Quality Report GNP/GNI Questionnaire 2014The Netherlands

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Part 1: General information

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

The member states of the European Union (EU) are obliged to deliver data on national accounts (NA) in conformity the European System of Accounts 2010 (ESA2010) from September 2014 onwards. The implementation of ESA2010 requires a benchmark revision of the NA. This benchmark revision gives also the opportunity to thoroughly examine and reassess the statistical system and NA compilation procedures. Even in areas where ESA2010 does not show any differences with its predecessor, changes in the accounts can appear as a result of changed interpretation of concepts and definitions. An example is the inclusion of illegal activities in the national accounts. This change is part of this benchmark revision.

In recent years the compilation of statistics and the collection of data at Statistics Netherlands (SN) have changed in several areas. As a consequence of the on-going attempt of Statistics Netherlands (SN) to reduce the administrative burden for the business community, statistics are lesser based on surveys and increasingly on data derived from administrative sources like tax registers. In the amendment of the Statistical Law in the Netherlands, it is explicitly laid down that SN has free and full access to these registers. Registers often contain less detailed information compared to surveys. On the other hand registers often cover the full population under examination. An important example is the use of VAT declarations in the compilation of structural business statistics (SBS). In the past samples were grossed up to the target population as registered in the general business register. Nowadays total turnover from the VAT-declarations is used also as target for grossing up. A second important administrative source used in this benchmark revision is the register on tax returns on payroll taxes. The register represents a key source for the estimation of wages and the number of employee jobs in the NA and is also used as a plausibility check of business statistics.

A second development influencing the results of business statistics is the law on the registration of enterprises coming into force first of July 2008 according to which all enterprises and legal persons are obliged to register themselves at the Chamber of Commerce. This register is the main source of information for the general business register of SN. As a consequence, the number of small enterprises, which were unknown so far, increased, leading to higher estimates for output and value added in those parts of the economy with relatively many small enterprises.

From this benchmark revision onwards statistics are used which were only partly available or still in their infancy at the 2001 revision. Between the two revisions, statistics on holdings and intraconcern services (NACE 70.1) became available, leading to an upward adjustment of value added of 4.5 billion euro in that industry. Statistics on international trade in services have been compiled by SN from 2003 onwards and are now fully implemented in the NA. For the estimates of local government and education new sources of information have become available since the last benchmark revision as well.

The compilation of the NA also relies on statistical information collected outside of SN. The Central Bank is an important supplier of data on financial institutions and the Balance of Payments. The Central Bank revised its data collection from 2005 onwards. The first results were

used during the 2001 benchmark revision. The quality of the data has improved significantly, resulting in a strong upward level shift of primary income and GNI.

Together with the conceptual changes resulting from the implementation of ESA2010, a benchmark revision was carried out on the basis of the most recent statistical knowledge and source data.

Both revisions (new concepts and new data sources) of the NA affected important macro-economic variables and policy indicators: gross domestic product (GDP) is upwardly adjusted by 44.7 billion euros to a total of 631.5 billion euros, an increase of 7.6 per cent. Conceptual adjustments because of ESA2010 and reinterpretation of definitions and concepts add up to 3 per cent. The remaining 4.6 per cent, corresponding to 27,2 billion euros, is mainly due to the use of the register based source data. The register data on VAT and payroll taxes, combined with new law on the registration of small enterprises caused the strong upward level shift of SBS value added. Gross national income (GNI) is raised by 57.7 billion euros. Over 10 billion euros is caused by benchmarking on the source data from the Central Bank.

After revision, the government deficit for 2010 amounts to 31.9 billion euros which is 5.0 per cent of GDP. As both the deficit (numerator) and GDP (denominator) are raised with a similar percentage, the deficit as percentage of GDP is not affected by the benchmark revision. With an amount of 372.6 billion euros the level of government debt remains nearly unchanged. Because of the upward adjustment of GDP, the debt-to-GDP ratio for 2010 was lowered to of 59.0 per cent. The before revision estimate of the government debt ratio was 63.4 per cent. As of the 2010 benchmark revision the estimates of wages and salaries and labour input are based on the register on employers' tax returns on payroll taxes. This source of information provides a nearly exhaustive description of wages and salaries paid. Based on this new source compensation of employees is upwardly adjusted by almost 10 billion euros. The number of jobs increased by 625 thousand, amounting to a total of almost 9.8 million. In terms of hours worked the adjustment is much smaller, because the addition concerns mainly 'small' jobs.

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

In addition to the regular revision policy, Statistics Netherlands developed a dedicated publication strategy for the 2010 benchmark revision, which included:

- A press release informing and preparing users for the upcoming revision of NA results due to conceptual changes, benchmark related changes and changes in European regulations. The press release also included a timetable. The date of publication was February 10th 2014;
- Stakeholders presentation (under embargo), 3rd of March;
- Official release¹ of the 2010 revision results on March 6^{th2}, "Revisie Nationale Rekeningen 2010: Beschrijving en uitkomsten revisiejaar 2010":

¹ The English edition, "National accounts 2010 benchmark revision" was published on 24th of September.

- o Press release with main results;
- o Press meeting with presentation of main results;
- Publication with an explanatory text on the major changes and with summary tables on Annual National Accounts (including the institutional sector accounts) and Labour Accounts;
- o All outcomes were decomposed into conceptual and benchmark adjustments;
- Official release of revision results 2001-2010 on 25th of June, including all data on the website in the online database StatLine in Dutch and English;
- Official release of revision results 1995-2000 on 24th of September, including all data on the website in the online database Statline in Dutch and English.

Furthermore, the regular revision policy and timetable was somewhat changed. On 25th of June 2014 the national accounts figures concerning both output, expenditure, and sector accounts for 2012 and 2013 (provisional figures) and 2011 (final estimates) were published domestically in StatLine, the electronic database of Statistics Netherlands. For the sector accounts the publication of the annual figures was accelerated some days to comply with the t+85 deadline, and included quarterly time series consistent with the new annual estimates and the first quarter of 2014.

The publication 'Nationale rekeningen 2013' was available on the website of Statistics Netherlands on 8th of September 2014 (PDF format). The English edition National accounts of the Netherlands 2013 was released on 22nd of September 2014.

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

Revision analysis

For some time now, revisions of Dutch macro-economic estimates, from flash to final estimates, have been mapped systematically. This concerns both the size and the sign of the revisions. The aim is to gain a better understanding of the main causes of the revisions, in order to improve future (provisional) estimates. Although the analysis of revisions mainly relates to volume data such as economic growth, it is expected that the research projects related to this programme will also benefit from improved current value estimates. The successive estimates of Dutch national accounts data are presented on the website of Statistics Netherlands (www.cbs.nl) under: Thema's, Macro-economie, Methoden, Bijstellingen (only in Dutch). The revision policy for the Dutch national accounts is explained in section 1.3 of this Quality Report.

Process tables

From 2003 onwards annual process tables have been compiled for the final estimates of the national accounts. However, the tables for 2003 - 2006 were not found satisfactory for various reasons. This led to a new set up of a process tables for the reference year 2007. The results of the table are presented in two papers:

- 'Further elaboration of the use of the concept of Process Tables in National Accounts practice' (part 1 of DG-Eurostat Grant agreement 2008, Theme 01, The Improvement of the quality of National Accounts No. 20101.2008.002-2008.190).
- 'Further elaboration of Process Tables and the use of Process Tables as an instrument to improve National Accounts compilation' (part 1 of DG-Eurostat Grant agreement 2009,

² http://www.cbs.nl/nl-NL/menu/themas/macro-economie/methoden/dataverzameling/revisie-2010/default.htm

Theme 01, The improvement of the quality of National Accounts No. 20101.2009.001-2009.173).

After the ESA2010 benchmark revision, process tables will be produced for the final annual estimates of the supply and use tables including most industries and final expenditure categories. These process tables systematically describe the compilation process of national accounts figures from sources to final estimates. These process tables are integrated into the compilation process, as to further enhance the quality and transparency of our estimates. Further research is currently undertaken to produce process tables for the remaining industries and final consumption categories (general government, education, health care and government consumption) yet uncovered.

Improvement of the quality of estimates for transactions with the Rest of the World, more specific Special Purpose Entities

Previous quality reports reviewed the efforts Statistics Netherlands undertook to improve the (first) estimates of reinvested earnings on foreign direct investment (RIE). The impact of this item on the (revisions of the) Dutch GNI estimates appeared to be substantial. The cooperation with the Dutch Central Bank on this subject continues. From January 2012 onwards harmonised population of Non-Financial Corporations and Special Purpose Entities (SPEs) is used for the Balance of Payments as compiled by the Dutch Central Bank and for the Statistics on Financial Corporations. In the past population divergences gave rise to substantial revisions of provisional figures. This improvement should ameliorate the preliminary estimates of the reporting year 2012 and subsequent reporting years. Another important development is that staff members of Statistics Netherlands (National Accounts and Statistics Financials of Corporations) and the Dutch Central Bank (Balance of Payments) frequently discuss on a micro level the data transmitted by the 7 biggest non-financial corporations. These improvements will have no effect on preceding years.

Apart from the above described initiatives, it is concluded that the quality of the source data is still insufficient due to non-response for the first annual estimate of the national accounts. At present, these source data is obtained from the Dutch Central Bank in March. At that time most of the involved companies are not able to report annual data on all crucial variables requested, especially concerning transaction to and from the Rest of the World. Better quality data will become available in June. In close cooperation with the Dutch Central bank, Statistics Netherlands is presently analysing the option to introduce this better quality data into the national accounts at a later stage in the compilation process. The first results of the analysis show that this contributes to an improvement of the first annual estimate. However, more research is needed to solve planning and implementation related issues.

1.4 Description of developments in major sources

With the 2010 benchmark revision level estimates of gross national income are up to date, keeping track of all recent developments in major data sources such as e.g. VAT register data etc. For more information on the sources used, reference is made to Section 3.3 and the GNI inventory 2015 (forthcoming).

Part 2: Changes to sources and methods to final estimates

There are no changes to sources and methods to final estimates 2002-2009. Numerical differences are resulting from work on two reservations, which are addressed in section 3.2.

Part 3: Revisions to years 2010 to 2012

In addition to the regular revisions of 2011 and 2012, the benchmark revision leads to additional adjustments in 2010, 2011 en 2012 estimates.

Table 1 shows the differences between the GNI Questionnaires 2014 and 2013 in gross national income estimations according to ESA1995, representing the reference years 2010, 2011 and 2012. Furthermore, the revisions due to the 11 ESA2010 transitional items and revisions concerning GNI-reservations are made explicit. The remaining revision is due to a mix of benchmark and routine revisions, for which a further split is not possible. As a consequence, Section 3.1 on routine (current) revisions remains empty.

More information on the GNI-reservations is presented in sections 3.2 (work done) and 4.2 (overview).

	Quest, 2013	Total	of w	vhich due to		Quest. 2014	Total	of v	which due to	
	(ESA95)	revision	11 ESA2010 items	GNI- Rerservations	other	(ESA2010)	revision	11 ESA2010 items	GNI- Rerservations	othe
Gross national income,										
market prices	mln euro						%			
2010	577087	58417	11832	3885	42700	635504	10,1	2,1	0,7	7
2011	600375	42976	11523	3390	28063	643351	7,2	1,9	0,6	4
2012	604347	44189	12289	3037	28863	648536	7,3	2,0	0,5	4

Instead, section 3.0 is introduced which presents the quantitative results of the benchmark revision for 2010 and focuses on the adjustments relative to the previous results linked to revision 2001. Appendix A contains the publication tables on GDP (A.1) and on balancing items (A.2) from the publication "National accounts 2010 benchmark revision". Please note that figures from the publication differ from those in Table 1, as the publication tables follow ESA2010 concepts.

Subsequently, as far as possible, a distinction is made between adjustments of a conceptual nature (section 3.4) versus (a summary of) those that originate from statistical changes (section 3.3). However, this break-down cannot always be quantified exactly because the impact of the two causes is sometimes strongly intertwined. Also, it should be noted that a full update of the GNI inventory, based on ESA 2010, is expected September 2015.

3.0 Quantitative results benchmark revision 2010

As a consequence of the benchmark revision, GDP is upwardly adjusted by 44.7 billion euros and GNI by 57.7 billion euros. The resulting upward adjustment in the total compensation of employees is 10 billion euros.

Anticipating the exhaustive and detailed process table to be presented in the GNI-inventory next year, below a preliminary and partially populated process table is presented, showing the link between SBS-data and the balanced NA-data. For industries not or partially covered by SBS similar information is not available yet.

Table 2: Process table 2010: from SBS to NA-data (billion euro)

Output (basic prices)				
		Adjustment		
	Business	to	Other	Balanced
	statistics	definitions	adjustments	result
Agriculture, forestry and fishing	•			28
Mining and quarrying	20,8			
Manufacturing	255,3			
Electricity and gas supply	17,9	0,1	-0,3	17,8
Water supply and waste management	8,9	0,1	-0,2	8,8
Construction	86,1	1,7	-0,2	87,5
Trade, transport, hotels, catering	213,2	2,4	0,4	215,9
Information and communication	50,3	0,8	0,1	51,3
Financial and insurance activities				76,3
Real estate activities				68,7
Business services	128,6	3,2	-0,5	
Government and care				186,6
Culture, recreation, other services				26
Intermediate consumption (–)				
Agriculture, forestry and fishing				17,1
Mining and quarrying	4,4	-0,6	-0,3	
Manufacturing	193,6			
Electricity and gas supply	10,7			
Water supply and waste management	5,1			
Construction	58,3	0,3	-1,7	
Trade, transport, hotels, catering	105,7	-1,5	1,3	105,5
Information and communication	25,1			
Financial and insurance activities				28,6
Real estate activities				37,1
Business services	59,6	-1,5	-2,0	56
Government and care				62,8
Culture, recreation, other services				11,3
Value added (gross, basic prices)				
Agriculture, forestry and fishing				10,8
Mining and quarrying	16,4	0,6	0,3	
Manufacturing	61,7			
Electricity and gas supply	7,2			
Water supply and waste management	3,8			
Construction	27,7			
Trade, transport, hotels, catering	107,4			
Information and communication	25,2			
Financial and insurance activities				47,7
Real estate activities			<u> </u>	31,6
Business services	69,0	4,7	1,5	
Government and care	0.5,0	-5,7		123,7
Culture, recreation, other services	· ·	•		14,6

Table 2 shows that the benchmark revision, which accompanied the ESA 2010 implementation, led to a reconciliation of source statistics and national accounts estimates.

Gross domestic product

Gross domestic product can be estimated by using three different methods:

- Production method;
- Income method:
- Expenditure method.

Below the adjustments resulting from the benchmark revision are described according to each of these three methods.

Production method

The benchmark revision gives rise to an upward adjustment of output of 41.7 billion euros. Due to conceptual changes output is downward adjusted by 6.6 billion euros, which is a balance of large positive and negative adjustments. The net recording of (inward) 'goods sent for processing' significantly lowers the level of output. Outward processing and including illegal activities elevate output levels. However, altered sources and methods are the main cause of the adjustments of output amounting to 48.2 billion euros.

Intermediate consumption is reduced by 2 billion euros. Conceptual changes account for a reduction of 23.8 billion euros. The shift in the recording of expenses on R&D from intermediate consumption to GFCF is an important cause of this reduction, together with the net recording of (the inward) goods sent for processing. These downward adjustments are only to a little extent compensated by increases in intermediate consumption coming from including illegal activities and purchases of processing services originating from outward processing. Data improvements are a second reason for the upward adjustments in intermediate consumption.

The balance of taxes and subsidies on products is increased by 0.2 billion euros. Theoretical VAT, calculated as the sum of (relevant) transactions times the current rates, is increased because of the adjustment of intermediate consumption and final expenditure. Therefore also the difference between theoretical VAT and actual VAT has changed. On balance GDP is upwardly adjusted by 44.7 billion euros of which 17.5 billion euros originating from conceptual changes and 27.2 billion euros coming from new statistical insights. Specific adjustments for the main industries are described below.

Agriculture, forestry and fishery

Next to the general changes, output of agriculture, forestry and fishery is upwardly adjusted because of revised estimates of output of electricity in horticulture (300 million) and direct sales of farmers to households (200 million). Furthermore, the estimates for forestry are upwardly adjusted based on data from the labour accounts.

Mining and quarrying

Based on new information, the estimates for mineral exploration are upwardly adjusted by almost 1.1 billion euros. Secondly, imports of natural gas are no longer re-routed via mining, but directly attributed to the buyers. This implies a simultaneous reduction of output and intermediate consumption of this industry (1.5 billion euros each).

Manufacturing

The strict application of the principle of economic ownership has substantial effects on output and intermediate consumption in manufacturing both downwardly (inward processing) and up-

wardly (outward processing). Furthermore, changes caused by adjusting to the state-of-the-art of business statistics have a significant impact. Also the re-classification of enterprises to the right NACE-code plays a role in these adjustments.

Electricity and gas supply

From this benchmark revision onwards the recording of the distribution of energy takes place on a 'net' basis, meaning that the output of energy distributors consist only of (trade or distribution) margins. Until now, SN applied a gross recording including the distributed energy both in output and intermediate consumption. As a consequence, output and intermediate consumption are reduced by 13.2 billion euros. Until now the estimates for the energy industries were mainly based on physical data combined with information on prices. Because of individual contracts, hedging etc. this method appeared to have become invalid, meaning from now on current price estimates will rely mainly on the (monetary oriented) business statistics.

Water supply and waste management

The revised delineation of the industry 'general government' in the SUT implied a shift of part of waste management from this industry to general government. As a consequence output and intermediate consumption were reduced by 3.3 and 2.2 billion euros respectively.

Construction

Next to the general conceptual changes, implementing revised source statistics is the main cause for the adjustment of production, intermediate consumption and value added.

Trade, transport, hotels and catering

In addition to the general conceptual changes mentioned in the introduction, at the transport industry a change was made for intra-industry deliveries of services which were until now recorded on a net basis. In conformity with the guidelines stating that deliveries between enterprises should be recorded on a gross basis, this has been changed. As a consequence production and intermediate consumption are upwardly adjusted by the same amount. Implementing revised source statistics leads to substantial adjustments in output, intermediate consumption and value added. The obligation of small enterprises to register with the Chamber of Commerce had a substantial influence on these adjustments.

Information and communication

This industry is only partly covered by business statistics. Especially for film, radio and television SN has to rely on annual reports, numbers of members, etc. in order to make estimates for this branch. In the IT-branch the influence of the obligation of small enterprises to register with the Chamber of Commerce is noticeable.

Banking and insurance

FISIM calculations no longer apply to interest transactions between banks (also non-resident banks). This has reduced output and intermediate consumption in this industry alike. A revised estimation method for insurance and the gross recording of re-insurance reduces these variables even further. In addition, the measurement of output of Special Purpose Entities (SPE's) is changed to a sum-of-cost method, implying a zero net operating surplus.

Real estate activities

Next to general conceptual changes, the output of this industry is upwardly adjusted by 511 million euros because of the shift of holiday homes originating from hotels and catering. Furthermore, from now on FISIM on mortgages is fully recorded in this industry, implying an increase of intermediate consumption of 3.6 billion euros. The estimates for imputed rents of owner occupied dwellings have been revised leading to an upward adjustment of output by 1.8 billion euros. At the same time intermediate consumption was raised by 1 billion euros. Renting of buildings is

not covered by business statistics. Output of this industry is therefore estimated applying a commodity flow method, meaning that supply is set equal to demand. As a result of the upward adjustment of output and intermediate consumption in many industries, demand is upwardly adjusted and so is production of rents of buildings.

Business services

The revised recording of R&D has had a substantial influence on the intermediate consumption of the R&D-industry. Next to that, new business statistics on holdings and intra-concern services became available with a raise of 9.5 billion euros of output and 5.0 billion euros of intermediate consumption. Furthermore output has been upwardly adjusted because of the shift of house cleaning from households with paid staff to cleansing services (1.5 billion euros). Implementing revised source statistics leads to substantial adjustments in output, intermediate consumption and value added. The obligation of small enterprises to register with the Chamber of Commerce had a substantial influence on these adjustments.

Government and health

In addition to general conceptual changes, the delineation of the government sector and industries led to the adjustment of output, intermediate consumption and value added. The shift of cleansing by local government to this industry has led to an increase of all these variables. Implementing new source data for local government and education gave rise to further adjustments.

Culture, recreation and other services

This industry is only partly covered by business statistics. Especially for sport clubs, political institutions etc. SN has to rely on annual reports, numbers of members, etc. for making estimates for his branch.

Households with paid staff

Because of the revised classification of house cleaning and babysitting, output and value added have been downwardly adjusted by 2.3 billion euros each.

Expenditure method

Consumption of households and non-profit institutions serving households (NPIsh) is upwardly adjusted by 14.3 billion euros. The inclusion of illegal activities caused an increase of 2.4 billion euros. This adjustment was countered by 1 billion euros for goods and services used for illegal output which up to now were assumed to be part of household consumption. Examples are energy necessary for the growing of cannabis and clothing for prostitutes. The revised delineation of wages in kind led to an increase of the consumption of households of 1.7 billion euros. Wages in kind were further adjusted upwardly based on new information from the register on wage taxes. A decrease of 3.6 billion is caused by the shift of the remaining part of FISIM on mortgages from consumption of households to intermediate consumption of the fictive industry owner-occupied dwellings. Consumption of households was upwardly adjusted as a result of improved statistical information on hotel and catering industry, sports, culture and recreation Consumption of the government was reduced by 0.9 billion euros, of which 0.7 billion euros due to a shift from benefits in kind tot benefits in money. Other changes which had effect on government consumption were the revised recording of R&D, premiums for guarantees, the Eurovignet and the revised estimates of own account GFCF in software. It must be added that the delineation of collective and individual consumption of government has been revised thoroughly in this benchmark revision based on the Classification of the Functions of Government (COFOG). Individual consumption has been upwardly adjusted. This mainly concerns services in the field of sports and recreation.

The increase of GFCF by 22.7 billion euros is mainly caused by the revised recording of R&D (10.9 billion) and the revised estimates of own-accounts investment in software (8.6 billion). The impact of the revised recording of military goods on balance (investment minus disinvestment) amounts to 0.4 billion euros. An upward adjustment of the production in construction affected the estimates of GFCG in buildings and infrastructural works.

The strict application of the transfer of ownership recording has a substantial effect on imports and exports of goods and services. Goods sent abroad for processing are no longer recorded as imports and exports of goods. Only the actual payment for the processing fee is recorded in the NA. The opposite adjustment is found with the recording of merchanting. Until now only the trade margins realised on merchanting were recorded as an export of services. From the benchmark revision onwards the purchased and sold goods are shown on a gross basis, with the limitation that goods purchased are recorded as negative exports. On balance the impact on exports of goods equals 5.3 billion euros. Application of the principle of economic ownership reduced the exports of goods with an amount of 13.2 billion euros. This reduction is partly countered by exports of illegal goods (2.2 billion) and the shift of bunkering from services to goods (3.7 billion) The import of goods is reduced by 19.8 billion euros, of which 19.9 billion euros is caused by the strict application of the principle of economic ownership. Illegal activities (1.2 billion) and bunkering (2.9 billion) led to an upward adjustment of the imports of goods. Bringing NA in line with the source data on foreign trade led to a negative adjustment of imports of goods of 13.9 billion euros.

The effect of the strict application of the principle of economic ownership with foreign trade in goods has its (upward) counterpart in international trade in services. The impact on exports of services amounts to 3 billion euros, that of imports of services by 0.8 billion euros. The revised recording of merchanting (of course) led to a reduction of exports of services of 5.3 billion euros. Abolishing the imputation of FISIM between banks caused a reduction of imports (-1.5 billion) and exports (-3.6 billion) of services and also the counterpart of the shift of the recording of bunkering to goods affected the international trade in services.

It has to be stated that at this benchmark revision new source statistics on international trade in services could be used in full for the estimates of NA. Although the 'gross' flows of imports and exports are substantially reduced, the impact on the trade balance was limited. At this benchmark revision the trade balance was upwardly adjusted by 5.5 billion euros to arrive at 52.8 billion euros.

Income method

Based on administrative data from the register on tax returns on payroll taxes estimates for wages were increased by almost 12 billion euros. Employers' social contributions were estimated 2 billion euros lower than before this benchmark revision, which was mainly caused by a revised estimate of pension premiums. Net other taxes and subsidies on production was reduced by 1.4 billion euros. On balance operating surplus/mixed income was upwardly adjusted by 36.2 billion euros of which 10.8 billion euros caused by changed registration of R&D and 8.1 billion euros originating from changes in the estimates of own-account GFCF in software. The extension of the coverage of GFCF caused an upward adjustment of the consumption of fixed capital by 17.8 billion euros. Finally, net operating surplus/mixed income was upwardly adjusted by 18.9 billion euros.

Gross national income

Gross national income (GNI) was upwardly adjusted by 57.7 billion euros, of which 44.7 billion euros due to the adjustment of GDP. Of the remaining 13 billion, primary incomes accounted for 10.1 billion euros. The main cause was the use of revised data on primary income as provided by the Dutch Central Bank, where a new data collection system was implemented.

3.1 Routine (current) revisions

The benchmark revision for 2010 obviously also had a strong impact on the 2011 and 2012 estimates. In addition to the benchmark effects, the routine current revisions stemming from annual sources and updates of provisional figures have also resulted in changes. A split between benchmark and routine (current) revisions for 2011 and 2012 is not possible and therefore this section remains empty.

3.2 Revisions related to the work on reservations

In the GNI-questionnaire 2014, work has been done on the treatment of cross border property income and the estimates on illegal activities have been added.

3.2.1 Treatment of cross border property income

Concerning the transversal issue on cross border property income, two issues are addressed by the Netherlands in this GNP/GNI Questionnaire 2014:

- Improving the treatment of interests and dividends received by Mutual funds
- Clarifying the treatment of income from quasi corporations ("holiday homes").

The estimated retained earnings by foreign MFs on behalf of Dutch shareholders are presented in table 3, and are also included in the GNI questionnaire 2014. The estimates are based on the assumption that the ratio of retained earnings to dividends of Dutch and foreign MF's are the same. Survey data is available for retained earnings of Dutch MF's and dividends for both Dutch and foreign MFs on a quarterly basis.

Table 3: Cross border investment income atributable to Dutch collective investment funds shareholders

	mlneuro		
Year	total	Dividend	Retained earnings
2001	1106	1060	46
2002	969	1103	-134
2003	1225	1180	45
2004	1503	1515	-12
2005	1630	1648	-18
2006	1215	1197	18
2007	1446	1461	-15
2008	4113	3400	713
2009	5094	3061	2033
2010	3091	1604	1487
2011	3664	2663	1001
2012	1845	1499	346
2013	2490	1900	590

Source: revision database sector accounts Netherland

The second issue concerns the clarification of the treatment of income from quasi corporations, more specifically the income obtained by households from holiday homes. The 2002-2009 estimates are explained in the GNI inventory 2001 of The Netherlands as follows:

Income from quasi-corporations (rents) to and from the rest of the world are compiled by the Dutch Central Bank (DNB) and are included in the balance of payments. The item is an estimate for net revenue from cross-border real estate holdings. It comprises rents paid for land and buildings, but not for equipment.

Dutch receipts for 2001: 278 mln €, Dutch spending 2001: 357, balance -79.

Source: GNI inventory 2001

In addition to the information obtained from DNB, the estimated household income from holiday homes is based on information on foreign owned dwellings from the tax office. The information is collected as part of the income tax assessment forms from 2007 onwards. As a second step, the income from rents on these dwellings is assumed to be less than 1 per cent of the value of the foreign owned dwellings. Table 4 summarizes the results, which shows fairly small numbers.

Table 4; income from quasi corporations, more specifically holiday homes

Year	mln euro	
	2002	81
	2003	68
	2004	68
	2005	72
	2006	65
	2007	72
	2008	81
	2009	74
	2010	78
	2011	87
	2012	106
	2013	91

Source: Sector accounts database 2014, unpublished D.422 households received from ROW

3.2.2 Treatment of Illegal activities

Table 5 shows the estimates for illegal activities for the period 2002- 2009. The estimates are based on balanced supply use data for the reporting years 2001 and 2010 and are interpolated using price and volume changes derived from a study on illegal activities by Rensman et al³ for the period 1995 – 2008. The interpolation was carried out separately for all illegal activities distinguished in the Dutch NA (see section 3.4.)

	Table 5: Impact on GN due to to transversal reservation \	/1: Illegal activ	ities					NETH	FRLAN	DS
						millio	n EUR			
	2002-2009									
	As of 22/09/2014	code ESA 95	2002	2003	2004	2005	2006	2007	2008	2009
	PRODUCTION APPROACH									
1	Output of goods and services (at basic prices)	PI	2551	2699	2718	2724	2700	2752	3001	3090
2	Intermediate consumption (at purchasers' prices)	F2	498	537	537	546	585	620	662	673
3	Gross value added (at basic prices)	B1G	2052	2163	2181	2179	2114	2132	2338	2419
			О	О	0	О	О	О	0	(
	EXPENDITURE APPROACH									
6	Total final consumption expenditure	P3	1113	1061	1133	1042	1050	1072	1274	1325
7	Household final consumption expenditure	P3	1113	1061	1133	1042	1050	1072	1274	1325
14	Exports of goods and services	P6	1991	2039	2065	2131	2005	2062	2153	2264
15	Imports of goods and services	P7	1052	937	1017	994	941	1002	1089	1170
	INCOVE APPROACH									
17	Gross operating surplus and mixed income	B2G+B3G	2052	2163	2181	2179	2114	2132	2338	2419
20	Gross domestic product (ESA 95)	B1*G	2052	2163	2181	2179	2114	2132	2338	2419
					,				,	
27	Gross national income (ESA 95)	B6*G	2052	2163	2181	2179	2114	2132	2338	2419
29	Cross national income (ESA 95) excluding HSIM allocation	B5*Gex FISIM	2052	2163	2181	2179	2114	2132	2338	2419

³ Rensman et al , The contribution of illegal activities to national income in the Netherlands, The Hague 2012

3.3 Other revisions due to changes in methods and sources

Many changes in source statistics have occurred since the last benchmark revision of the NA over the reporting year 2001. As a consequence of the continuous attempt of SN to reduce the administrative burden on the business community, statistics are less based on surveys and increasingly on existing administrative data like tax registers. The information obtained from tax registers is often less detailed but on the other hand holds a nearly exhaustive coverage of the target population. An important example is the use of VAT declarations in the compilation of business statistics. In the past samples were grossed up to the target population as registered in the general business register. Nowadays total turnover from the VAT-declarations is used as target for grossing up. A second important administrative source used in this benchmark revision is the tax returns on payroll taxes. This register represents a key source for the estimation of wages and the number of employee jobs in the NA and is also used as a plausibility check of business statistics.

A second development influencing the results of business statistics is the law on the registration of enterprises coming into force first of July 2008 according to which all enterprises and legal persons are obliged to register themselves at the Chamber of Commerce. This register is the main source of information for the general business register of SN. As a consequence, the number of small enterprises, which were unknown so far, increased, leading to higher estimates for output and value added in those parts of the economy with relatively many small enterprises.

Within SN a special large and complex cases unit has been established for collecting data for large multinational companies. In addition to understanding and mapping the often complicated structures of such companies, judgements on economic ownership of output and assets plays an important role in constituting the collection of consistent information. This approach provided new insights and adjustments for business and foreign trade statistics.

From this benchmark revision onwards statistics are used which were only partly available or still in their infancy at the 2001 revision. Between the two revisions, statistics on holdings and intraconcern services (NACE 70.1) became available, leading to an upward adjustment of value added of 4.5 billion euro in that industry. Statistics on international trade in services have been compiled by SN from 2003 onwards and are now fully implemented in the NA. For the estimates of local government and education new sources of information have become available since the last benchmark revision as well.

The compilation of the NA also relies on statistical information collected outside of SN. The Central Bank is an important supplier of data on financial institutions and the Balance of Payments. The Central Bank revised its data collection from 2005 onwards. The first results were used during the 2001 benchmark revision. Since then, the quality of the data has improved significantly, resulting in a strong upward level shift of primary income and GNI.

Last but not least it must be mentioned that during the period between two benchmark revisions the classification of a number of establishments has been changed. Because of the comparability in time these changes are not always taken in account in the NA. The benchmark revision was used to (re)classify all establishments according to their present NACE-class.

In addition to the calibration of the NA on source statistics, new 'models' have been introduced for estimating output, intermediate consumption, value added and parts of final expenditure. New models were needed especially for those areas of the economy for which limited (financial) data are available. Examples are imputed rents for owner-occupied dwellings and industries like sports, culture and recreation. For estimating the latter, annual reports, the number of members and other volume type of information is used.

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

This section provides an overview table on the impact of changes from ESA 95 to ESA 2010 on the GNI Questionnaire for all transition items for a chosen year. For each transitional item identified as having an impact on GNI in the Manual on the Changes between ESA 95 and ESA 2010 (i.e. Transitional Items 1-11) a detailed description of the calculation for a chosen year is provided, including numerical evidence.

Table 6: Transition from ESA2010 to ESA95

GNI QUESTIONNAIRE 2014		N	ETHERLAND	S
Table 2: Transition from ESA2010 to ESA95			million EUR	
2010 - 2013				
As of 22/09/2014	2010	2011	2012	2013
Total impact of differences in definitions between				
ESA2010 and ESA95 on GN	11832	11523	12289	12683
(ESA2010 minus ESA95)				
Of which:				
(1a) R&D created by a market producer	7848	7841	7821	7805
(1b) R&D created by a non-market producer	2973	3050	3108	3158
(2) Valuation of output for own final use for market producers	245	243	229	226
(3) Non-life insurance - Output, claims due to catastrophes, and reinsurance	-54	-534	219	574
(4) Weapon systems in government recognised as capital assets	624	633	655	660
(5) Decommissioning costs for large capital assets	0	0	0	C
(6) Government, public and private sector classification	0	0	0	C
(7) Small tools	0	0	0	C
(8) VAT-based third EU own resource	196	289	257	260
(9) Index-linked debt instruments	0	0	0	C
(10) Central Bank - allocation of output	0	1	0	C
(11) Land improvements recognised as a separate asset	0	0	0	C

1. R&D created by a market producer/

This section describes the R&D estimation process for 2011.

Estimates of gross fixed capital formation in R&D are mainly based on three source statistics, i.e. the R&D survey, government data on universities and data from health statistics. Total output of R&D reported by these source statistics amounts to 12.2 billion euros. As a consequence of a redesign of source statistics on R&D based on the reporting year 2011, the upwardly adjusted estimates for the NA-benchmark revision 2010 were extrapolated backwards from 2011.An adjustment in output of minus 0.3 billion euros was made in response to differences in definitions, double counting for own account production of software and balancing.

Table 7: Overview of supply and use of		by	by
<i>R&D 2011 (billion €)</i>	Total	market producer	non-market producer
Domestic supply	11.9		
Imports of services	1.5		
Total supply	13.4	7.8	3.1
Intermediate consumption	0.4		
Exports of services	1.6		
Gross fixed capital formation	11.4		
Total use	13.4	7.8	3.1

Data on imports en exports of R&D are derived from statistics on foreign trade in services. Intermediate consumption of R&D-industry (Nace 72000) is derived from business statistics and concerns subcontracting of R&D-activities.

Gross fixed capital formation of R&D by market producers account for 7.8 billion euros. The contribution to GDP of non-market producers (3.1 billion €) comes from R&D related consumption of fixed capital as estimated by the PIM.

2. Valuation of output for own final use by market producers

The estimate of the mark-up on output for own final use (mainly software) by market producers is estimated as 5% of own account GFCF on software, amounting 4.9 billion euros. The 5% mark-up corresponds to the percentage of gross operating surplus, adjusted for mixed income, in total costs in IT-services industry.

3 Non-life insurance output, claims due to catastrophes and re-insurance

The use of adjusted claims in the calculation of output of insurance has an impact on GDP. In the example below the calculation of adjusted claims is shown.

Table 8: Calculation of adjusted claims 2006-2010 (mln euro)

		Impact on	output			
		2006	2007	2008	2009	2010
Indemnity insurance	Actual daims	8.485	8.710	9.071	9.199	9.294
	Adjusted daims					9.476
	Difference					182
Health insurance	Actual daims	3.344	3.144	3.218	3.215	3.552
	Adjusted claims					3.496
	Difference					-56
		2006	2007	2008	2009	2010
Price index		0,984	1,022	1,051	1,032	1,02

Firstly actual claims are adjusted for price changes. As there were no disasters the adjusted claims are calculated applying a five-year moving average.

This approach is used for all types of (re-) insurance.

The data for the revised recording of premium supplements in re-insurance are directly derived from statistics provided by the Central Bank.

(4) Weapon systems in government recognised as capital assets

As statistics Netherlands has access to the data on expenditure of the government including defence, GFCF in military equipment can be obtained directly from government data. The impact on GDP equals consumption of fixed capital which is estimated using the PIMmethod.

(5) Decommissioning costs for large capital assets

At present decommissioning costs for large assets are already included in GFCF. This implies that accounting for consumption of fixed capital of these assets is done ex post instead of ex ante. We lack information on the basis of which decommission costs can reasonable be estimated ex ante. As a result we simply assumed that in the course of time ex ante and ex post CFC cancel out, implying a zero impact on GNI.

(6) Government, public and private sector classification

The delineation of government was subject of research in the benchmark revision of the Dutch NA. Only a few very small units were reclassified of which the total impact is close to zero.

(7) Small tools

No changes were made in the benchmark revision of the Dutch NA. The standing practice of following the bookkeeping of companies in this regard is continued after the ESA2010 revision.

(8) VAT-based third EU own resource

The data on VAT-based third EU own resource are directly derived from government data.

(9) Index-linked debt instruments

No changes were made in the benchmark revision of the Dutch NA. Information on index-linked debt instruments is scarce. Based on pension funds statistics, 25 per cent of total bond assets of pension funds (177 billion €) is index linked, and some 80 per cent is emitted by the rest of the world. For the calculation of the index linked change in the principal value, relevant for interest following ESA4.46c, access to micro data on contracts is needed. Unfortunately, this information is not available.

Furthermore, pension funds statistics are the only statistics including a split of total fixed income securities.

One can make a calculation of the impact to interest of index-linked bonds assuming a fictitious rate of 2%, in 2013, which, assuming the bond has a fixed coupon, would increase the interest received by pension funds from ROW by some 700 mln euro. Other sectors may also have index linked debt instruments as part of their assets. On the other hand, foreign residents may own domestically issued index linked debt instruments. Foreign residents actually own more Dutch bonds than Dutch residents own foreign bonds. Information on the value change due to an index link received by ROW is not available.

Given the lack of data sources at present, the net interest as a result of index-linked bonds is assumed to be 0.

(10) Central Bank - allocation of output

10% of the relevant output (2010: 5 million euros) is allocated to export of services. As no data are available on exports of this type of output, the 10% is an expert guess.

(11) Land improvements recognised as a separate asset

No changes were made in the benchmark revision of the Dutch NA, as land improvement was already recorded as GFCF under ESA1995.

Part 4: Revisions related to reservations

Section 4.1: Revisions related to GNP reservations (1995-2001)

No reservations for the Netherlands for these years.

Section 4.2: Revisions related to GNI reservations (2002-2010)

In the notification 27th of January 2012, the European Commission states that the verification process for the Netherlands is completed. The process has revealed four specific reservations concerning the reliability, comparability and exhaustiveness of the GNI of the Netherlands:

- The estimation of own-account construction and small-scale building maintenance needs to be based on more recent benchmark data (applicable to years from 2002 to 2010).
- The payments for the use of motorways (Eurovignette) should be reclassified from taxes on production to transactions in services (applicable to years from 2002 to 2010)4.
- In the context of the use of foreign trade statistics for national accounts, the estimation of "re-exports" and of "transit trade" transactions needs to be based on more recent benchmark data (applicable to years from 2002 to 2010).
- The estimation of imports and exports of government services needs to be based on more recent administrative sources (applicable to years from 2002 to 2010).

The Commission notified the Dutch authorities that it reserved its position as to the accuracy of GNI on the above points relating to the years indicated for each point.

Included in the GNI questionnaire 2012 are corrections to make amends with the first three specific reservations. After verification, the Commission considered that first three specific reservations were properly addressed, and decided to lift the specific reservations.

Included in the GNI questionnaire 2013 are corrections to make amends with the fourth specific reservation. Also for this point, the Commission considered that the final specific reservations was properly addressed, and has lifted the specific reservation.

In addition to the specific reservations, the impact on GNI due to illegal activities has been added. Furthermore, the estimates of own-account construction for 2010, 2011 and 2012 have been updated. Table 9 shows the estimates and update of the GNI-reservations in the GNI-questionnaire 2013 and 2014.

⁴ See: Eurostat guidance on accounting rules for EDP. Classification of payments for the use of roads, 13 March 2008

	G	NC 20	13	G	VIC 20°	14		Updates GNI- reservations		
mln euro	2010	2011	2012	2010	2011	2012	2010	2011	2012	
Illegal activities				2402	2368	2636	2402	2368	2636	
Treatment of cross border property income				1487	1001	346	1487	1001	346	
Construction	-107	-131	-151	-111	-110	-96	-4	21	55	
Eurovignet (motorways)	-142	-116	-118	-142	-116	-118	0	0	С	
Foreign trade in goods	-588	-588	-588	-588	-588	-588	0	0	С	
Import and exports of government services	137	246	211	137	246	211	0	0	C	
total	-700	-589	-646	3185	2801	2391	3885	3390	3037	

Appendix A: National accounts 2010 benchmark revision results

Table A.1 shows Gross Domestic Product 2010, before and after the benchmark revision. De difference is split into the categories "conceptual' and "sources and methods".

	Before revision	After revision	Difference		
			Total	Conceptual	Sources an
					method
	mln euro				
From the output					
r rom the output					
Output (basic prices)	1137 237	1178 924	41687	-6570	48 25
Intermediate consumption (excl. deductible VAT) (-)	613 117	611167	- 1950	-23792	2184
Value added (gross, basic prices)	524 120	567 757	43 637	17 222	264
Taxes less subsidies on products	62796	63016	220	260	- 4
Taxes on products	66 462 3 666	66 567 3 551	105 - 115	100 160	4
Subsidies on products (–) Difference imputed and paid VAT	- 127	739	- 16 866	- 160	86
binerer ice imputed and paid VAT	- 21	739	800		30
Domestic product (gross, market prices)	586 789	631512	44 723	17 482	272
From the generation of income					
Compensation of employees	300 491	310 471	9 980	1719	820
Wages and salaries	234552	246 542	11990	1719	102
Employers' social contributions	65 939	63 929	-2010	_	-20
Taxes on production and imports less subsidies	63 454	62 036	-1418	- 155	-126
Taxes on production and imports	73549	73 329	- 220	- 155	- 6
Subsidies (-)	10 095	11293	1198	-	119
Operating surplus / mixed income (gross)	222 844	259 005	36 161	15918	20 24
Consumption of fixed capital	89725	106 982	17 257	17 831	- 57
Operating surplus / mixed income (net)	133 119	152 023	18 904	-1913	2081
Domestic product (gross, market prices)	586 789	631512	44 723	17 482	272
From the final expenditure					
	100.000				
Final consumption expenditure	435 169	449742	14 573	-1869	1644
General government	166 970 268 199	167 232 282 510	262 14.311	- 915 - 954	117 15.26
Households incl. NPIs serving households Fixed capital formation (gross)	101885	124 649	22.764	- 954 20 286	247
Corporations, households and NPIs serving households	80548	98 442	17 894	14 139	375
General government	21337	26 207	4870	6 147	-127
Changes in inventories 1)	2452	4308	1856	135	172
Exports of goods and services	461717	454 398	-7319	-10 999	368
Goods	361676	360 296	-1380	-2006	62
Services	100 041	94 102	-5 939	-8993	305
Imports of goods and services (-)	414 434	401585	- 12 849	-9929	-292
Goods	319826	300 067	- 19 759	-5853	-1390
Services	94608	101518	6910	-4076	10 98
Domestic product (gross, market prices)	586 789	631512	44 723	17 482	2724

Table A.2 shows balancing items 2010, before and after the benchmark revision. De difference is split into the categories "conceptual" and "sources and methods".

Befo	re revision	After revision	Difference		
			Total	Conceptual	Sources an
				oo ioopiaa	method
	min euro				
omestic product (gross, market prices)	586 789	631512	44723	17 482	272
let primary income from the rest of the world	-9002	3992	12 994	2 141	108
Primary income from the rest of the world	209 011	224 343	15 332	4508	108
Compensation of employees	1099	1099	45.000	4.500	10.8%
Property income Subsidies from the rest of the world (EU)	207 013 899	222 349 895	15 336 - 4	4508	108.
Primary income to the rest of the world (–)	218 013	220 351	2338	2367	
Compensation of employees	5432	5532	100	2307	
Propertyincome	210 395	212.851	2456	2563	- 1 .
Taxes on production and imports to					
the rest of the world	2 186	1968	- 218	- 196	- 2
lational income (gross, market prices)	577 787	635 504	57717	19 623	38 09
consumption of fixed capital (-)	89 725	106 982	17 257	17 831	- 57
lational income (net, market prices)	488 062	528 522	40 460	1792	38 66
let current transfers from the rest of the world	-8 870	-9302	- 432	- 758	32
Current transfers from the rest of the world	9375	10.017	642	123	5
Current taxes on income and wealth	843	3628	2785	_	27
Social contributions	1529	1858	329	_	3
Social benefits (in cash)	248	248	-	-	
Other current transfers	6755	4283	-2472	123	-25
Current transfers to the rest of the world (–)	18 245	19319	1074	881	1:
Current taxes on income and wealth	689	1725	1036	-	103
Social contributions	284	284	_	-	
Social benefits (in cash)	2304	2 471	167	685	- 5
Other current transfers	14 968	14 839	- 129	196	- 32
Pisposable national income (net)	479 192	519 220	40 028	1034	38 99
inal consumption expenditure (-)	435 169	449742	14 573	-1869	164
djustment for net equity in pension funds reserves	45.4	205	140		
surplus of the nation)	154	- 295	- 449	_	- 44
lational saving (net)	44 177	69 183	25 006	2903	22 10
ixed capital formation (net) (–)	12 160	17 667	5 507	2455	305
Changes in inventories (-) 1)	2 452	4308	1856	135	17
surplus of the nation on current transactions	29 565	47 208	17 643	313	173
Net exports	47 283	52.813	5 530	-1070	660
Goods	41850	60 229	18 379	3847	14.5
Services	5 433	-7416	-12849	-4917	-79
Net primary income	-9002	3 992	12 994	2 141	108
Received	209 011	224 343	15 332	4508	1082
Paid (–)	218013	220 351	2338	2367	- 2
Net current transfers	-8870	-9302	- 432	- 758	33
Received Paid (-)	9 375 18 245	10 017	642 1074	123 881	5
Adjustment for net equity in pension funds reserves	6240	838	1074	001	
(surplus of the nation)	154	- 295	- 449	-	- 4
let conited transform from the root of the united	2.250	1900	1260		12
let capital transfers from the rest of the world Capital transfers from the rest of the world	-3259 2436	-1890 896	1369 - 1540		130 154
Capital transfers to the rest of the world (–)	5 695	2786	-2909	_	-290
cquisitions less disposals of non-produced non-financial assets	-	703	703	-	70
lational net lending (+) or net borrowing (-)	26 306	46 021	19715	313	194
Change in assets on the rest of the world	211406	198 240	-13 166		
Change in liabilities to the rest of the world (-)	186 223	156 241	-29 982		
Statistical discrepancy	1123	4022	2899		