



**EUROPEAN COMMISSION**  
**EUROSTAT**

Directorate C: National Accounts; prices and key indicators  
**Unit C-3: Statistics for administrative purposes**

**2018 QUALITY REPORT**  
**STATISTICS NETHERLANDS, VERSION 1.2**

**BASED ON Eurostat/C3/GNIC/441: EN**  
**October 2018**

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## PART 1: GENERAL INFORMATION

Table 1 is not provided due to the fact that for the Netherlands the reporting years 2002-2009 have officially been closed for GNI own resource purposes.

For the years 2010-2016, revisions have been made for all years. There are at this point in time no outstanding GNI reservations for the Netherlands. Hence the 2010-2016 revisions do not address outstanding GNI reservations. Revisions for the years 2010-2016 are strictly the result of (1) the implementation of the 2015 benchmark revision (changes in methods and sources) and (2) routine revisions for the reporting year 2016. For the year 2016, it is impossible to separate routine and benchmark revisions. Hence all revisions for 2016 are reported under Total revision caused by changes in methods and sources (excl. ESA2010 implementation). Table 2 provides an overview.

**Table 2**  
**Revisions to the Dutch GNI (ESA95 based) for 2010-2013 and the Dutch GNI**  
**(ESA2010 based) for 2014 and 2016**  
**(As percentage of GNI from the 2017 Questionnaire)**

	2010	2011	2012	2013	2014	2015	2016
<b>Total revision to GNI</b>	1.0	1.0	1.2	0.8	1.3	1.6	0.5
<i>'of which':</i>							
<b>Total revision caused by GNI reservations</b>	n.a.						
<b>Total revision caused by changes in methods and sources (excl. ESA2010 implementation)</b>	1.0	1.0	1.2	0.8	1.3	1.6	0.5
<b>Total revision caused by routine (current) revisions</b>	-	-	-	-	-	-	

In addition table 3 provides an overview of the (unrevised) total impact of the implementation of ESA2010 methodology on the GNI estimate (transition from ESA 95 to ESA 2010). This is only relevant for the ESA95 based years 2010-2013.

**Table 3**  
**Total impact of ESA2010 Implementation on the Dutch GNI (ESA95 based)**  
**for 2010-2013**  
**As percentage of GNI (ESA95 based) from the 2018 Questionnaire**

	2010	2011	2012	2013
<b>Total impact of ESA2010 implementation</b>	1.6	1.6	1.7	2.3

On the basis of the agreed European revision policy the European Commission recommends that member states revise their national accounts at least every five years. The last benchmark revision of the Dutch national accounts was carried out for reporting year 2010. In this respect the Netherlands has adhered to this recommendation. A modified compilation process of the Dutch National Accounts and underlying (business) statistics resulted in final estimates being available already 18 months after the reference year (this used to be 30 months). This implies that, following the EU revision policy, the 2015 benchmark should be published four after the 2010 benchmark. In this respect the Netherlands does not fully adhere to the European revision policy which expresses a preference for member states to publish their next benchmark revision in 2019. However the European policy was agreed upon after preparations in the Netherlands for the 2015 benchmark revision had started. The emphasis in the 2015 revision was on incorporating the latest insights from the various statistics and information sources in the national accounts. A number of methodological changes were also made.

The source data on which the national accounts are based, change over the years because statistics or administrative records are discontinued or substantially modified, or because new source data become available. The introduction of new data can lead to a change in the level estimates of macroeconomic variables compared to the previous estimates. New statistical insights have also been gained since 2010, the reporting year of the previous benchmark revision. These insights and the consequent changes in the estimation methods used are incorporated in the revised estimates.

Many of the revision adjustments are explained on the basis of five overarching themes.

#### **GNI verification as a result of the EC (Eurostat) and EDP dialogue visit**

An information visit to Statistics Netherlands (SN) in December 2016 formed part of the verification by the

European Commission (Eurostat) of the correct application of the European System of Accounts 2010 (ESA 2010) in the determination of GNI figures as used for contribution to the EU own resources. Eurostat identified 14 action points for possible improvement of the Dutch methodology and calculations. All these points have been investigated by SN and the results have been incorporated in the estimates resulting from the benchmark revision.

The EDP dialogue visit from the European Commission in January and February 2018 (in the context of government figures) also resulted in a list of action points, some of which have been incorporated in the benchmark revision estimates in consultation with the European Commission.

### **Sector classifications/reclassifications**

The national accounts apply two ways of classifying businesses in the system: by type of economic activity (NACE Rev2) and by institutional sector. Both classifications are attributed to units in the general business register (GBR) of SN. With regard to the sector coding in the GBR, SN has made additional efforts in recent years to improve the classification of businesses. This has led to changes in the sector coding attributed to businesses. This in turn has impacted the post-revision results of the national accounts.

### **Collaboration between the Dutch Central Bank and Statistics Netherlands**

With effect from the benchmark revision for reporting year 2015, the rest of the world account of SN's national accounts and the balance of payments of the Dutch Central Bank (DNB) will be drawn up by means of a joint statistical process and aligned fully with each other. That means there will no longer be any differences in the key figures concerning the balance of the current account and the net external assets of the Netherlands between DNB and SN. The investigation into differences between the balance of payments and sector accounts deepened the combined knowledge what causes these differences and this had a substantial quantitative impact particularly in the financial part of both the balance of payments and the national accounts.

### **The effects of globalisation**

Progressive globalisation is a challenging phenomenon in relation to the national accounts. The international integration of production activities in global production chains makes it difficult to allocate these activities to the economies of individual countries. Major changes were made in ESA 2010 that contribute to a consistent allocation of goods and services transactions to countries. These include more stringent guidelines for processing and transit trade which were implemented in the national accounts in the 2010 benchmark revision. Since then, the understanding of how multinational enterprises organise their production activities and how this impacts on the production of (economic) statistics has grown substantially, leading to changes in the recording of some of their transactions in the national accounts.

### **New (administrative) data sources**

The Netherlands has extensive administrative registration systems. A number of the SN statistics based on these registers were already included in national accounts in the benchmark revision concerning reporting year 2010. The use of administrative data was further expanded in the 2015 benchmark revision. In the estimation of various economic aspects of housing and home ownership, for example, the Register of Addresses and Buildings (BAG) was used for the first time to estimate imputed rents of owner-occupied dwellings. New - or adapted - SN sources were also used, such as the updated statistics on International Trade in Services.

### **GNI growth over 5 per cent**

In 2017, GNI was 6.1 % higher than in 2016. This level shift reflects real economic developments. GDP increased in volume terms by 2.9%. Combined with a price change of GDP of almost 1.2% this implies GDP in current prices increased by almost 4.1%, or in nominal terms, by 29 billion euros. Furthermore, dividends payable by non-financial institutions to the rest of the world were 13 billion euros lower than in 2016. Together, this led to an increase of GNI in 2017 of 42 billion euros, or 6.1%.

## **1.1 Major changes and improvements to sources and methods of national accounts**

Unlike the figures in the 2017 questionnaire, those in the 2018 GNI questionnaire result from the 2015 national accounts benchmark revision. Benchmark revisions of the Dutch national accounts follow a time sequence of five years. Their main purpose is to align the macroeconomic indicator level estimates to the most recent, and up-to-date, data sources feeding into the national accounts. Such level adjustments are occasionally required as, in between benchmark revisions, the emphasis in national accounts data compilations is put on estimating volume and price changes in order to monitor economic development.

The 2010 benchmark revision included the full implementation of new international guidelines (2008 SNA, ESA2010). Some of the 2015 revisions are, as a follow up, the result of refined interpretations of these international guidelines, based on among other things new insights from the international debate on the SNA2008/ESA2010 and its implementation.

A significant milestone of the 2015 revision is the full consistency obtained between the national accounts and the balance of payments. This joint effort of SN and the Dutch Central Bank (DNB) not only affected the national accounts but also required a balance of payments revision. From now on, both macroeconomic statistics will follow one common publication and revision policy.

## **1.2 Changes in the revision policy and timetable for finalising the estimates; (domestic) publication date of the submitted data**

With reference to the 2017 GNI questionnaire, no further changes were made in the revision policies or time tables. The post 2015 revision results were published according to the usual SN release calendar. On 22 June 2018 the 2015 NA revision results were released for the entire period 1995-2017, as requested in the ESA transmission programme.

## **1.3 Results of any investigations on the quality of GNI and its components**

The 2015 benchmark revision included the research results on the 14 “A” action points for the Netherlands, as identified by Eurostat in the report of the audit visit of December 2016.

The verification work done by the Commission for the Netherlands so far has led to 14 points for possible improvement of the methodology and calculations (“A points”). This list covers the following areas:

- A1: Benchmarks older than 5 years;
- A2: Holding gains less losses in trade margins;
- A3: Financial services: calculation according to ESA 2010 paragraph 3.73;
- A4: Financial services indirectly measured;
- A5: Recording of transactions of the insurance industry;
- A6: Dwellings services: compensation for the right to use furniture;
- A7: dwelling services: imputed rentals;
- A8: Recreational accommodation services: eventual double counting;

- A9: use of cash based State accounts for production subsidies and taxes;
- A10: Decommissioning costs for large assets;
- A11: Transactions of public stockpiling units;
- A12: Holding gains and losses on changes in inventories;
- A13: Estimates of merchanting;
- A14: VAT gap.

The 2015 benchmark revision also addressed the remaining differences between the rest of the world sector and the balance of payments. This had a substantial impact on the financial accounts and on GNI related transactions, in particular the gross income flows from and to the rest of the world. Inconsistencies between mutual (SN-DNB) data sources, ‘balance of payment statistics’ (DRA, DNB) and ‘Finances of non-financial corporations statistics (SFO, SN) were examined in detail, for the largest companies at micro level.

The acquired consistency between balance of payments and national accounts implied a data quality improvement for both sets of statistics.

#### **1.4 Description of developments in major sources**

The 2015 benchmark revision resulted in the following main developments in statistical sources :

- Estimates of imputed dwelling services and private rentals are now based on the (administrative) Register of Domestic Addresses and Buildings (BAG);
- The grossing up of structural business statistics has been further improved with the help of value added tax registers;
- Other new, redesigned and/or improved sources introduced in the course of the 2015 benchmark, e.g. international trade in services statistics, income tax statements of self-employed, financial information of businesses in agriculture.

### **PART 2: CHANGES TO SOURCES AND METHODS FOR THE FINAL ESTIMATES**

The total upward revision to GNI (ESA2010 based) for 2015 is 10.9 billion euros or 1.6 % of GNI as presented in the 2017 questionnaire. Table 4 presents the decomposition of this revision into GDP (6.6 billion euros, 1%) and the balance of primary income (4.4 billion euros, 0.6 %). As the starting point for the balancing process is initial estimates which are influenced by all above mentioned overarching benchmarking themes, balancing adjustments cannot always be uniquely allocated to A-action points. Roughly estimated, 6.3 billion euros of the adjustment of GNI is accounted for by the A-action points. To give an impression of the accuracy of this rough estimate: if, in cases where balancing adjustments cannot be allocated uniquely, the expenditure approach is taken as leading an adjustment of GNI of 5.9 billion euros results. Under the same conditions, using the production approach as leading would result in an GNI-adjustment of 6.2 billion euros.

See annex A for more details on the revised estimates concerning the A-action points. Other main changes resulting from benchmarking estimates on existing, and improved, data sources and methods are discussed in Part 3.

**Table 4**  
**Breakdown of Revisions to the Dutch GNI for 2015 (ESA2010 based)**  
**(Million euros and percentage of GNIQ2017)**

		<b>2015</b>
<b>GNIQ 2018</b>		<b>690.537</b>
'of which':		
(1) Revision of GDP		6.551
	(as percentage of GNIQ2017)	1.0%
(2) Revision of Balance of primary income		4376
	(as percentage of GNIQ2017)	0.6%
<b>GNIQ 2017</b>		<b>679.610</b>

### **PART 3: REVISIONS TO YEARS 2010 TO 2016**

#### **3.1 Routine (current) revisions**

All data in the 2018 GNI Questionnaire are in line with the results of the 2015 benchmark revision estimates and accompanying changes in (the use of) sources and methods. Therefore all revisions between the 2017 and 2018 questionnaires are reported under 3.3: revisions due to changes in methods and sources, although the 2016 estimates are also influenced by routine revisions. As mentioned above, for the year 2016 a breakdown into revision and benchmark changes is unfeasible.

#### **3.2 Revisions related to the work on reservations (details of the methodological changes should be provided in part 4)**

At present no reservations are in place for the GNI figures of the Netherlands.

### **3.3 Other revisions due to changes in methods and sources**

All changes discussed in section 3.3 refer to the revision benchmark year 2015. The back casting methods applied to the 2015 revision results are presented in Annex B.

#### **3.3.1 Production approach GDP**

This section provides an overview of revisions as carried out at the level of industry branches. Only industries with significant revisions of value added are explicitly addressed.

In the benchmark revision, total value added (gross, basic prices) of all industries was adjusted upward by 5.8 billion euros. This explains the major part of the adjustment of GDP (+6.6 billion euros). Other adjustments in the concordance of total value added at basic prices and GDP at market prices relate to changes in the subsidies on products (+2.3 billion euros) and the elimination of the VAT gap (-1.6 billion euros, action point A14). The latter two are both partly compensated by a higher value added (at basic prices) and thus have a limited impact on GDP.

In the recording of subsidies a distinction is drawn between subsidies on products linked to the volume or value of goods and services sold and other subsidies on production that are usually linked to the use of production factors like labour and capital goods. Due to new insights into the basis on which subsidies are granted by the state and local authorities, most subsidies on products were reclassified in this benchmark revision to other subsidies on production and social benefits in kind. The shift in subsidies for public transport is the most notable in this regard. This change leads to a lower level of output and value added (at basic prices) in the respective branches. The effect on GDP (at market prices) is zero.

The main upward adjustments in value added were found for banking (+4.9 billion euros), management and technical consultancy (+3.0 billion euros) and real estate services (+3.6 billion euros). Substantial downward adjustments included those for wholesale trade (-2.1 billion euros), employment activities (-1.7 billion euros), land transport (-1.5 billion euros) and arts, entertainment and recreation (-1.3 billion euros). These changes in value added are explained in greater detail below.

The adjustment to the value added of all industries collectively is the balance of adjustments in output (+41.2 billion euros) and intermediate consumption (+35.3 billion euros). For the industries described below with large adjustments to value added, new insights generally meant that the output and intermediate consumption were not adjusted in proportion to the pre-revision situation. Nevertheless there are also industries for which both output and intermediate consumption were adjusted without any significant effect on the value added. This ‘grossing up’ is partly associated with better assessment of the activity of multinational enterprise groups and the continuing fragmentation of production chains. This revision has drawn on these new insights. The effects of globalisation are therefore also reflected in the estimate of the industries.

Table 5 gives an overview of the main adjustments of value added at basic prices by industry.

**Table 5**  
**Adjustment of value added at basic prices**  
**(x1000 Million euros)**

	<b>Adjustment (x1000 mln euros)</b>
<b>Value added total economy (basic prices)</b>	5,8
<i>of which</i>	
<i>Agriculture, forestry and fishing (Nace section A)</i>	0,8
<i>Electricity, gas, steam and air conditioning supply (Nace section D)</i>	1,0
<i>Construction (Nace section F)</i>	-1,8
<i>Wholesale trade, except of motor vehicles and motorcycles (Nace 46)</i>	-2,1
<i>Land transport (Nace 49)</i>	-1,5
<i>Accommodation and food service activities (Nace section I)</i>	0,7
<i>Financial institutions, except insurance and pension funding (Nace 64)</i>	4,9
<i>Insurance and pension funding (Nace 65)</i>	-0,3
<i>Real estate activities (Nace 68)</i>	3,6
<i>Management, technical consultancy (NACE 69-71)</i>	3,0
<i>Employment activities (Nace 78)</i>	-1,7
<i>Arts, entertainment and recreation (Nace R)</i>	-1,3
<i>Other activities</i>	0,7
<b>taxes minus subsidies on products</b>	0,7
<b>GDP</b>	6,6

#### Agriculture, forestry and fishing (Nace section A)

Value added of agriculture was adjusted upwards by 0.8 billion euros. Previously, the estimate for the agricultural sector relied mainly on statistics based on the population from the agricultural census. In the 2015 revision, for the first time the data from the agricultural census were combined with financial data on agricultural businesses from Finances of non-financial corporations statistics. The population of this survey is based

on SN's general business register (GBR). A comparison of these two sources showed that some businesses were not included in the agricultural census, namely those where a holding or management company was registered as the owner. The inclusion of these units led to an upward adjustment of value added. This upward adjustment was also partly the result of a recalibration of the national accounts against the Structural Business Statistics for agricultural services.

#### **Electricity, gas, steam and air conditioning supply (Nace section D)**

Value added of the energy companies was adjusted upwards by 1 billion euros. This is partly due to the fact that (solar) electricity generation by households increased faster in recent years than previously calculated. Further examination of source data led to new information on the effects of hedging on revenues, whereby companies protect themselves against market risks such as fluctuating commodity prices or adverse weather conditions. In addition, the most up-to-date level estimates were introduced. More specifically, examination at SN's Large and Complex Cases Unit - led to improved information on a few large energy producers.

#### **Construction (Nace section F)**

Value added of construction of buildings and development was adjusted downwards by 1.8 billion euros. New insights and revised assumptions with regard to the item 'inventory changes in work in progress' from the Structural Business Statistics had a downward effect. Before the benchmark revision, it was assumed that this item mainly related to work not yet carried out in the order portfolio and should therefore be disregarded as output. On closer examination it was concluded this actually comprised completed work in progress. This reinterpretation resulted in a different allocation of the output over the years. For 2015 this led to a 0.5 billion euro downward adjustment to value added. A recalibration against the source data also had a downward effect on value added. Lastly, a revised, lower estimate of concealed activities and own-account construction was used. New source information indicated that the extent of concealed activities of house maintenance was lower than had previously been estimated. In the case of own-account construction, work was found to have been carried out by contractors to a greater extent than had previously been estimated. This part of production is already measured in the Structural Business Statistics of the construction industry, so a smaller additional estimate for own-account construction is sufficient.

#### **Wholesale trade, except of motor vehicles and motorcycles (Nace 46)**

Value added of wholesale trade was reduced by 2.1 billion euros compared to the pre-revision estimate. This adjustment is largely due to a benchmark to the Structural Business Statistics. The reclassification of a number of units to other branches also had a downward effect.

#### **Land transport (Nace 49)**

Value added of land transport was reduced by 1.5 billion euros compared to the pre-revision estimate. The bulk of this (-1.1 billion euros) can be attributed to a changed method of recording public transport subsidies. Before the benchmark revision, these subsidies were considered to be subsidies on products, but after the revision most subsidies are classified as other subsidies on production. In the past, subsidies were linked to the number of passengers or the number of kilometres, so they had to be classified as product-related. Nowadays, subsidies are granted for the maintenance of a

transport network, regardless of the amount of transport services provided. Hence the financial support from the government has become an other subsidy on production. This shift had already occurred in the course of 1990s, but has only been implemented in the national accounts in the 2015 benchmark revision. This leads to a lower level of output and value added. The remainder of the adjustment is due to alignment with the Structural Business Statistics.

#### Accommodation and food service activities (Nace section I)

The 0.7 billion euro upward adjustment to value added of hotels and catering is mainly attributable to the higher estimate for sales of cannabis (cf. action point A1)). The retail trade margins on cannabis in so-called “coffee shops” consequently increased by over 0.5 billion euros.

#### Financial institutions, except insurance and pension funding (Nace 64)

The value added of NACE 64 was adjusted upwards by 4.9 billion euros.

The adjustment in NACE 64 excluding the activities of holding companies (NACE 642) (+5.5 billion euros) is largely due to a changed calculation of FISIM production (+3 billion euros), caused by using revised balance sheet information on the relevant financial assets partly offset by using more appropriate interest rates in the calculation of FISIM (cf. action point A4 in Annex A).

A 1.0 billion euro upward adjustment in value added is caused by a decrease of the intermediate consumption of monetary financial institutions by the same amount following the recalibration on a new data source for these institutions. This also led to an increase of the own account production of software by 0.6 billion euro and to an increase of value added by the same amount.

The implementation of a new method for the calculation of spreads (cf. action point A3 in Annex A) yielded an increase of the value added by 0.6 billion euro. Lastly, an estimation was made for units in NACE 64 excluding NACE 642 that are missing in the source data, because they are wrongly classified outside the financial corporations sector (S.12) in the GBR. This estimation led to an increase of the value added by 0.3 billion euro.

In addition to the aforementioned changes that affected the value added for NACE 64 excluding NACE 642, other changes led to an equal increase of output and intermediate consumption and therefore had no effect on the value added. The intermediate consumption of investment funds increased by 1.0 billion euros because of increased imports of services of foreign investment funds and because of the new method to calculate spreads (action point A3 in Annex A). Since the output of these investment funds is calculated as the sum of costs, output increased by the same amount.

Value added for NACE 642 decreased by 0.6 billion euros due to the implementation of the recommendations of various taskforce reports on SPEs. Research was undertaken to ascertain the activities and true nature of units classified as SPEs in NACE 642. The result of this study was that a large number of units was reclassified out of the financial corporations sector and out of NACE 64 into the non-financial corporations sector. The value added involved was mostly transferred to NACE 70.

There were also changes for NACE 642 that increased both output and intermediate consumption without affecting the value added. These changes are the effect of a new

method to calculate FISIM consumed by SPEs compared to before the revision. Previously it was assumed that all loans and deposits with the rest of the world sector were intra-company transactions for which FISIM is not calculated. Following the introduction of a more detailed breakdown of sector S.2 it became apparent that the vast majority of deposits and loans made by SPEs with the rest of the world are not intra-company transactions. As a result, FISIM is now calculated on a much-increased balance of loans and deposits. As total output equals the sum of costs this increase in total intermediate consumption directly increase the output of intra-company services and thus total output.

#### Insurance and pension funding (Nace 65)

Value added of this sector was adjusted downwards by 0.3 billion euros. This is due to upward adjustments to output and intermediate consumption of 2.6 billion and 2.9 billion euros respectively. These adjustments are mainly due to new information on the costs of foreign investment funds. The output of life insurance and pension funds is estimated on the basis of the sum of costs. This means the upward adjustment in intermediate consumption is also reflected in output.

#### Real estate activities (Nace 68)

Value added of real estate activities (NACE 68) was adjusted upwards by 3.6 billion euros, the result of an upward adjustment of production by 7.0 billion euros and an upward adjustment of intermediate consumption by 3.4 billion euros. These amounts can be attributed to the different activities included in NACE 68.

The estimate of the production of real estate services not only comprises services related to trade in and management of real estate and the actual rent received by housing associations and private landlords, but also the imputed rent for homes occupied by the owner. The largest upward adjustment of value added in real estate services is related to these imputed rents for owner-occupied dwellings.

Aligned with EU-practices a new method was adopted to estimate imputed rents, based on data from the 2015 rental survey combined with the use of a new source, the Basic Register of Addresses and Buildings (BAG). The BAG contains detailed information of all addresses and real estate in the Netherlands, such as address, intended use, surface area and year of construction. The revised method to estimate imputed rents is described in the annex (action point A7). As a result of the new method, imputed rents for homes occupied by the owner were adjusted upwards by 4.5 billion euros. The production of renting out and lodging was adjusted upwards by 1.2 billion euros. Intermediate consumption related to owner-occupied homes and lodging and renting activities was adjusted upwards by 2.5 billion euros, of which 1.3 billion resulted from an adjusted estimate of FISIM. Together this led to an increase of value added by 3.2 billion euros.

For the combination of NACE 681 (trading in real estate) and 683 (intermediation in and management of real estate), value added was adjusted upwards by 1.2 billion euros. The pre-revision estimates for these activities were based on the Structural Business Statistics, that turned out to be rather volatile because of small and non-representative samples. From 2015 onwards corporate tax data are used as the main source for NACE 681 and 683. This resulted in an upward adjustment of output by 0.8 billion euros and a downward adjustment of intermediate consumption by 0.4 billion euros.

In the Dutch national accounts, NACE 682, renting of real estate, is split into renting of residential buildings and renting of non-residential buildings. Value added of renting of residential buildings was adjusted downwards by 2.0 billion euros, resulting from an increase of output by 0.3 billion and an increase of intermediate consumption by 2.3 billion euros. The latter was based on new, more detailed information on housing associations supplied by the government. For the estimate of the private rentals, a stratification method based on the rental survey and the BAG was used similar to that used for owner-occupied homes, which led to an upward adjustment. Detailed information on this estimate is described in annex A, action point A6.

Value added of the renting of non-residential buildings was adjusted upwards by 1.1 billion euros. It was concluded that Structural Business Statistics do not cover all the renting of non-residential buildings, because closer investigation revealed that a substantial number of these properties are rented out by private persons and foreign investors. Production was adjusted upwards by 0.2 billion euros, while intermediate consumption was adjusted downwards by 0.9 billion euros. This last adjustment was based on the large share of private owners, who have lower costs for maintenance, cleaning, repairs, administration etc. since part of that is done by own staff or on own account.

#### **Management, technical consultancy(Nace 69-71)**

Value added in management and technical consultancy was increased by 3.0 billion euros from the pre-revision estimate, mainly due to changes in the classification of statistical units. This particularly concerns companies consisting of a director/major shareholder who draws remuneration through this company as an employee, or businesses that consist of a director/major shareholder and one or two employees. Since the 2015 revision, these businesses are included in non-financial holding companies (Nace 701), whereas before the revision they were spread across various industries. For the economy as a whole, this new method of recording directors/major shareholders does not affect total GDP.

#### **Employment activities (Nace 78)**

Value added in employment activities has been reduced by 1.7 billion euros compared to the pre-revision estimate. A comparison of various sources, particularly Structural Business Statistics and microdata underlying the labour accounts, revealed that the revenues and costs of various units in the Structural Business Statistics related to the total remuneration for labour (i.e. including remuneration for placed (self-employed) personnel) and not only to the remuneration received by the respective units for placement. In the national accounts, these overstated revenues were included in the estimates before the benchmark revision. For the costs however, the use of tax data underlying the labour accounts ensured that the correct amount of labour costs was included, leading to an overstated value added. The overstated revenues have now been adjusted, so output and value added of the employment and placement agencies have decreased. In the other sectors, which comprise users of the services of employment and placement agencies, the intermediate consumption of these services has decreased correspondingly and value added has therefore increased.

#### **Arts, entertainment and recreation (Nace R)**

Value added in art, culture and gaming was adjusted downwards by €1.3 billion. A new analysis of the sources (annual reports, VAT returns and microdata underlying the labour

accounts) revealed that the expenditure on art and culture had been overestimated. The increased use of the annual museum pass (*museumjaarkaart*), for example, had a larger depressing effect on prices than had previously been assumed on the basis of the available sources. The extrapolation method since the benchmark revision of 2010, using price and volume indicators to estimate output, therefore overstated output and value added.

### **3.3.2 Expenditure approach**

The estimates for the various final expenditure components were also adjusted in this benchmark revision. These are partly related to the adjustments to value added as explained in the previous section. Consumption of households including NPISHs has been adjusted upwards by 7.3 billion euros. Consumption by the government was also adjusted upwards by 0.7 billion euros. Fixed capital formation was adjusted upwards by 20 billion euros. The trade balance was adjusted downwards by 20 billion euros, from 72 billion to 52 billion euros. A limited adjustment was made to inventories. A brief explanation of the adjustments affecting each final expenditure component is provided below.

#### **Consumption of households and NPISHs**

Consumption of households and non-profit institutions serving households (NPISHs) was adjusted upwards by 7.3 billion euros. This was largely due to the higher results for private rentals for dwellings and imputed rental for owner-occupied dwellings.

In addition, expenditure on clothing, among other things, was adjusted upwards (by 1.3 billion euros). This adjustment is largely attributable to the recalibration against the underlying source statistics. The 0.8 billion euros increase in the estimate of expenditure on alcoholic beverages, tobacco and drugs was mainly attributable to a new estimate of cannabis production.

Consumption of insurers' and pension fund services was adjusted upwards. This was due to the upward adjustment of the production of the insurance and pension fund branch whose services are purchased by consumers (see section 3.3.1., NACE 65).

A 2.2 billion euro downward adjustment was made among other things to expenditure on recreational and cultural services. Expenditure on organised travel in particular was estimated to be lower than before the revision (-1 billion euros). This is partly due to the fact that consumers are increasingly arranging their own travel and booking online. The pre-revision results were found to have underestimated this shift. Expenditure on cultural services (libraries, museums) was also adjusted downwards. A new source analysis showed that this expenditure had been overestimated, partly due to an underestimated use of the annual museum pass (see section 3.3.1. NACE R).

The use of private vehicles was also adjusted downwards by 1.4 billion euros because of revised estimates of income in kind from company cars.

#### **Government consumption**

Consumption by the government was adjusted upwards by 0.7 billion euros. This was mainly due to the adjustment of benefits in kind, because some payments to healthcare and welfare and homeowners' associations previously recorded as subsidies on products are now being recorded as benefits in kind.

#### Fixed capital formation

Fixed capital formation was adjusted upwards by 21 billion euros. This adjustment was almost exclusively due to a number of incidental transactions whose recording was revised after closer inspection. Before the revision, these transactions were entered as purchases and sales of non-produced assets (brand names, goodwill). On closer inspection they were found to be mostly transactions in produced assets (particularly R&D) that count as capital formation.

Lastly, as a result of a recalibration against the source, amounts were moved from capital formation in industrial buildings to capital formation in dwellings. This has no effect on total capital formation.

#### Imports and exports

The trade balance was adjusted downwards by 20 billion euros, from 72 billion to 52 billion euros. This was largely due to the aforementioned reclassification of in gross fixed capital formation of 20 billion euros.

The balance of international trade in services was adjusted downwards by 7 billion euros, and that of international trade in goods by 13 billion euros downwards.

For the data on international trade in services, in this revision it was possible for the first time to use new SN source statistics that are fully in line with the definitions used in the balance of payments and the national accounts. In addition, the coverage of these new source statistics was improved through the use of ICP (intra-community transaction declarations) data of the Tax and Customs Administration to determine the population of businesses involved in international trade in services. The use of the updated source statistics increased the services balance by 6 billion euros. The remaining adjustment relates to a transfer between international trade in goods and services. This is due in part to a better assessment of the effects of the continuing globalisation and in part to a recalculation of the so-called CIF-FOB reclassification and correction<sup>1</sup> that is applied in international trade in services to bring it into line with the trade in goods that is valued on an FOB-FOB basis. In international trade in goods the balance adjustment is due both to the aforementioned transfer between trade in goods and services and to a recalibration against the source data.

### 3.3.3 Income approach

In the Netherland's National Accounts production process the three methods of estimating GDP (income, production, expenditure approach) are simultaneously applied in an SUT estimation. It should be noted that in effect only the production and expenditure method are truly independent. The production and the income approach are more or less identical as gross operating surplus is calculated as a residual item in gross

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<sup>1</sup> See National accounts 2016, page 121.

value added. With one major difference, important components of the income approach such as compensation of employees, mixed income and taxes are covered by high quality administrative data.

For the benchmark year in the data validation stage a confrontation was done between operating surplus resulting from SBS(-type) data and tax data for the self-employed and the statistics on finance of non-financial corporations, used for income estimates in the institutional sector accounts. The latter provides data on the non-financial corporations and are based partly on a survey (large enterprise groups) and partly on tax records (small enterprise groups). The analysis was carried out for sectors S.11 (non-financial corporations) and S.14 (households). For S.12 (financial institutions), the same data sources are used for estimating both the supply and use tables and the sector accounts, so a confrontation is pointless.

The confrontation led to adjustments on both the micro (individual companies) and the industry level. At the end of this process, data sources for operating surplus for supply and use tables and sectoral accounts were aligned with each other.

As the adjustment of compensation of employees was limited to 0.2 billion euros in this benchmark revision, the adjustments of operating surplus correspond to adjustments in gross value added, the shift of subsidies on products to other subsidies on production and the elimination of the VAT-gap as described in section 3.3.1.

### **3.3.4 Bridging GDP to GNI**

GNI equals the sum of GDP and the primary income balance with the rest of the world. The primary income balance was adjusted upwards by 4.6 billion euros. In combination with the adjustment to GDP, the total revision adjustment to GNI in 2015 consequently amounts to +10.9 billion euros (1.6%).

The following changes led to adjustments to the primary income balance with the rest of the world:

#### **Listed SPE type holdings**

Shares of companies with residence in the Netherlands can be listed on Dutch or foreign stock exchanges. A study of securities statistics of the Dutch central bank led to new information on a number of foreign-listed enterprises domiciled in the Netherlands.

Also, it was concluded that SPE type holdings, formerly assumed to be solely in the business of passing through income and financial capital, may in fact significantly contribute to Dutch GNI. For most of the SPEs the incoming flows (from abroad) are more or less equal to the outgoing flows (to the rest of the world). This is true, according to ESA 2010, for SPEs that are fully owned by one or more foreign parent(s), which is the case for the majority of the SPE's. They are considered as foreign direct investment enterprises. The profits realized by the subsidiaries are transferred to the Dutch SPE and subsequently, after taxation, either returned to the parent abroad through dividends, or retained (and reinvested/added to the equity in the financial account). According to the ESA 2010 guidelines, the retained profits are registered as D.43 reinvested earnings on foreign direct investments (uses). By doing so, the result for gross national income (GNI) is (close to) zero.

However, studies have revealed that the Netherlands is also domicile to SPEs with a significant number of minority shareholders, each owning less than 10% of the ordinary

shares or voting power. This typically occurs when SPEs are listed on a stock exchange. These SPEs receive profits from the subsidiaries abroad and pay dividends to the shareholders of the SPE. However, as these SPEs have minority shareholders each owning less than 10%, only 'payments' of reinvested earnings should be registered in the income accounts to the extent that one or more foreign direct investor(s) owning more than 10% is/are still present in the SPE. As a result, there will be an impact on GNI. Practice shows that the impact is sometimes significant and may result in GNI series that are quite volatile over time. For 2015 the result is an upward adjustment of 3.8 billion euros.

### **Small enterprises**

For small non-financial companies information may be available on dividends and retained earnings received from the rest of the world, but not on the actual paid profit flows. In order to avoid GNI distortion, it was therefore decided in the previous benchmark revision (2010) also to disregard the profit income received from the rest of the world. Now, on the basis of new data on the nationality of the UCI (Ultimate Control Institute), a method has been developed to estimate the payment of dividend and retained profit to the rest of the world. The new recording method introduced in the 2015 revision led to a net downward adjustment of GNI of -2.6 billion euros.

### **Income from mutual funds abroad**

In accordance with international guidelines, the relevant operating costs of foreign investment institutions must be explicitly passed on to investors through the import of a service. As compensation, investors then receive a higher income from their foreign investment funds. This grossing up of the costs of foreign investment funds increases GNI to the extent that households are directly or indirectly the end-investors (through investment funds, insurers or pension funds). This estimation method increases net primary incomes by 1.7 billion euros.

Joint research by SN and DNB into holdings in Dutch investment institutions led to a higher estimate of the investments held by households and foreign investors. This is at the expense of pension funds' holdings. This change increased the balance of primary incomes by 0.7 billion euros. Other benchmarking resulted in a downward adjustment of 0.2 billion euros.

### **Income from holiday homes in the rest of the world**

In the national accounts, the production of imputed dwelling services should always be allocated to the country where the dwelling is located, regardless of whether the owner is a resident of that country. If a resident owns a holiday home or other home abroad, the production of dwelling services is allocated to the country in which the home is located and the housing service is then imported by the owner. This import flow is financed by notional income from wealth attributable to the Dutch economy, comprising the balance of the imputed housing services and the locally incurred costs of maintenance, energy, etc. and depreciation. Both the estimates for holiday and other homes abroad and for holiday homes in the Netherlands owned by non-residents have been adjusted on the basis of up-to-date source information (rent per period, occupancy rate and number of holiday homes). The effect of this adjustment on net primary income is +1.1 billion euros. The income from holiday homes is adjusted according to A-action point 8 (see annex A for further explanation).

### **Cross-border flows of compensation of employees**

The wages of non-residents working in the Netherlands must be allocated to the GNI of the country in which the employee is resident. Due to a change of method, the figures for incoming and outgoing wage payments were adjusted. Persons working in the Netherlands not included in the municipal population register are currently considered to be employees living abroad. The incoming commuters (outgoing wage flow) are estimated on the basis of payroll tax return data provided by Dutch employers. The calculation of outgoing commuters (incoming wage flow) has also been revised on the basis of new data from the integrated income and wealth statistics (IIWS). The overall effect of these adjustments on the balance of primary income with the rest of the world is -1.6 billion euros.

The cross-border flows of compensation of employees are adjusted according to A-action point 1: the update of benchmark estimates older than 5 years (see annex A for further explanation).

### **Interest**

As part of the continuity strategy of the national accounts, an adjustment of 1 billion euros was applied to interest payments by businesses to the rest of the world from the 2013 reporting period onwards. In years prior to 2013 this flow was found to have been incorrectly omitted. As part of the 2015 revision, a recalibration took place against the source and this transaction is now included.

### **Imputed bank services**

The estimation method of imputed bank services (FISIM) was changed in this benchmark revision. Based on benchmarked financial balance sheets and the result of research on A-action point 4 (see annex A), the total effect of changes in FISIM on GNI was 0.7 billion euros of which a -0.4 billion euros effect on GDP and +1.1 billion euros on the balance of primary income.

Revisions in the balance of primary income are presented in table 6.

**Table 6**  
**Breakdown of Revisions to the Dutch total revision to the balance of primary income for 2015 (ESA2010 based)**  
**(Billion euros )**

	2015
Listed SPE type holdings	3.8
Small enterprises	-2.6
Income from mutual funds abroad	2.2
Income from holiday homes abroad	1.1
Cross border flows of compensation of employees	-1.6
Interest	1.0
Imputed bank services	1.1
Other revisions	-0.4
<b>Total revision of the balance of primary income</b>	<b>4.6</b>

### 3.4 Revisions due to the transition from ESA 95 to ESA 2010

Compared to the quality report of 2017, change items in the transition table (from ESA 2010 to ESA 1995) were recalculated to reflect the results of the benchmark revision of the national accounts of the Netherlands, with the exception of item (2) Valuation of output for own final use for market producers; this item has been removed from the transition table following a decision by the GNI Committee. See table 7 for an overview of the transition items for the years 2010-2013.

**Table 7**  
**Transition items for the years 2010-2013 (changes compared to the 2017 QR)**  
**(Million euros)**

<b>GNI QUESTIONNAIRE 2018</b>	<b>NETHERLANDS</b>			
<b>Table R2: Transition from ESA2010 to ESA95</b>	<b>million EUR</b>			
<b>2010-2013</b>	<i>For information only! Do not fill in cells.</i>			
As of 22/09/2018	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Total impact of differences in definitions between ESA2010 and ESA95 on GNI (ESA2010 minus ESA95)</b>	-2023	-1454	-1797	2262
<b>Of which:</b>				
(1a) R&D created by a market producer	-1244	-1037	-977	2562
(1b) R&D created by a non-market producer	21	15	9	5
(2) Valuation of output for own final use for market producers	-245	-243	-256	-257
(3) Non-life insurance - Output, claims due to catastrophes, and reinsurance	-530	-168	-560	-30
(4) Weapon systems in government recognised as capital assets	-25	-21	-13	-18
(5) Decommissioning costs for large capital assets	0	0	0	0
(6) Government, public and private sector classification	0	0	0	0
(7) Small tools	0	0	0	0
(8) VAT-based third EU own resource	0	0	0	0
(9) Index-linked debt instruments	0	0	0	0
(10) Central Bank - allocation of output	0	0	0	0
(11) Land improvements recognised as a separate asset	0	0	0	0

*NB: The numbers of the transition items (1) to (11) correspond to the numbering used in the Manual on the changes between ESA95 and ESA2010.*

Item (1a) R&D created by market producers: changes are the result of an adjustment of R&D subsidies of 0.8 billion euros for reporting year 2015 and the adjustment of the recording of EU subsidies on R&D. In the pre-revision results the latter were recorded as sales instead of subsidies. As a consequence output is reduced by 0.4 billion euros for reporting year 2015. Also the alignment with up-to-date source statistics led to minor changes in the estimates. The 2013 estimates are influenced substantially by an incidental large import of R&D of one specific company. Previously, this was recorded as the import of non-produced assets (brand names).

Estimates for the period 2010-2013 are backward extrapolations of the 2015 benchmark, mainly applying pre-revision volume and price changes. It should be noted that substantial incidental GFCF of one specific company was estimated in a separate process from the backward extrapolation for reporting years 2015 and 2013.

Item (1b) R&D created by a non-market producer: the changes are the result of the alignment with source statistics for reporting year 2015.

Estimates for the period 2010-2013 are a backward extrapolation of the 2015 benchmark using pre-revision volume and price changes.

Item (2) Valuation of output for own final; use for market producers: decision of the GNI-committee

Item (3) Non-life insurance – Output claims due to catastrophes and re-insurance:

Adjustments have been made to this item because of the amendment of the interpretation of source data on actual claims in the years before 2013. Furthermore, the ‘macro’ consumer price index in the calculation of adjusted claims (5-year moving average) in current prices is now used instead of the consumer price index for insurance services for the years before 2013. The rationale for the latter is that claims are linked to a broad set of consumer goods and services and not to insurance services.

Item (4) Weapon systems in government recognised as capital assets: the changes in the estimates of this transition item are due to a change in the used service life of military airplanes introduced in the 2015 benchmark revision. In consultation with the Ministry of Defence and our colleagues from Destatis, the service life was adjusted from 25 to 34 years, also to bring the applied methodology more in line with other member states. As a consequence consumption of fixed capital decreased.

Item (8) VAT-based third EU own resource: no changes have been made in this item.

#### **PART 4: REVISIONS RELATED TO GNI RESERVATIONS (2002-2010)**

All reservations on 2002-2010 GNI data of the Netherlands have been lifted. Hence no revisions for the Dutch GNI figures are reported under Part 4.

#### **Annex A – Update of the Report on GNI A-action points**

This annex provides an update of the progress report on the 14 A-action points submitted to Eurostat in August 2017. Click on pictogram to view this document.



GNI QR NL 2018 A  
Action Points-v1.2.d

For all action points only their effect on GNI prior to balancing can be estimated. The effect of A-action points before balancing may however differ from the effect ‘after balancing’. As the starting point for the balancing process is initial estimates which are influenced by all above mentioned overarching benchmarking themes, balancing adjustments cannot be uniquely allocated to A-action points.

## **Annex B – Back casting of time series**

This annex provides a methodological explanation of how the 2015 benchmark revision results were back-casted to reporting years 2010-2014.

New methods and software have been developed at Statistics Netherlands to construct time series directly after finalising the revised benchmark year (in this case 2015). The main purposes of this new approach are (a) to compile time series more efficiently, and (b) to be able to publish revised time series in direct combination with publication of the benchmark year.

The newly developed method for the supply and use tables is explained in more detail in section B.1. Supply and use tables serve as the framework for determining (revised) GDP figures. Section B.2 describes the new method for constructing revised time series for the current accounts including the balance of primary income.

### **B.1 – GDP Estimates**

Revisions in the benchmark year 2015 are back-casted to 1995 using two different processes:

1. The year 1995 remains unchanged, which implies that the value changes in de period 1995-2015 must be adjusted;
2. The level of 1995 is adjusted proportionally to the 2015 benchmark change.

Obviously a mix of the two options is also a possibility. In the time series project it was decided to leave the levels for the reporting year 1995 unchanged as much as possible, unless it was clearly pointed out that the 1995 estimate had serious omissions. Obviously method 1 was predominantly used.

Naturally, the magnitude of the adjustment in value changes depends on the magnitude of the adjustment in the revision year 2015. The larger the adjustment in 2015, the more the sequence of value changes will require adjustment.

The required sequence of value change adjustments is determined ex ante per industry or final expenditure category and the following time slots: 1995-2001, 2001-2010 and 2010-2015. The precise numerical specification of this strategy may differ per transaction type. It should be noted that a range of specific revision adjustments are back-casted on the basis of so-called ‘adjustment layers’. This approach is explained later on in this annex.

In addition, it is important to safeguard the consistency of revision adjustments within systems (e.g. the output of the catering services industry versus the consumption of catering services), but also across systems. For example, it is important to align revisions in the supply and use system with those in the labour accounts. Furthermore, the variables on output, intermediate consumption and value added are compiled in the supply and use tables and subsequently reclassified and introduced into the sector accounts without adjustment. The accounts for the government and banking sectors are compiled simultaneously for supply-use and sector accounts.

Ideally, revision adjustments in the benchmark year should gradually ‘disappear’ over time, so that the economic picture does not change too much for previous years. For example, pre-revision economic growth patterns should preferably be maintained in the

post-revision results. These desired properties of back-casting methods have been tested extensively, also on the basis of graphical representations.

The applied back-casting method can be explained on the basis of the following steps:

**Step 0. Determine base years for the time series**

All previous benchmark revision years serve as so-called base or anchor years: 2015, 2010, 2001, and 1995.

**Step 1. Determine the magnitude of revision adjustment in 2015 for core NA variables such as output, value added and intermediate consumption.**

Whenever relevant, revision adjustments are split into two parts. The first part consists of adjustments for which specific adaptations have to be made, for example for conceptual changes or for adjustments of a structural nature. These adjustments are made in a so-called 'layer'. When using a layer, the effect of a specific project on previous years is determined based on supplementary information addressing those previous years. This supplementary information is processed first, before the algorithms tackle the remainder of the adjustments in the time series. The second, remaining part of the adjustment gradually disappears over time.

With respect to the supply and use tables, the most important layers address the 'illegal economy', 'insurance and pensions services', 'issues related to globalisation' and 'registration of natural gas stocks' (cf. the revision publication National accounts 2015 benchmark revision (SN, 2018) for more background information on these adjustments).

**Step 2A. Determine a strategy to phase out changes over time, for total output in current prices (totals), imports and margins**

For the remaining (non-layer) adjustments a default strategy is developed beforehand to phase out revision adjustment back in time. Over the period 2010-2015, a maximum of 3 percentage points of the total percentage revision adjustment (post-revision level minus pre-revision level divided by pre-revision level) is eliminated (at the level of total output). The remaining adjustment is passed on to previous periods (1995-2010).

In the period 2001-2010, a maximum of 6 percentage points of the percentage difference will be eliminated. All remaining adjustments will be transferred to the previous period (1995-2001).

Based on the choices made in step 2, new post-revision levels for output can be quantified in current prices for all base years. The strategy described above is referred to as the so-called default strategy. If further information is available, other percentages may be chosen.

**Step 2B. Determine a strategy to phase out changes over time for final expenditure**

In principle, final expenditure adjustments are estimated similarly to output by industries, with explicit attention given to the origin of the final expenditure in the old series based on information obtained from the input-output table. The data on origin of a certain product is used to weigh the various strategies on the supply side, resulting in a strategy

for a specific final expenditure category. In addition, the so-called default strategy or an alternative strategy based on expert knowledge can be applied if necessary.

### **Step 3. Adjustment of value added**

Choices made in step 2 are leading in step 3. Based on the ratio 'adjustment of value added per unit of adjustment of output in reporting year 2015 (see step 1) and the specific choices made in step 2, adjustments in value added are phased out over previous years. Based on the choices made in steps 1 and 2, new post-revision levels for value added are calculated for all the base years. Manual adjustments can be made in this step if the adjustment in value added is much larger than the adjustment in output.

### **Step 4. Calculate the new level of intermediate consumption (IC) as a balance item**

Step 4 consists of assessing intermediate consumption as the result of step 2 and 3 = output minus value added

### **Step 5. Break down of output, intermediate consumption by products groups for all specific base years.**

The approach followed for back casting output intermediate consumption and value added determines the back casting of all details. Alternative methods can also be applied if preferred, for example to give a specific product group a different back casting profile than total output or intermediate consumption.

In order to be consistent with the new levels for total output and total intermediate consumption balancing items are introduced for the largest product group. For value added, gross operating surplus is the balancing item.

### **Step 6. Determine values for product groups for the intervening years**

Interpolation techniques are used for the intervening years, aligning as much as possible with pre revision developments.

### **Step 7. Deflating**

After step 6 the result is a time series in current prices. Values in prices of the previous year must also be calculated. Pre-revision price indices are equally used for the post revision time series in previous years' prices. Calculations are made on the product group level. In other words the estimates in previous years' prices are straightforward. Exceptions are made for industries or commodities whose measurement of output changes rely heavily on volume instead of value changes (example g. the health industry and margins), where volume changes are kept intact and prices are adjusted.

### **Step 8. Fine tune details of industries**

Sometimes it is necessary to adjust the settings after the technical completion (before balancing) For example, if developments prior to revision are no longer representative for the newly estimated levels the default method needs to be replaced by an alternative.

### **Step 9. Balancing**

After data computation, the subsequent step is balancing. First the largest differences between supply and use are balanced manually. The smaller differences can be eliminated automatically using an algorithm. In principle, adjustments should be made carefully so as not to disturb the previously determined economic developments too

much (steps 1 to 8). Generally speaking, the production approach is adjusted less than the expenditure approach.

## **B.2 – Balance of primary income**

For the balance of primary income too, revision adjustments for the benchmark year 2015 are split into two parts. One part consists of ‘layers’ of revisions due to research, the second part gradually phases out back in time by using an algorithm. The application of layers implies that revision effects for previous years have been explicitly assessed based on available information. This information is firstly processed into consistent time series adjustments (layers) before the algorithm deals with the remaining adjustments.

Automatic back casting basically represents a linear phasing out of revision changes up to 2010, the previous benchmark year. The main strategy is to change the year 2010 as little as possible. The balance of primary income is heavily influenced by the use of a multitude of layers addressing changes in an array of transactions. The most important layers relevant for the primary income balance are: profit income flows of listed SPE type holdings, relationship of small non-financial corporations with the rest of the world, income from investment institutions, new estimate of income from holiday homes abroad, cross border work, adjustments in interest rate transactions and imputed banking services.