not sum to totals because off rounding. Back to table

Notes for: Gross national income (GNI)

1. Also known as primary or investment income.

8 . Changes to Pink Book 2019 tables

There is only one change taking place to the tables in the Pink Book 2019. It is caused by the inclusion of more detailed trade data from monetary financial institutions intragroup fees and cost recharges. Table below lists the changes that will affect Pink Book 2019 tables.

Table 4: Lists the changes to Pink Book 2019 tables

Chapter	Table Number	Table Name	CDID	Description of Change
(03) Trade in services	3.8	Other business services	CWVK	Exports (Credits): of which: Intragroup fee and cost recharge receipts from non-residents by UK MFIs
			CWVL	Imports (Debits): of which: Intragroup fee and cost recharge payments to non-residents by UK MFIs

Source: Office for National Statistics

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